

Consolidated Financial Statements

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Statement of Comprehensive Income

Income Statement

€ mn	Note	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
Interest income from financial instruments (ac and fvoci)		1,168	769
Interest income from financial instruments (fvpl)		30	20
Market-driven modification gains		2	1
Interest expenses for financial instruments (ac and fvoci)		196	64
Interest expenses for financial instruments (fvpl)		283	126
Market-driven modification losses		19	3
Net interest income	31	702	597
Loss allowance excluding credit-driven net modification gain or loss		189	131
Credit-driven net modification gain or loss		3	2
Loss allowance	32	192	133
Commission income		337	297
Commission expenses		60	52
Net commission income	33	277	245
Net gain or loss on the derecognition of financial assets (ac)		13	20
Net gain or loss on the derecognition of financial liabilities (ac)		-21	3
Net gain or loss on the derecognition of financial assets (fvoci)		9	0
Net derecognition gain or loss	34	1	23
Net gain or loss from financial instruments (fvpl)	35	26	-30
Net gain or loss from hedge accounting	36	-2	-5
Net gain or loss from investments accounted for using the equity method	37	-2	-2
Administrative expenses	38	571	528
Net other operating income/expenses	39	0	-12
Operating profit		239	155
Income taxes	40	86	87
Consolidated net income		153	68
Consolidated net income attributable to non-controlling interests		0	1
Consolidated net income attributable to shareholders of Aareal Bank AG		153	67
Earnings per share (EpS)			
Consolidated net income attributable to shareholders of Aareal Bank AG ¹⁾		153	67
of which: allocated to ordinary shareholders		138	53
of which: allocated to AT1 investors		15	14
Earnings per ordinary share (€)	41	2.32	0.89
Earnings per AT1 unit (€)	41	0.15	0.14

¹⁾ The allocation of earnings is based on the assumption that net interest payable on the AT1 bond is recognised on an accrual basis.

Reconciliation from Consolidated Net Income to Total Comprehensive Income

€ mn	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
Consolidated net income	153	68
Items that will not be reclassified subsequently to profit or loss		
Changes in the reserve from remeasurements of defined benefit plans	61	34
Remeasurements of defined benefit plans	89	49
Taxes on remeasurements of defined benefit plans	-28	-15
Changes in the reserve from the measurement of equity instruments (fvoci)	-1	1
Gains and losses from equity instruments (fvoci)	-1	1
Reclassifications to retained earnings from equity instruments (fvoci)	–	–
Taxes on gains and losses from equity instruments (fvoci)	0	0
Items that are reclassified subsequently to profit or loss		
Changes in the reserve from the measurement of debt instruments (fvoci)	-12	4
Gains and losses from debt instruments (fvoci)	-8	6
Reclassifications to the income statement from debt instruments (fvoci)	-9	0
Taxes on gains and losses from debt instruments (fvoci)	5	-2
Changes in the reserve from foreign currency basis spreads	15	3
Gains and losses from foreign currency basis spreads	22	4
Reclassifications to the income statement from foreign currency basis spreads	–	–
Taxes on gains and losses from foreign currency basis spreads	-7	-1
Changes in currency translation reserves	-10	14
Gains and losses from translating foreign operations' financial statements	-7	7
Reclassifications to the income statement from translating foreign operations' financial statements	-5	–
Taxes on gains and losses arising from translating foreign operations' financial statements	2	7
Other comprehensive income	53	56
Total comprehensive income	206	124
Total comprehensive income attributable to non-controlling interests	-2	3
Total comprehensive income attributable to shareholders of Aareal Bank AG	208	121

Statement of Financial Position

€ mn	Note	31 Dec 2022	31 Dec 2021
Assets			
Financial assets (ac)	42	40,490	42,345
Cash funds (ac)	10	5,424	6,942
Loan receivables (ac)	11	29,948	29,434
Money market and capital market receivables (ac)	12	5,017	5,884
Receivables from other transactions (ac)	14	101	85
Loss allowance (ac)	43	-490	-492
Financial assets (fvoci)	44	3,552	3,753
Money market and capital market receivables (fvoci)	12	3,550	3,749
Equity instruments (fvoci)	13	2	4
Financial assets (fvpl)	45	2,258	1,734
Loan receivables (fvpl)	11	427	598
Money market and capital market receivables (fvpl)	12	5	4
Positive market value of designated hedging derivatives (fvpl)	15	1,104	900
Positive market value of other derivatives (fvpl)	16	722	232
Non-current assets held for sale	46	7	–
Investments accounted for using the equity method	17, 47	14	19
Intangible assets	18, 48	566	394
Property and equipment	19, 49	235	278
Income tax assets	20, 50	46	66
Deferred tax assets	21, 51	179	168
Other assets	22, 52	474	463
Total		47,331	48,728
Equity and liabilities			
Financial liabilities (ac)	53	40,022	43,017
Money market and capital market liabilities (ac)	23	26,425	30,597
Deposits from the housing industry (ac)	24	13,115	11,717
Liabilities from other transactions (ac)	25	96	94
Subordinated liabilities (ac)	26	386	609
Financial liabilities (fvpl)	54	3,514	1,882
Negative market value of designated hedging derivatives (fvpl)	15	2,183	971
Negative market value of other derivatives (fvpl)	16	1,331	911
Non-current liabilities held for sale	55	1	–
Provisions	27, 56	292	558
Income tax liabilities	57	76	17
Deferred tax liabilities	21, 58	57	56
Other liabilities	28, 59	111	137
Equity	29, 60	3,258	3,061
Subscribed capital		180	180
Capital reserves		721	721
Retained earnings		2,076	1,937
AT1 bond		300	300
Other reserves		-88	-143
Non-controlling interests		69	66
Total		47,331	48,728

Statement of Changes in Equity

	Subscribed capital	Capital reserves	Retained earnings	AT1 bond	Other reserves				Currency translation reserve	Total	Non-controlling interests	Equity
					Reserve from remeasurements of defined benefit plans	Reserve from the measurement of equity instruments (fvoci)	Reserve from the measurement of debt instruments (fvoci)	Reserve from changes in the value of foreign currency basis spreads				
€ mn												
Equity as at 1 January 2022	180	721	1,937	300	-133	-3	16	-23	0	2,995	66	3,061
Total comprehensive income for the period	-	-	153	-	60	-1	-12	15	-7	208	-2	206
Consolidated net income	-	-	153	-	-	-	-	-	-	153	0	153
Other comprehensive income	-	-	-	-	60	-1	-12	15	-7	55	-2	53
Payments to non-controlling interests	-	-	-	-	-	-	-	-	-	-	-2	-2
Dividends	-	-	-	-	-	-	-	-	-	-	-	-
AT1 coupon	-	-	-14	-	-	-	-	-	-	-14	-	-14
Changes in ownership interests in subsidiaries	-	-	-	-	-	-	-	-	-	-	7	7
Other changes	-	-	-	-	-	-	-	-	-	-	-	-
Equity as at 31 December 2022	180	721	2,076	300	-73	-4	4	-8	-7	3,189	69	3,258

	Subscribed capital	Capital reserves	Retained earnings	AT1 bond	Other reserves				Currency translation reserve	Total	Non-controlling interests	Equity
					Reserve from remeasurements of defined benefit plans	Reserve from the measurement of equity instruments (fvoci)	Reserve from the measurement of debt instruments (fvoci)	Reserve from changes in the value of foreign currency basis spreads				
€ mn												
Equity as at 1 January 2021	180	721	1,902	300	-166	-4	12	-26	-13	2,906	61	2,967
Total comprehensive income for the period	-	-	67	-	33	1	4	3	13	121	3	124
Consolidated net income	-	-	67	-	-	-	-	-	-	67	1	68
Other comprehensive income	-	-	-	-	33	1	4	3	13	54	2	56
Payments to non-controlling interests	-	-	-	-	-	-	-	-	-	-	-2	-2
Dividends	-	-	-24	-	-	-	-	-	-	-24	-	-24
AT1 coupon	-	-	-14	-	-	-	-	-	-	-14	-	-14
Changes in ownership interests in subsidiaries	-	-	7	-	-	-	-	-	-	7	3	10
Other changes	-	-	-1	-	-	-	-	-	-	-1	1	0
Equity as at 31 December 2021	180	721	1,937	300	-133	-3	16	-23	0	2,995	66	3,061

Statement of Cash Flows

	Cash flow 1 Jan - 31 Dec 2022	Cash flow 1 Jan - 31 Dec 2021
€ mn		
Consolidated net income	153	68
Additions to and reversals of loss allowances	193	135
Amortisation, depreciation, impairment and write-ups of non-current assets	59	48
Other non-cash changes	132	146
Gains/losses on the disposal of non-current assets	1	-1
Other adjustments	-743	-441
Adjusted consolidated net income	-205	-45
Changes in financial assets (ac) (excluding cash funds)	416	-2,793
Changes in financial assets (fvoci)	-212	-187
Changes in financial assets (fvpl)	-950	1,258
Changes in other assets	-24	8
Changes in financial liabilities (ac) (excluding subordinated capital)	-1,814	4,055
Changes in financial liabilities (fvpl)	1,083	-29
Changes in provisions	-249	-60
Changes in other liabilities	-43	-22
Income taxes paid/income tax refunds	-132	-93
Interest received	1,279	740
Interest paid	-409	-206
Cash flow from operating activities	-1,260	2,626
Proceeds from the disposal of equity instruments and investments accounted for using the equity method	4	4
Payments for the acquisition of equity instruments and investments accounted for using the equity method	-	-10
Proceeds from the disposal of property and equipment and intangible assets	1	5
Payments for the acquisition of property and equipment and intangible assets	-34	-39
Effect of changes in reporting entity structure	-5	0
Cash flow from investing activities	-34	-40
Dividends paid and AT1 coupon payments	-14	-38
Changes in subordinated liabilities	-215	-348
Changes due to other financing activities	5	-2
Cash flow from financing activities	-224	-388
Cash and cash equivalents as at 1 January	6,942	4,744
Cash flow from operating activities	-1,260	2,626
Cash flow from investing activities	-34	-40
Cash flow from financing activities	-224	-388
Cash and cash equivalents as at 31 December	5,424	6,942

Notes

Basis of Accounting

Aareal Bank AG is a public limited company incorporated under German law, with its registered office in Paulinenstrasse 15, 65189 Wiesbaden, Germany. It is the parent company of an international property finance and services group, and registered under no. HRB 13 184 in the Commercial Register at the Wiesbaden local court (Germany).

As a listed public limited company, Aareal Bank AG has prepared its consolidated financial statements for the financial year ended on 31 December 2022 in accordance with International Financial Reporting Standards (IFRSs) applicable within the European Union (EU) as at the reporting date, in connection with the provisions pursuant to section 315e of the German Commercial Code (Handelsgesetzbuch – “HGB”). The reporting currency is the euro (€). In addition, the consolidated financial statements were prepared using the European Single Electronic Format pursuant to Commission Delegated Regulation (EU) No. 2019/815 as amended (i.e. in the XHTML format) and were complemented with tags based on Inline XBRL technology.

The Management Board approved the consolidated financial statements for publication on 6 March 2023; they will be published in the German Federal Gazette.

This report contains rounded numbers, which may result in slight differences when aggregating figures and calculating percentages.

Accounting Policies

(1) Accounting standards

Recognition and measurement within Aareal Bank Group are based on accounting policies applied consistently throughout the Group. The consolidated financial statements are prepared on a going concern basis.

We apply accounting policies – and the presentation of financial statements – consistently, in order to ensure the comparability of financial statements over time.

Information is presented in accordance with the principle of materiality. Minor differences may occur regarding the figures stated, due to rounding.

The Bank observes the general prohibition of setting off assets against liabilities. To the extent that the criteria of IAS 12.74 are met, deferred tax assets and deferred tax liabilities are offset. If the requirements set out in IAS 32.42 are met, financial assets and liabilities are reported on a net basis.

Income and expenses are recognised on an accrual basis and recorded in the income statement in the period to which they relate. Interest income and expenses are recognised using the effective interest method. In the case of impaired receivables, interest income and expenses are recognised only on the basis of the net carrying amount. Interest from derivatives designated for hedge accounting and economic hedging relationships is included in net interest income. Interest from derivative hedging instruments is shown under interest from financial instruments (ac and fvoci), while interest from economic hedging relationships is reported under interest from financial instruments (fvpl). We provide specific information on negative interest from financial assets or positive interest from financial liabilities in the Notes, under net interest income. These assets and liabilities are deposits as well as money market and securities repurchase transactions. The interest benefit from the ECB's Targeted Longer-Term Refinancing Operations (TLTRO) is recognised if there is reasonable certainty that it will be granted.

Dividend income is recognised when there is a corresponding legal title.

Commission income and expenses include revenue from the provision of goods or services in the ordinary course of business. This mainly refers to IT consulting projects, trainings, licence and maintenance agreements and hosting or outsourcing services.

The presentation of the financial position and the financial performance in the consolidated financial statements depends on the recognition and measurement methods underlying the preparation of the financial statements, as well as on estimates and assumptions made by the management in relation to uncertain future events. Any assessments required for recognition and measurement are prepared in line with the relevant accounting standards. Estimates and assumptions are based on historical experience and other factors, such as planning and current expectations and forecasts with respect to the occurrence of future events. The estimates and assessments themselves as well as the underlying assessment factors and estimation techniques are reviewed regularly and compared with actual outcome. In our view, the parameters used are relevant and reasonable.

The most significant estimation uncertainties and judgements of the management primarily refer to the calculation of provisions, loss allowances and provisions in the lending business, and the measurement of goodwill, property and tax assets and liabilities. We refer to the item-specific disclosures in this section for information related to the estimates and assumptions actually made within the context of recognition and measurement.

An asset is recognised in the statement of financial position when it is probable that an associated future economic benefit will flow to the Company and the asset can be measured reliably.

A liability is recognised if it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and when the settlement amount of the liability can be measured with sufficient reliability.

(2) Changes in accounting policies

The following financial reporting standards (IASs/IFRSs) were applied for the first time in the reporting period:

- **IFRS 3 Reference to the Conceptual Framework**

The amendments result in an update of IFRS 3 pursuant to which the standard now refers to the Conceptual Framework 2018 and no longer to the Conceptual Framework 1989. Moreover, two additions were made. In terms of the identification of liabilities that an acquirer has assumed in a business combination, the acquirer has to apply the provisions set out in IAS 37 or IFRIC 21 (instead of those included in the Conceptual Framework) for transactions and similar events that are within the scope of IAS 37 or IFRIC 21. Moreover, the explicit statement that contingent assets acquired in a business combination shall not be recognised was included.

- **IAS 37 Onerous Contracts–Costs of Fulfilling a Contract**

The amendments determine that the “cost of fulfilling a contract” comprises the “costs that relate directly to a contract”. Such costs may either be incremental costs of fulfilling that contract (for example, direct labour and materials) or an allocation of other costs that relate directly to fulfilling contracts (for example, an allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling that contract).

- **IAS 16 Property, Plant and Equipment: Proceeds before Intended Use**

As a result of the amendments, it is now prohibited to deduct income from the cost of an item of property, plant and equipment that results from selling any goods produced while such item of property, plant and equipment is being brought to the location and condition necessary for it to be capable of operating in the manner intended by the management. Instead, an entity recognises the proceeds from such disposals and the costs for the production of these goods under operating profit. As before, costs for test runs carried out to test whether the item of property, plant and equipment is working properly are an example for directly attributable costs.

- **Annual Improvements 2018–2020**

Improvements to IFRS 1, IFRS 9, IFRS 16 and IAS 41

The new and revised standards and interpretations did not have material consequences for the consolidated financial statements of Aareal Bank Group.

Until 31 December 2022, the following financial reporting standards (IASs/IFRSs) and interpretations (IFRICs), which are required to be applied in future financial years, had been published by the International Accounting Standards Board (IASB) and endorsed by the EU Commission:

New International Financial Reporting Standards/Interpretations		Issued	Endorsed	Effective date
IFRS 17	Insurance Contracts	May 2017 / June 2020 / December 2021	November 2021 / September 2022	Financial years beginning on or after 1 January 2023

Revised International Financial Reporting Standards		Issued	Endorsed	Effective date
IAS 1	Disclosure of Accounting Policies	February 2021	March 2022	Financial years beginning on or after 1 January 2023
IAS 8	Definition of Accounting Estimates	February 2021	March 2022	Financial years beginning on or after 1 January 2023
IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	May 2021	August 2022	Financial years beginning on or after 1 January 2023
IAS 1	Classification of Liabilities as Current or Non-current	January 2020		Financial years beginning on or after 1 January 2024
IFRS 16	Lease Liability in a Sale and Leaseback	September 2022		Financial years beginning on or after 1 January 2024

- **IFRS 17 Insurance Contracts**

The standard governs the accounting for insurance contracts. IFRS 17 replaces the previously applicable interim standard IFRS 4. The new standard applies to insurance contracts, reinsurance contracts as well as investment contracts with discretionary participation features. In accordance with IFRS 17 insurance contracts are generally measured using the general measurement model. Under this model, the fulfilment cash flows and the contractual service margin are determined upon initial recognition for a group of insurance contracts. Depending on what any changes in underlying parameters refer to, subsequent measurement affects either insurance revenue or insurance finance income or expenses, or the contractual service margin may have to be adjusted which will affect the income statement only in later periods.

- **IAS 1 Disclosure of Accounting Policies**

The amendments to IAS 1 are intended to support preparers in their decision which accounting policies are required to be disclosed in the financial statements. Entities are now required to disclose material accounting policy information rather than their significant accounting policies.

- **IAS 1 Classification of Liabilities as Current or Non-current**

The amendments to IAS 1 are meant to clarify the classification of liabilities as current or non-current. In future, only rights that exist as at the end of the reporting period shall be relevant for the classification of a liability. In addition, further guidance as to the interpretation of the criterion “right to defer settlement for at least twelve months” as well as explanations regarding settlement characteristics were included.

- **IAS 8 Definition of Accounting Estimates**

The amendments to IAS 8 are intended to provide support to make a distinction between accounting policies and accounting estimates. In this context, the definition of a change in accounting estimates is replaced by a definition of accounting estimates. According to the new definition, accounting estimates are “monetary amounts in financial statements that are subject to measurement uncertainty”. Entities develop accounting estimates when the accounting policies require items in financial statements to

be measured in a way that involves measurement uncertainty. Changes in accounting estimates that result from new information or new developments do not represent a correction of an error.

- **IAS 12 Deferred Tax related to Assets and Liabilities arising from a Single Transaction**

The amendment to IAS 12 narrows the scope of the initial recognition exemption pursuant to which no deferred tax assets or liabilities are recognised upon initial recognition of an asset or a liability. If the transaction gives rise simultaneously to equal taxable and deductible temporary differences, such differences no longer fall under the scope of the exemption; accordingly, deferred tax assets and liabilities have to be recognised.

- **IFRS 16 Lease Liability in a Sale and Leaseback**

The amendment includes guidance on subsequent measurement of leases in a sale and leaseback transaction for seller-lessees. The objective of the amendment is primarily to harmonise subsequent measurement of lease liabilities to avoid any inappropriate recognition of gains. In general, the amendment has the effect that the lease payments expected at the commencement date are to be taken into account as part of subsequent measurement of lease liabilities in a sale and leaseback transaction. In each period, the carrying amount of the lease liability is reduced by the expected payments; the difference to the actual payments is recognised through profit or loss.

Aareal Bank Group did not opt for early application of these standards in the 2022 financial year, which are required to be applied in future financial years.

Aareal Bank Group is currently reviewing the effects of the application of the new and amended financial reporting standards on the consolidated financial statements.

(3) Consolidation

Consolidation principles

The consolidated financial statements of Aareal Bank Group include all subsidiaries which are controlled directly or indirectly by Aareal Bank AG. Aareal Bank controls an investee when it has the power to direct the investee's relevant activities, has an exposure or rights to variable returns from its involvement with the investee and has the ability to use its power over the investee to affect the amount of such returns. If control is exercised via voting rights, Aareal Bank assumes that a parent-subsidiary relationship exists if more than half of the voting rights are held directly or indirectly. In cases where voting rights are not conclusive in determining control relationships, other factors are used to assess whether Aareal Bank Group has the power over the company. For this purpose, an assessment is made of the following: purpose and design of an investee, what are the relevant activities of the company, what is the decision-making process in relation to these relevant activities and whether Aareal Bank, by virtue of its rights, currently has the ability to direct these relevant activities. In addition, we assess whether Aareal Bank Group exercises control as principal or as agent or whether a third party acts as agent for the Group. If the assessment shows that Aareal Bank has the sole power over an investee and additionally has the ability to use its power over the investee to affect the amount of the investor's returns, the investee is included in the consolidated financial statements.

Consolidation of a subsidiary begins from the date the Group obtains significant influence (full consolidation). Subsidiaries are deconsolidated when there is no longer the ability to exercise significant influence.

Any non-controlling interests resulting from full consolidation are shown in the statement of financial position, as a separate item of equity. This also applies to a partial disposal without the loss of control over the subsidiary (sale of a non-controlling interest).

Initial consolidation of an entity in the event of an acquisition is based on the purchase method, in accordance with IFRS 3, whereby remeasured amounts must be used when recognising assets and liabilities (including any hidden reserves and hidden encumbrances) of an entity to be consolidated. This may lead to the recognition of new assets and liabilities (including contingent liabilities) that were previously not reported in the statement of financial position of the company to be consolidated. Any excess of acquisition cost over the Group's interest in the fair value of net assets is recognised as (positive) goodwill. Any negative goodwill determined during this comparison is charged against income.

Intragroup transactions, balances and results of transactions between Group entities are eliminated. Accounting policies applied by subsidiaries were amended for the purpose of preparing consolidated financial statements to the extent required to ensure consistent accounting throughout the Group.

Joint arrangements are defined as contractual arrangements where two or more parties carry out business activities that are subject to joint control. Joint control only exists when the decisions about the relevant activities require unanimous consent of the parties sharing control. In general, a distinction is made between joint operations and joint ventures. The parties to a joint operation that have joint control have the rights to the assets, and the obligations for the liabilities, relating to the arrangement. Assets and obligations, as well as revenue and expenses are carried on a pro-rata basis. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Interests in joint ventures are measured using the equity method.

Associates are companies in which the Group has an equity interest and may exercise significant influence, without having control. Significant influence is deemed to exist when an investor holds 20%–50% of the voting rights of a company. Associates are also measured using the equity method.

In accordance with the equity method, the Group's share in the profit or loss of associates and joint ventures is recognised in the consolidated income statement from the date of acquisition and is included in the carrying amount of the equity investment, taking into account interim distributions. Further information on investments accounted for using the equity method is included in Note (47).

Associates and joint ventures are no longer accounted for using the equity method from the date when Aareal Bank loses significant influence over the company or when joint control ends.

As at the reporting date, Aareal Bank was not exposed to material limitations as regards the access to, or use of, assets of the Group and as regards the settlement of liabilities of the Group.

Reporting entity structure

As at 31 December 2022, the reporting entity structure comprised 89 companies (2021: 85), including Aareal Bank AG as well as 79 (2021: 75) subsidiaries, two joint arrangements (2021: two) as well as seven associates (2021: seven).

In the reporting period, three companies constituted the material additions to the reporting entity structure. Our range of services in the Banking & Digital Solutions segment was expanded with the acquisition of payment solutions provider Collect Artificial Intelligence GmbH ("CollectAI") from Otto Group, to include end-customer communications services as well as AI-based interactive invoicing and intelligent dunning solutions. The purchase price was € 8 million, with € 5 million payable in cash and € 3 million as a contingent purchase price due over the next four years. The fair value of assets amounted to € 6 million; it mainly comprises € 3 million in software, € 1 million related to bank balances and € 1 million in client relationships. The acquisition results in goodwill of € 5 million, including potential market value effects and synergies. The company generated overall balanced profits on sales revenues of € 0.4 million in the first quarter of 2022. The company generated € 2.1 million in profits on sales revenues of € -3 million in the period between the acquisition date (31 March 2022) and year-end.

On 20 June 2022, Aareon entered into a binding agreement on the acquisition of approximately 93 % of shares and voting rights in Momentum Software Group AB. Aareon also purchased shares on the market; it thus held around 96 % in the company's capital at the consolidation date (30 June 2022). The purchase price amounted to approximately € 163 million and was paid in cash. The fair value of assets amounted to € 24 million; it largely comprised € 11 million in software, € 7 million related to client relationships and € 1 million in brand rights. The company generated € 0 million in profits on sales revenues of € 5 million in the first half of 2022. The company has generated € 1 million in profits on sales revenues of € 5 million since the consolidation date (30 June 2022). The associated transaction costs amounted to € 4 million. The acquisition resulted in goodwill of € 141 million, including potential market value effects and synergies. With this transaction, Aareon has acquired a SaaS solution for property management and energy monitoring in the Nordic countries, thus strengthening its footprint in the market. Clients will be offered a more extensive portfolio of products in connection with Aareon's digital ecosystem.

Aareon also increased its stake in Dutch PropTech OSRE B.V. to around 51 %. OSRE offers a SaaS solution that automates the property transaction process for new rentals across all segments of the residential and commercial property markets. The goal of this partnership is to further expand Aareon's presence in the Dutch market.

There were no other material changes to the reporting entity structure.

Note (92) "List of Shareholdings" includes an overview of the Group companies.

(4) Currency translation

Individual line items in the financial statements of each Group entity are measured on the basis of the currency of the primary economic environment the respective entity operates in ("functional currency").

The consolidated financial statements are prepared in euro, being both the functional and the reporting currency.

Monetary assets and liabilities denominated in a foreign currency, unsettled cash market/spot transactions and non-monetary items measured at fair value are all translated to the functional currency on the basis of the ECB reference rate prevailing on the balance sheet date. Non-monetary items measured at amortised cost are translated using historical rates.

Currency translation adjustments on monetary assets and liabilities must be recognised in income. Depending on the relevant measurement category, currency translation adjustments on non-monetary items are either recognised directly in equity (in the currency translation reserves), or recognised in the income statement (in net gain or loss from transactions measured at fair value).

Financial statements of consolidated subsidiaries, which are presented in a currency other than the euro, are translated at the ECB reference rate prevailing at the reporting date (statement of financial position) and at (monthly) average rates (income statement). Translation differences are recognised in equity, in the currency translation reserves.

(5) Revenue recognition

Aareal Bank Group recognises revenue in all segments. Revenue or other income is recognised when the performance obligation is satisfied or the goods or products and services have been delivered to the customer, i. e. the customer has obtained control.

Revenue recognition in the banking business mainly refers to the provision of loans, the administration of syndicated loans or the provision of payment systems for the property and energy industries. Aareal Bank Group recognises revenue in the same period in which the services are provided. When contracts comprise various performance obligations, each of the performance obligations are priced separately. Mostly, fixed fees are agreed. Commissions from the lending and other banking business mainly arise over a specified period of time. The customer obtains control over the service while Aareal Bank is providing the service. The agreed transaction price is invoiced to the customer on a pro-rata basis as at the end of an agreed period (normally monthly or quarterly). The Bank recognises the invoiced amount as revenue when it is entitled to a consideration in an amount that directly corresponds to the value of the services already provided. Invoiced amounts are payable immediately in the agreed amounts. Since the service has already been provided at the time the invoice is issued, an unconditional right to consideration arises, and a receivable due from the customer is recorded.

In the Aareon segment, Aareal Bank Group generates revenue mainly from licence, maintenance, subscription, SaaS and consultancy contracts. The contracts may be offered individually, but also in combination. For example, a licence contract generally is complemented by a maintenance contract. These contracts are considered in combination from a commercial point of view. The transaction price is allocated to the performance obligation based on the price observable in the market.

Revenue from licence contracts mainly relates to the granting of rights to use software products that are operated by clients under an in-house model. In-house model means that clients use Aareon's software products on their own servers and are responsible for

the software's operability. The solutions developed by Aareon are based on databases of third-party providers such as SAP®, Oracle® or Microsoft®. In most cases, Aareon acts for its own account in the distribution of such third-party licences and is subject to the implementation risk. The right of use is granted for an unlimited period in most of the cases. The software products are technical solutions that clients in the property industry use to organise their operational processes and, for example, to manage and control their housing portfolios. The performance obligation toward the client is the granting of the right to use the software products mentioned above. Revenue from licence contracts is deemed to be realised when there is an agreement signed by both parties without a right of rescission, the product has been delivered in its entirety (e.g. via licence keys), the licence fee is fixed, and payment is probable. Thus, the client obtains control over the right of use granted. The payment is made primarily after the licence agreement has been concluded or after successful implementation of the software with a credit term of up to 45 days.

Maintenance contracts are entered into when the client enters into a licence contract under the in-house model described above (i.e. the client operates the software on its own servers and is therefore also responsible for their operability). Aareon's services provided as part of maintenance work comprise the regular provision of updates as well as support services for ongoing operation of the software.

Since the financial year 2021, Aareon has also offered subscription contracts (rental software). In the DACH region, Aareon is committed to deliver material new functions to the client in very short intervals. On the other hand, the client is required to install these new functionalities and releases in a timely manner since Aareon provides its maintenance and support services only for these new functionalities and releases. In contrast to the licence contract, Aareon is also obliged to ensure the functionality of the rented software at all times. The client, in turn, is obliged to surrender the software after the termination of the rental contract without any damages.

In the case of SaaS (software-as-a-service) contracts, the software product is not operated in-house, i.e. not by the clients themselves. Instead, the client has access to Aareon's server which is used to provide the functionalities of the software. The performance obligation of Aareon comprises the provision of the access rights as well as, in line with the maintenance contract, the installation of regular updates and the provision of support services.

Revenue generated from maintenance and subscription contracts with the product Wodis Yuneo as well as SaaS services is recognised pro rata temporis over the contractual term of service provision. The contractual performance period starts with the go-live date. The clients pay their fees in advance on a monthly basis or for a specified period (not more than one year). The advance payments that refer to performance obligations that have not yet been satisfied are accrued as contract liabilities and released to revenue on a pro-rata basis as the services are provided in future. The customer obtains the benefits from the service and uses the service at the same time as it is provided.

Consulting services include, among other things, requests for customisation of their products, training services how to use the software (modules) or implementation services for migration projects. Revenue is recognised once the service has been provided. This involves the generation or enhancement of assets for the customers over which they obtain control. Revenue recognition as well as the recognition of the contract asset are based on the progress towards complete satisfaction which is measured using an input method. The stage of completion is determined based on a comparison of contract costs incurred – mainly in connection with deployed workforce/external advisers – with the total contract costs expected for the project. Customers make advance payments for the services provided by Aareon. These are offset against the related contract assets, or reported as contract liabilities if the advance payment received exceeds the contract asset.

In many cases, Aareon's contracts consist of only one performance obligation so that an allocation of the transaction price is not necessary. When several contracts are combined or several performance obligations are contained in a contract, the amounts invoiced separately correspond to the relative stand-alone selling prices. In the limited cases where the invoiced amounts do not correspond to the relative stand-alone selling prices, allocation and break-down is made for accounting purposes based on the adjusted market assessment approach.

Operating expenses are recognised in profit or loss at the time the service is used or at the time the expense is incurred. Interest income and expenses are recognised on an accrual basis.

Apart from the country-specific ERP business in the property and energy industries, Aareon offers digital solutions – sometimes on a cross-country basis – in the CRM (Customer Relationship Management), WRM (Workforce Relationship Management), SRM (Supplier Relationship Management) and BRM (Building Relationship Management) segments. Moreover, Aareon offers additional products and services such as insurance management with BauSecura and Aareon Cloud Services (Hosting). The products have been distributed since the financial year 2021 also in form of bundles, i.e. one ERP product together with several digital solutions.

Standardised contracts are concluded within Aareal Bank Group for the vast majority of contracts with customers. This does not involve costs of obtaining a contract. In addition, there are no material amounts of variable consideration for the various services. The customers are not granted significant financing components.

(6) Leases

A lease is a contract or a part of a contract that conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

In accordance with IFRS 16, a lessee has to recognise a liability for lease payments as well as an asset for the right to use the underlying asset during the lease term. The practical relief provided for by the IFRS 16 as regards short-term lease agreements and low-value leased assets is made use of. The lease liabilities include the present value of the lease payments to be made over the lease term. Lease payments may comprise:

- fixed payments less any lease incentives receivable,
- variable lease payments that depend on an index or interest rate,
- amounts expected to be payable under residual value guarantees,
- the exercise price of a purchase option if the exercise of the option is reasonably certain, and
- payments of penalties for terminating the lease if terminating the lease is reasonably certain.

To determine the present value, the lease payments are discounted using the interest rate implicit in the lease. If such rate cannot be determined, discounting is based on Aareal Bank Group's incremental borrowing rate for the corresponding maturity band and the corresponding currency. The lease term is determined as the non-cancellable period of a lease, taking into account both extension options and termination options if it is reasonably certain that such options are exercised.

The right-of-use asset is measured upon initial measurement at cost which comprises the following amounts:

- the amount of the lease liability,
- any lease payments made to the lessor at or before the commencement date, less any lease incentives received,
- any initial direct costs, and
- asset retirement obligations.

These items are re-measured at amortised cost. The right-of-use assets are depreciated on a straight-line basis over the lease term.

Aareal Bank Group does not apply the IFRS 16 rules to leases where the Bank acts as the lessee involving intangible assets. If contracts include both lease components and non-lease components, the practical expedient as provided for by the standard not to separate these components is made use of.

Aareal Bank Group also acts as lessor, in which case a distinction has to be made between operating and finance leases. The basis for this classification is the extent to which the risks and rewards incidental to ownership of an underlying asset are attributable to either the lessor or the lessee. If a substantial portion of the risks and rewards remain with the lessor, the lease is classified as an operating lease. Where substantially all risks and rewards are transferred to the lessee, the lease is classified as a finance lease.

The major rental contracts of Aareal Bank Group as lessor are operating leases and mainly refer to let property. They are reported in the statement of financial position under other assets. Lease contracts are entered into individually and include various terms and conditions.

In the case of operating leases, the leased asset continues to be recognised as an asset at amortised cost. The lease payments received are reported in the income statement in net other operating income/expenses.

In the case of finance leases, Aareal Bank Group derecognises the carrying amount of the leased asset as at the commencement date and recognises a receivable at an amount equal to the net investment in the lease. Any gains or losses on disposal are recognised in the income statement.

For subsequent measurement, interest income from the lease receivable is recognised and the net investment in the lease is reduced by the lease payments received. Any impairment resulting from these lease receivables are included in the loss allowance in accordance with IFRS 9.

(7) Consolidated statement of cash flows

Aareal Bank Group's statement of cash flows records cash flows pertaining to the areas of operating activities, investing activities and financing activities for the period under review. The starting point of the consolidated statement of cash flows is the amount of cash and cash equivalents, consisting of cash on hand, balances with central banks as well as public-sector debt instruments and bills of exchange eligible for refinancing at central banks.

The definition of the term "operating activities" is consistent with the composition of the operating profit in the statement of comprehensive income. Cash flows from investing activities include proceeds from and payments for property and equipment, intangible assets, equity instruments and investments. Cash flows from financing activities include cash flows from transactions with providers of equity and subordinated capital.

(8) Determination of fair value

The determination of fair value is governed by IFRS 13 and applies to both financial instruments and non-financial assets or liabilities. In accordance with IFRS 13.9, the fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction under current market conditions at the measurement date. The determination of the fair value is based on the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability. Another factor to be taken into account is whether Aareal Bank can enter into a transaction for the relevant asset or liability at the price in that market at the measurement date. The principal market is the market with the greatest volume and the highest level of activity for the asset or liability to which Aareal Bank has access. The most advantageous market is the market that maximises the amount that would be received to sell the asset, or minimises the amount that would be paid to transfer the liability.

Responsibility for the measurement of financial instruments lies with the Risk Controlling division and is made as part of the risk management process. Any anomalies and changes as regards measurement are analysed and checked on a continuous basis. The measurement methodologies are validated on a regular basis by cross-divisional teams.

Fair value hierarchy

In accordance with IFRS 13.72 et seqq., the fair value determination is based on the fair value hierarchy pursuant to which the inputs used are classified into various hierarchy levels on the basis of their respective market proximity and objectivity. The fair value of assets and liabilities is allocated to Level 1 of the fair value hierarchy if it is determined on the basis of unadjusted qualifying prices in active markets for identical assets or liabilities. Fair values determined using inputs other than qualifying prices included within Level 1 that are observable for the financial instrument, either directly or indirectly, are included in Level 2 of the fair value hierarchy. Fair values determined using valuation techniques where one or more material inputs are not based on observable market data are

assigned to Level 3 of the fair value hierarchy. The estimation uncertainties as regards fair value measurement increase the higher the level is. The procedure is set out in a corresponding working instruction (“Fair Value Measurement in accordance with IFRS 13”).

To determine the reclassification of a financial instrument, the level at the beginning of the reporting period is compared with the level at the end of the reporting period, and any changes are disclosed.

Measurement methods

The property and public-sector loans included in loan receivables are measured using the discounted cash flow method for the purpose of the determination of fair value. Discounting of future cash flows of a transaction is based on transaction-specific risk-adjusted interest rates. These are derived on the basis of a virtually risk-free market interest rate for each currency depending on the relevant term, taking into account add-ons for risks specific to the counterparty as well as credit costs based on the assumption that a regular-way transaction existed when the transaction was entered into. In the case of loans subject to fixed interest rates, the contractually agreed payments are used as future cash flows. The future cash flows for floating-rate loans are derived using the future forward interest rates, taking into account the relevant spread for customer-specific terms and conditions. In the case of defaulted loans, future cash flows are reduced by the expected losses. Debt securities and promissory note loans for which no current market price is available in an active market are measured through an analysis of future payments using the fully-capitalised earnings value approach, where the inputs are based on observable market data to the extent possible. These approaches include the discounted cash flow (DCF) method which is used to determine the present value of contractual cash flows until the expected end of the term. The present value is determined based on the benchmark curve applicable for the relevant market, taking into account mark-ups based on credit quality and liquidity. The valuation model used for options included in the transaction is the commonly used Black-Scholes model or numerical procedures.

In the case of unquoted financial investments in equity instruments, the costs of acquisition may also be the best estimate of fair value. Their recoverability is reviewed regularly.

The fair value of OTC derivatives is determined on the basis of sector-specific standardised measurement models, such as the present value method or option pricing models. These techniques are based on inputs of active markets, such as interest rates, yield curves and credit spreads. Since the derivatives are part of highly effective collateral agreements (Credit Support Annex to the ISDA Master Agreement and Collateral Annex to the German Master Agreement on Financial Derivatives Transactions) which are each subject to a master collateralisation agreement, measurement adjustments to reflect any potential counterparty credit risk or own credit risk (CVA and DVA) are not required for reasons of materiality. Nevertheless, with respect to defaulted property loans, receivables arising from associated derivatives are taken into account in the determination of loss allowances. The Bank uses the overnight interest rate swap curve (OIS curve) for the measurement of derivatives secured by cash collateral.

Yield curves used for measurement purposes were fine-tuned during the period under review. The measurement impact of this change in estimates, which was applied prospectively, was in a mid-single-digit million euro amount.

Amortised cost is an adequate estimate of fair value for cash funds, other loan receivables as well as short-term money market receivables and liabilities.

(9) Recognition and measurement of financial instruments

Pursuant to IAS 32, a financial instrument is any contract that gives rise to a financial asset at one contracting party and a financial liability or equity instrument at another contracting party.

Recognition

Financial instruments (including derivative financial instruments) must be recognised if the reporting entity has become a party to the contractual provisions of such financial instruments. Trade date and settlement date are not the same for regular way purchases and sales of financial assets. Such regular way purchases and sales may be accounted for either at trade date or at settlement date.

At Aareal Bank Group, financial instruments (fvpl) are recognised at the trade date, while all other financial instruments are recognised at the settlement date.

Financial instruments have to be derecognised when the contractual rights to the cash flows from the financial asset expire or an entity transfers the financial asset, including substantially all its risks and rewards. The modification of the contractual terms may also result in the derecognition of a financial instrument and the recognition of a new financial instrument.

If only a portion of risks and rewards is transferred and a portion of control is retained, the financial asset is recognised only to the extent of its continuing involvement. The extent of the continuing involvement corresponds to the extent to which the Company is exposed to changes in the value of the financial asset. A financial liability is derecognised when it is extinguished, i.e. when the obligation specified in the contract is discharged.

Modification

As a matter of principle, a modification is defined as any change made to existing terms of a loan agreement or a contractual adjustment during the loan or contract term. This applies regardless of the reasons for the modification (credit-driven or market-driven). Contractual adjustments may either lead to the derecognition of the “old” and the recognition of a “new” asset when such adjustments are substantial to the extent that they, in essence, constitute a new asset (hereinafter referred to as “substantial modification”) or to the recalculation of the carrying amount and the recognition of a net modification gain or loss, when such adjustments constitute an adjustment of an existing asset (hereinafter referred to as “non-substantial modification”).

The contractual adjustments subject to modifications may generally be caused by the borrower’s credit quality and solvency (credit-driven modifications) or the granting of more favourable terms and conditions in an existing contract or the adjustment of the framework for financings as a result of changes in the customer’s financing needs (market-driven modifications).

Both substantial and non-substantial modifications have an impact on profit or loss.

The amount of net modification gains or losses arising from non-substantial modifications is determined by the difference of the gross carrying amounts before and after the modification. Net modification gains or losses arising from market-driven modifications are recognised in net interest income, while credit-driven modifications are reported in the loss allowance. Subsequently, the changes in the carrying amount of the receivable is amortised over the remaining term of the receivable and recorded in net interest income.

In the case of a substantial modification, the old asset has to be derecognised, and a new asset has to be recognised. The difference of the gross carrying amounts before and after the modification is reported as net derecognition gain or loss after utilisation of the existing loss allowance in the case of market-driven modifications. The basis for the assessment initially are qualitative criteria such as obligor change or the extension of terms of loans that are not subject to an impaired credit quality. If these criteria do not apply, it is reviewed whether the present value of the newly agreed cash flows discounted with the original effective interest rate deviate by at least 10 % from the present value that results from discounting the original cash flows with the original effective interest rate. If this is the case, the matter also qualifies as a substantial modification. The derecognition and new recognition of the loan results in a new significance level being determined for a later migration in Stage 2. In the case of credit-driven modifications, a loss allowance is recorded prior to derecognition in an amount that covers the entire difference between the old carrying amount and the fair value determined at the time of initial recognition.

Measurement

Upon initial recognition, financial instruments are measured at fair value, for subsequent measurement at ac or fvoci (cf. section Classification), in each case plus any transaction costs.

Subsequent measurement of financial assets is based on the classification of the financial instrument. Depending on the classification, financial assets are measured at amortised cost, at fair value through other comprehensive income or at fair value through profit or loss. Investments in equity instruments are measured at fair value through profit or loss, unless an irrevocable election is

made at initial recognition to present subsequent changes in fair value in other comprehensive income. Within Aareal Bank Group, this election is exercised as a rule due to the investment characteristics of the equity instruments.

Financial liabilities are measured at amortised cost.

In addition, financial assets and liabilities may be designated as at fair value through profit or loss if certain prerequisites are met. Aareal Bank Group does not make use of this option.

Classification

The classification, i.e. the determination of the measurement category of a financial asset, is to be assessed on the basis of two criteria. The objective criterion refers to the contractual design as to whether the payments solely represent payments of interest and principal on the principal amount outstanding (SPPI = solely payments of principal and interest). Relevant criteria were defined that are reviewed at initial recognition. For example, this may be financings with a primary investment risk or contractually agreed payments that depend on the borrower's economic performance. The subjective classification criterion refers to the business model, i.e. the aim that a company pursues for a group of assets.

Subsequent measurement has to be based on amortised cost (ac) when the financial instrument is held in order to collect contractual cash flows (business model "Hold") and additionally the contractual cash flows represent solely payments of principal and interest, i.e. are SPPI compliant. This classification category is used for a large portion of the lending and securities business.

Subsequent measurement at fair value, with changes in fair value being recognised initially directly in equity and subsequently reclassified to profit or loss (so-called recycling) (fair value through other comprehensive income (fvoci)), has to be made when financial instruments are SPPI compliant and are held either to collect contractual cash flows or to be sold (business model "Hold & Sell").

Subsequent measurement at fair value, with changes in fair value being recognised through profit or loss (fvpl), has to be made if the financial instrument is not SPPI compliant or cannot be allocated to one of the two business models mentioned above. The latter is the case for example when there is the purpose of selling such financial instruments in the near term due to syndication covenants.

Loss allowance

Loss allowances are based on the internal staging and expected credit loss (ECL/EL) model of Aareal Bank. For this purpose, financial instruments measured at amortised cost and at fair value through other comprehensive income as well as loan commitments and financial guarantees are allocated to various stages at both initial recognition and subsequent measurement. The related loss allowances are recognised in the amount of the twelve-month or the lifetime expected credit loss.

Stage 1: All financial instruments without impairment trigger are allocated to this stage at initial recognition. Any disposal and addition involving a substantial modification does not result in a change of allocation. If the credit risk is not significantly increased, the financial instrument has to remain in Stage 1 for subsequent measurement. Loss allowances are recognised in the amount of the losses expected for the following twelve months and interest income is calculated on the basis of the gross carrying amount, applying the effective interest method. Loss allowances have to be recognised on a present value basis.

Stage 2: All financial instruments where credit risk has increased significantly since initial recognition are allocated to this stage. Any disposal and addition involving a substantial modification does not result in a change of allocation. Loss allowances are recognised in the amount of the losses expected for the entire remaining term of the instrument and interest income is calculated on the basis of the gross carrying amount, applying the effective interest method. Loss allowances have to be recognised on a present value basis. The significant increase in credit risk for allocation to Stage 2 is determined using the so-called bank-internal expected downgrade staging model and taking into consideration quantitative and qualitative criteria such as the credit rating of the client, the intensity of client handling (intensified handling), the existence of forbearance measures and/or payment defaults. If the significant

increase in credit risk no longer applies, the financial instrument is re-transferred to Stage 1. A description of the credit risk methods and systems in place at Aareal Bank AG is presented in the Risk Report as part of the Group Management Report.

Stage 3: This stage includes all financial instruments where there is objective evidence of impairment (impairment trigger or credit impaired). Loss allowances are recognised in the amount of the losses of the lifetime expected credit loss, and interest income is calculated on the basis of the net carrying amount (i.e. gross carrying amount less loss allowance) using the effective interest method. The lifetime expected credit loss in Stage 3 is determined as the difference between the gross carrying amount and the present value of expected future cash flows (discounted using the original effective interest). If the impairment triggers no longer apply, the financial instrument is re-transferred to Stage 1 or 2.

POCI (purchased or originated credit impaired): This category includes all financial instruments that were subject to an impairment trigger at initial recognition. The loss allowance is recorded in the amount of the lifetime expected credit loss.

The expected credit loss is generally determined by Aareal Bank using a model-based procedure where, depending on the stage, one- or multi-year parameters are used. The calculation of the expected loss in Stage 1 and of lifetime expected credit loss in Stage 2 is based on the one-year or lifetime probability of default (PD), respectively, the loss given default (LGD), the expected exposure at default (EAD), a discount factor (DF) and the expected contractual term. Current and expected country-specific economic conditions such as the GDP, long-term interest rates and unemployment rate are included in the LGD by means of a scenario-weighted market value forecast. This probability-weighted scenario mix reflects the uncertainties as to how the Covid-19 pandemic will develop further and the potential effects of the war in Ukraine; it supplements our baseline scenario with the addition of divergent developments over an observation period of three years. In addition, the economic outlook is taken into consideration implicitly in the estimation of the future development of the borrowers' financial position and performance and the expected property cash flows and, hence, in the probability of default (PD). We moved a new LGD model for our commercial property finance portfolio (which complies with new EBA guidelines for rating procedures) into production as at 30 June 2022; this new model also serves as a basis for model-based Stage 1 and Stage 2 loss allowance. The model effect due to this conversion was approximately € 10 million.

Intensified handling triggers recognition of loss allowance, in the amount of lifetime expected credit loss for the financial instrument concerned (Stage 2). The same applies for financings for which a forbearance measure has been granted.

A period of not more than twelve months is assessed for Stage 1, while the expected contractual term of the financial instrument has to be taken into account for Stages 2 and 3 (and, in addition, the expected term for repayment of the financial instrument in Stage 3).

The expected loss in Stage 3 is usually determined on the basis of individually estimated cash flows (ECF procedure) in three probability-weighted scenarios. The amount of the loss allowance is determined as being the difference between the carrying amount of the asset and the present value of the expected future cash flows, discounted using the original effective interest rate applicable at initial recognition or after the most recent interest rate adjustment in the case of variable-rate financial instruments (taking into account cash flows from realisation of collateral provided). Collateral is largely provided in the form of land charges or mortgages; these are measured at fair value of the respective scenario which is generally based on either the income capitalisation approach or the discounted cash flow method. Impairment triggers are strong indications for a decline of the borrower's credit quality, arrears, external expert opinions as well as further indications that not all interest and principal payments can be made as contractually agreed.

The loss allowance for debt instruments measured at amortised cost is reported in the item "Loss allowance (ac)", for debt instruments measured at fair value through other comprehensive income in the item "Reserve from the measurement of debt instruments (fvoci)" and for loan commitments and financial guarantees under provisions. Debt instruments reported under POCI are accounted for on a net basis, i.e. without any loss allowance. Changes in loss allowance are reflected by increasing or decreasing the carrying amount through other loss allowance.

If the receivables are not recoverable, the corresponding loss allowance is utilised and the receivable is derecognised. Direct write-offs are not made.

The loss allowance for receivables from other transactions is determined using a simplified procedure in the amount of the lifetime expected credit losses.

Hedging relationships

The risk management strategy set out in the Risk Report of the Group Management Report is the basis for the recognition of hedging relationships. At Aareal Bank Group, risks from value fluctuations are hedged in the case of transactions not measured at fair value through profit or loss. In this context, the risks from hedged items are intended to be offset by entering into hedging derivatives where the fair value changes have the opposite direction compared to those of the hedged item. Average prices of the hedges are not relevant for risk management. Hedging relationships are not recorded for transactions that are measured at fair value through profit or loss. The results from economic hedging relationships are offset in net gain or loss from transactions measured at fair value.

Hedge accounting in accordance with IFRS 9 distinguishes various forms of hedging relationships.

Fair value hedges are used to hedge hedged items against fair value changes resulting from changes in interest rates or from changes in interest and exchange rates that are determined accordingly as hedged risk. At Aareal Bank Group, property loans, securities and promissory note loans are typically hedged using interest rate swaps and cross-currency swaps. The derivatives used for hedging are accounted for at fair value through profit or loss. The offsetting fair value changes of the hedged item resulting from the hedged risk are also recognised through profit or loss. The proportion of the fair value changes of the hedged item not attributable to the hedged risk is accounted for in line with the classification of the hedged item. A fully effective hedging relationship results in offsetting measurement results. The hedging relationship may result in adjustments in the carrying amount of the underlying transaction. Such adjustments will only be recognised in income at the end of the transaction term.

Hedges of a net investment in a foreign operation are used to hedge currency risks arising on the translation of the net assets of foreign Group companies. The effective portion of measurement gains or losses from derivative hedging instruments is recognised directly in equity in the currency translation reserve. The ineffective portion of the hedging derivative's fair value changes have to be recognised in the income statement. The gain or loss on the hedging derivative relating to the effective portion of the hedge that has been recognised directly in equity shall be recognised in profit or loss on disposal of the foreign operation. Any translation differences resulting from the translation of an entity with a different functional currency into the Group currency also have to be recognised directly in equity in the currency translation reserve; they will be reclassified to the income statement upon disposal of the foreign operation.

The effectiveness of hedging relationships is reviewed by way of a forward-looking sensitivity analysis regarding the hedged risks. For this purpose, basis point values, i.e. sensitivities of the IFRS carrying amounts of the hedged items and the hedging transactions, are compared. Factors which may lead to ineffectiveness include differences in the term of transactions or payment dates, or diverging market conventions for underlying transactions and related hedges which affect the relevant measurement parameters (e.g. discounting using an OIS rate) and all risk and hedge types. Currency basis spreads are accounted for as hedging costs, with fair value changes of this element recognised in other comprehensive income. In the event of any changes to hedging relationships occurring in the course of risk management, the hedge ratio of existing hedges and/or hedged items is adjusted accordingly.

Please also refer to our explanations in the Notes (36) and (72).

(10) Cash funds

Cash funds include cash on hand and balances with central banks. Cash funds are exclusively allocated to the measurement category "ac".

(11) Loan receivables

The item "Loan receivables" comprises property loans, public-sector loans and other loan receivables, including deferred interest. Loan receivables can be allocated to all measurement categories. At present, they are allocated to the ac and fvpl measurement categories. The portion of loan commitments not disbursed is reported as contingent liabilities.

(12) Money market and capital market receivables

The item “Money market and capital market receivables” comprises money market receivables, promissory note loans and debt securities, including deferred interest. Money market and capital market receivables may generally be allocated to all measurement categories.

(13) Equity instruments

This item includes unconsolidated equity instruments. They are allocated to the measurement category “fvoci”.

(14) Receivables from other transactions

The item “Receivables from other transactions” comprises trade receivables and other financial receivables. Receivables from other transactions are exclusively allocated to the measurement category “ac”.

(15) Positive market value of designated hedging derivatives / Negative market value of designated hedging derivatives

The items “Positive market value of designated hedging derivatives” and “Negative market value of designated hedging derivatives” include derivatives with positive or negative market values from fair value hedges, cash flow hedges and hedges of a net investment in a foreign operation, including deferred interest. Derivatives are exclusively allocated to the measurement category “fvpl”. The basis for the recognition of hedging relationships is described in the chapter “Recognition and measurement of financial instruments” in this section. Effects from the measurement of these derivatives are reported in the item “Net gain or loss from hedge accounting”, together with the effects from the measurement of the transactions.

(16) Positive market values of other derivatives / Negative market value of other derivatives

Derivative financial instruments that are not part of recognised hedging relationships are reported in Aareal Bank Group under positive or negative market values of other derivatives. They are mainly used to hedge economic market price risks. Derivatives are exclusively allocated to the measurement category “fvpl”. Results from the measurement and the termination of the derivatives are reported in the item “Net gain or loss from financial instruments (fvpl)”. Interest received or paid in connection with these derivatives is also recorded generally in the item “Net gain or loss from financial instruments (fvpl)”. Interest received or paid for derivatives entered into for hedging purposes which, however, do not meet the hedge accounting criteria, is reported in net interest income. Effects from the measurement of these derivatives are reported in the item “Net gain or loss from financial instruments (fvpl)”, together with the effects from the measurement of the transactions.

(17) Investments accounted for using the equity method

The item “Investments accounted for using the equity method” includes shares in companies where Aareal Bank Group can exercise significant influence (associates) as well as shares in joint ventures.

Investments in associates included in this item are recognised at cost when the significant influence arises, and subsequently carried at amortised cost whereby, in particular, the share of results of operations of any financial year is recognised in income.

The equity method applied to the major associates was based on the most recent available financial statements.

(18) Intangible assets

The item “Intangible assets” consists of proprietary software, goodwill and other intangible assets such as purchased software and licences.

Intangible assets (except goodwill) are carried at cost, less accumulated amortisation and any impairment losses.

Research costs incurred in connection with software development are expensed as they are incurred. Development costs are capitalised from the time when the software development can be regarded as completed from a technical perspective, and several other conditions are fulfilled. They are amortised on a straight-line basis, using an estimated economic life of generally five years. Purchased software is also deemed to have a limited useful life. Amortisation is recognised in administrative expenses.

Goodwill is defined as the excess of the cost of acquisition over the fair value of the Group’s interest in the net assets of an acquired entity, at the time of acquisition (positive difference). Goodwill is carried at historical cost less accumulated impairments. Any negative goodwill arising upon acquisition is immediately recognised in income.

In case the annual impairment test (which must be carried out at least on an annual basis) shows that there are indications of impairment of intangible assets (as set out in IAS 36) and that the recoverable amount is lower than the carrying amount of the asset concerned, the asset is written down through profit or loss, to the estimated recoverable amount.

If it is impossible to estimate the recoverable amount for a specific asset, the recoverable amount of the cash-generating unit that the asset belongs to must be determined. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Aareal Bank Group defines cash-generating units either on the basis of a single subsidiary or on product level. The recoverable amount of an asset or a cash-generating unit is the higher of fair value less costs to sell and value in use. Value in use is the present value of future cash flows expected to arise from the continuing use of an asset or cash-generating unit. Future cash flows are determined based on medium-term projections. The present value of the future cash flows is determined using discount factors which are in line with the risks involved. Accordingly, the recognition of intangible assets and the impairment test are also subject to estimation uncertainties.

(19) Property and equipment

Property and equipment includes owner-occupied land and buildings as well as office furniture and equipment, and their right-of-use assets. Property and equipment also includes a hotel operated by Aareal Bank. Property and equipment is measured at cost, less accumulated depreciation, impairment losses and write-downs. Depreciation, impairment losses and write-downs are reported under administrative expenses, while those of the owner-operated hotel are shown in net other operating income/expenses.

Owner-occupied buildings reported under property and equipment are depreciated on a straight-line basis, over a period of 25 to 50 years. Owner-occupied land is not depreciated. Please refer to the explanations in the Notes on other assets for the accounting method to be applied for land and buildings which are not owner-occupied. Office furniture and equipment items are depreciated using the straight-line method, applying the following periods:

	Depreciation period
Other property and equipment	
IT equipment	3-7 years
Other office furniture and equipment	5-13 years

Tenant improvements are depreciated based on the principles applicable for the relevant building.

For details on recognising impairments as defined in IAS 36, please refer to the explanations in the Note on intangible assets in this section.

Gains and losses upon disposal of property and equipment are recognised in income (in net other operating income/expenses).

The costs to purchase property and equipment in the amount of up to € 250.00 (low-value assets) are expensed as they are incurred.

Any items of property and equipment with a cost of more than € 250.00 net, but not exceeding € 1,000.00, can be combined in a collective account for the year, which is then depreciated on a straight-line basis over a period of five years.

(20) Income tax assets/income tax liabilities

The measurement of uncertain tax positions is made using the best estimate of the expenditure required to settle the obligation (most likely amount). In contrast, measurement is based on the expected value if this helps to achieve a more precise estimate.

(21) Deferred tax assets/deferred tax liabilities

Deferred tax assets are recognised when they are deemed recoverable. The recoverability is assessed using tax planning (internal assessment) on the basis of medium-term Group planning. Accordingly, deferred tax assets are only recognised to the extent that we deem it probable that future taxable profits will be available against which the temporary differences and tax loss carryforwards can be utilised. In this context, the matters underlying the deferred tax items were subjected to a maturity analysis. Deferred taxes are calculated on the basis of country- and company-specific tax rates expected to apply at the time of the realisation of temporary differences and set-off against loss carryforwards.

Deferred tax assets and deferred tax liabilities are offset in accordance with IAS 12.74 when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or tax group.

We generally assume that the deferred tax items are of a long-term nature. The remaining maturity or the time of the expected realisation is long-term when there is more than one year between the reporting date and the maturity date.

(22) Other assets

The item “Other assets” includes, amongst other things, properties and contract assets. Properties reported under other assets are intended for short-term disposal. They are measured at the lower of cost or net realisable value, in accordance with IAS 2, and therefore are subject to estimation uncertainties.

(23) Money market and capital market liabilities

The item “Money market and capital market liabilities” comprises money market liabilities, mortgage Pfandbriefe, registered public-sector Pfandbriefe, promissory note loans and other debt securities, including deferred interest. Money market and capital market liabilities are allocated to the measurement category “ac”.

(24) Deposits from the housing industry

The item “Deposits from the housing industry” includes deposits payable on demand and term deposits, including deferred interest. Deposits from the housing industry are allocated to the measurement category “ac”.

(25) Liabilities from other transactions

The item “Liabilities from other transactions” comprises trade payables and other financial liabilities. Liabilities from other transactions are exclusively allocated to the measurement category “ac”.

(26) Subordinated liabilities

Subordinated funds raised do not provide for any early repayment obligation. In the event of liquidation or insolvency, claims on interest and principal from these liabilities are subordinated to the claims of all other creditors, which are not subordinated themselves. Subordinated liabilities are allocated to the measurement category “ac”.

(27) Provisions

The item “Provisions” comprises provisions for pensions and similar obligations, provisions for staff expenses and non-staff operating costs, provisions for risks related to unrecognised items in the lending business, provisions for legal or tax risks, as well as other provisions. Provisions are recognised when there is a present legal or constructive obligation towards third parties arising from a past event, the outflow of resources to meet this obligation is probable and the amount of the obligation can be reliably estimated. The measurement of provisions is made using the best estimate of the expenditure required to settle the obligation (most likely amount). In the context of acquisitions in accordance with IFRS 3, contingent liabilities were also recognised at their fair value (expected value). These are released when the reasons for their recognition cease to exist.

Measurement is subject to several uncertainties and often requires significant estimates made by the management in relation to various factors that may not apply subsequently. The final amount of the liabilities may deviate significantly from the measurement previously made in accounting. For example, the outcome of individual legal proceedings may not be predicted with certainty. If utilisation from the obligation is not expected in the short term, i.e. within twelve months, the provision will be recognised at present value.

Provisions for pensions and similar obligations

Aareal Bank Group maintains various pension plans as defined in IAS 19. For the purpose of reporting pension obligations, IAS 19 makes a distinction between defined contribution plans and defined benefit plans.

Under defined contribution plans, an enterprise pays fixed contributions into a separate entity or a fund and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods. Contributions paid to the statutory pension insurance scheme are also classified as defined contribution plans. The contributions paid to a defined contribution plan are recorded as staff expenses.

Defined benefit obligations are all pension obligations that do not meet the criteria of a defined contribution obligation. The amount of obligations usually depends on one or several factors, including age, length of service, and salary.

The Group’s obligations under defined benefit plans are recognised as a provision in the consolidated statement of financial position. These are based on general works agreements on an employee pension scheme, individual agreements with executive staff as well as individual agreements concluded with the members of the Company’s senior management. Projected economic and demographic developments as well as salary trends must be applied to the calculation of the provisions. Calculating the amount of provisions in the Group is based on actuarial opinions which are prepared by external actuaries on the basis of Aareal Bank-specific and Group-wide standardised parameters.

Provisions for pensions and similar obligations under defined benefit plans are determined based on actuarial opinions in accordance with IAS 19 on the basis of the projected unit credit method; the various defined benefit plans are measured separately. The fair value of the plan assets is deducted from the present value of the pension obligation, taking into account, if applicable, the rules for

the asset ceiling in relation to a surplus of plan assets over the benefit obligation. The resulting amount represents the net defined benefit liability (provision) or the net defined benefit asset. Net interest expense in the financial year is determined by applying the discount rate calculated at the beginning of the financial year to the net liability calculated as at that date. The discount rate used to determine the present value of the obligation is based on the capital market rate of high quality corporate bonds with comparable maturities at the reporting date. Determination is based on the GlobalRate:Link method by Willis Towers Watson. The data basis consists of corporate bonds recorded by Bloomberg which have a rating of at least “AA” and are denominated in the same currency as the underlying pension obligation. Actuarial gains and losses (remeasurements), which – in connection with the amount of obligations – arise on changes in expectations regarding life expectancy, pension increases, salary development and discount rate compared to the estimation made at the beginning of the period or compared to the actual trend during the period, are recorded in other comprehensive income in the item “Changes in the reserve from remeasurements of defined benefit plans”. Actuarial gains and losses (remeasurements) recorded in other comprehensive income may not be reclassified subsequently to profit or loss (recycling). Differences between the expected return on plan assets, determined at the beginning of the period using the then applicable discount rate, and the actual return on plan assets (remeasurement) at the end of the period are also recognised in other comprehensive income. Actuarial gains and losses as well as the difference between expected and actual return on plan assets are included in other reserves. They are reported separately in the statement of changes in equity. Thus, the recognition of pension obligations is based on estimates which are subject to uncertainty.

Share-based payment

Aareal Bank Group maintains share-based payment plans subject to cash settlement in accordance with IFRS 2. We refer to our comments in Note (82) to the consolidated financial statements, which include a detailed description of the plans and their scope as well as information on the valuation model applied and the effects of share-based payments on the Group’s financial position and performance.

Provisions for obligations arising from share-based remuneration plans are recognised under administrative expenses, in the amount of the fair value of the relevant obligation as at the reporting date.

(28) Other liabilities

The item “Other liabilities” includes, among other things, contract liabilities, deferred income and liabilities from other taxes..

(29) Equity

The item “Equity” comprises subscribed capital, capital reserves, retained earnings and other reserves. Other reserves include the reserve from remeasurements of defined benefit plans, the reserves from the measurement of equity and debt instrument at fair value through other comprehensive income, the reserve from changes in the value of foreign currency basis spreads and currency translation reserve. In addition, the item “Equity” includes non-controlling interests as well as the so-called Additional Tier 1 bond (AT1 bond). The AT1 bond is classified as equity since there is neither an obligation to repay the bond nor is there an obligation for ongoing debt service (payment of a dividend). The transaction costs directly attributable to the issue of the AT1 bond as well as dividends paid are deducted directly from equity, net of taxes.

(30) Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss that it incurs because a specified debtor fails to make payment when due. A guarantor recognises a financial guarantee contract as a liability at the date of addition, using the fair value of the guarantee obligation. The obligation is subsequently measured at the greater of the impaired amount and the original amount, less any accumulated amortisation. Within Aareal Bank Group, financial guarantee contracts are presented based on the present value of the claim resulting from the future premium payments of the holder, and offset with the obligation for the guarantee (net basis).

Notes to the Statement of Comprehensive Income

(31) Net interest income

€ mn	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
Interest income from financial assets (ac and fvoci)	1,108	684
Loan receivables	1,086	684
Money market and capital market receivables	22	0
Interest income from financial liabilities (ac)	60	85
Money market and capital market liabilities	46	66
Deposits from the housing industry	14	19
Interest income from financial instruments (fvpl)	30	20
Loan receivables	16	16
Other derivatives	14	4
Market-driven modification gains	2	1
Total interest and similar income	1,200	790
Interest expenses from financial liabilities (ac)	172	17
Money market and capital market liabilities	157	0
Deposits from the housing industry	2	0
Liabilities from other transactions	0	2
Subordinated liabilities	13	15
Interest expenses for financial assets (ac and fvoci)	24	47
Cash funds	20	29
Money market and capital market receivables	4	18
Interest expenses for financial instruments (fvpl)	283	126
Other derivatives	283	126
Market-driven modification losses	19	3
Total interest and similar expenses	498	193
Total	702	597

Net interest income of € 702 million was significantly higher than in the previous year (€ 597 million), mainly due to a year-on-year increase in the credit portfolio, good margins as well as first positive effects from higher market interest rates on the deposit-taking business and an improved funding mix. As expected, this also includes the pro-rata interest rate bonus of € 13 million paid in the first half of the year under the ECB's existing Targeted Longer-Term Refinancing Operations (TLTROs), as Aareal Bank's net lending volume in the euro area continued to rise.

Following the decision of the Governing Council of the ECB on 27 October 2022 to adjust the terms of the current third series of TLTROs, Aareal Bank already repaid € 4.3 billion of the € 5.3 billion in November 2022. The unilateral change to the contractual terms resulted in a measurement loss of € 14 million from the interest rate hedges entered into in this context. This loss was recognised as a net modification loss in relation to the € 1.0 billion TLTROs still held in the portfolio.

(32) Loss allowance

	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
€ mn		
Additions	282	245
Reversals	92	113
Recoveries on loans and advances previously written off	1	1
Loss allowance – other items	–	0
Credit-driven net modification gain or loss	3	2
Total	192	133

Loss allowance totalled € 192 million (2021: € 133 million). This included an addition to loss allowance of € 134 million for the Bank's exposure to Russia which is being run down, determined in line with IFRS 9 based on various probability-weighted scenarios: the highest probability was attributed to the scenario of a sale of receivables, the second-highest probability to the scenario of a total default. A third scenario assumed the renewal and repayment of receivables. This brings coverage of the outstanding exposure (€ 213 million) to more than 60%. The exposure could not be serviced due to the sanctions imposed in Russia (transfer risk), even though the borrower is willing and able to pay. The potential additional impact of the war in Ukraine and the economic consequences of the mutual sanctions imposed are very difficult to estimate at this point in time.

Furthermore, we moved a new LGD model for our commercial property finance portfolio (which complies with new EBA guidelines for rating procedures) into production as at the end of the first half of the year; this new model also serves as a basis for model-based Stage 1 and Stage 2 loss allowance. The model effect due to this conversion was approximately € 10 million. Other than that, there were only few loan defaults, a reflection of the portfolio's high quality and clear recovery trends given the end of the pandemic. In addition, Aareal Bank has recognised a management overlay of approximately € 11 million for all property loans in Stage 1 and Stage 2, in order to account for macro-economic uncertainty affecting economic forecasts to an extraordinary extent, given the impact of the Ukraine war. Uncertainty emanates from a combination of recessionary trends, high dynamic interest rate increases, and an extraordinary level of inflation. The overlay was determined using a scenario-dependent forecast of probabilities of default, based on GDP forecasts over the term, and an additional increase in model-based probabilities of default by around 5% for 2023.

The recognition of loss allowance and the collateral values used are based on the evaluation of five different macro-economic scenarios which are given different weightings. The most probable scenario is called the "Baseline" scenario and is described in detail in the chapter "Macro-economic environment". The adverse scenarios account for an aggregate weighting of 45%. In the following, three major macro-economic factors are compared in order to classify the evaluated scenarios:

	2022	2023	2024	2025
%				
"Positive" scenario (10% weighting)				
Gross domestic product (year-on-year change in %)				
Euro zone	3.2	0.7	3.2	1.5
USA	2.0	1.0	1.9	1.7
UK	4.4	0.0	2.5	2.4
Unemployment (%)				
Euro zone	6.7	7.1	6.8	6.7
USA	3.7	4.0	4.4	3.8
UK	3.7	4.3	4.3	3.9
Long-term interest rates (1-year government bonds) (%)				
Euro zone	2.8	2.2	2.3	2.3
USA	3.7	2.8	2.8	2.8
UK	3.3	3.1	2.9	2.3
Portfolio-weighted property price development (2022 basis = 100%)	100%	99%	101%	101%

	2022	2023	2024	2025
%				
“Baseline” scenario (45% weighting)				
Gross domestic product (year-on-year change in %)				
Euro zone	3.2	-0.1	2.0	2.1
USA	2.0	0.1	0.9	2.1
UK	4.4	-0.9	1.5	2.7
Unemployment (%)				
Euro zone	6.7	7.2	7.1	7.0
USA	3.7	4.2	4.6	4.0
UK	3.7	4.4	4.4	4.0
Long-term interest rates (1-year government bonds) (%)				
Euro zone	2.8	2.5	2.3	2.3
USA	3.7	3.1	2.8	2.8
UK	3.3	3.2	2.9	2.3
Portfolio-weighted property price development (2022 basis = 100%)	100 %	97 %	97 %	97 %
%				
“Adverse 1” scenario (15% weighting)				
Gross domestic product (year-on-year change in %)				
Euro zone	3.2	-1.5	2.6	1.8
USA	2.0	-0.4	0.9	2.1
UK	4.4	-1.7	1.7	2.5
Unemployment (%)				
Euro zone	6.7	7.7	7.5	7.5
USA	3.7	4.4	4.8	4.1
UK	3.7	4.6	4.7	4.4
Long-term interest rates (10-year government bonds) (%)				
Euro zone	2.8	2.7	2.5	2.5
USA	3.7	3.1	2.8	2.8
UK	3.3	3.5	3.1	2.5
Portfolio-weighted property price development (2022 basis = 100%)	100 %	95 %	95 %	94 %

	2022	2023	2024	2025
%				
“Adverse 2” scenario (15 % weighting)				
Gross domestic product (year-on-year change in %)				
Euro zone	3.2	-0.8	0.8	1.3
USA	2.0	-0.7	-0.9	1.4
UK	4.4	-1.6	-0.2	1.5
Unemployment (%)				
Euro zone	6.7	7.3	7.7	7.9
USA	3.7	4.5	5.5	5.2
UK	3.7	4.5	5.1	5.2
Long-term interest rates (10-year government bonds) (%)				
Euro zone	2.8	3.5	3.7	3.7
USA	3.7	4.6	4.3	4.0
UK	3.3	4.0	3.9	3.4
Portfolio-weighted property price development (2022 basis = 100%)	100 %	95 %	89 %	86 %
	2022	2023	2024	2025
%				
“Adverse 3” scenario (15 % weighting)				
Gross domestic product (year-on-year change in %)				
Euro zone	3.2	-1.4	-0.3	1.5
USA	2.0	-1.2	-1.1	1.8
UK	4.4	-2.1	-1.1	2.0
Unemployment (%)				
Euro zone	6.7	7.6	8.4	8.5
USA	3.7	4.4	5.3	4.6
UK	3.7	4.6	5.6	5.7
Long-term interest rates (10-year government bonds) (%)				
Euro zone	2.8	2.3	1.8	1.9
USA	3.7	2.7	2.0	2.2
UK	3.3	3.1	2.2	1.6
Portfolio-weighted property price development (2022 basis = 100%)	100 %	95 %	91 %	91 %

The Stage 1 and Stage 2 loss allowances in the property finance business are calculated using the probability of default (PD) and the loss given default (LGD) based on models, and largely depend on the market value of the properties. In this context, the scenarios presented above are taken into account in the LGD calculation using the respective weightings. In addition, the economic outlook is taken into consideration implicitly in the estimation of the future development of the borrowers' financial position and performance and the expected property cash flows and, hence, in the probability of default (PD). As part of the assessment of sensitivity, we present the loss allowance for each scenario with a 100 % weighting in each case. This calculation includes the so-called quantitative stage transfer to Stage 2 applying the expected downgrade model on the basis of the GDP background factor included in the management overlay, but does not include qualitative criteria for a significant increase in credit risk.

Stage 1 and Stage 2 model-based loss allowance for the property finance business

	31 Dec 2022
%	
Scenario-weighted (recognised amount)	98
“Positive” scenario (100 %)	89
“Baseline” scenario (100 %)	94
“Adverse 1” scenario (100 %)	99
“Adverse 2” scenario (100 %)	103
“Adverse 3” scenario (100 %)	116

Assuming a flat increase/decrease in market values by 5 % at year-end and the probabilities of default as at the reporting date, loss allowance would have decreased by around € 7 million or increased by around € 16 million, respectively.

Please also refer to our explanations in Note (65).

(33) Net commission income

	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
€ mn		
Commission income from		
ERP products (incl. add-on products)	207	182
Digital solutions	85	70
Banking business and other activities	45	45
Total commission income	337	297
Commission expenses for		
Purchased services	56	48
Banking business and other activities	4	4
Total commission expenses	60	52
Total	277	245

Net commission income increased to € 277 million (2021: € 245 million) on the back of higher sales revenue at Aareon and the performance of the Banking & Digital Solutions segment.

Commission income from ERP products and digital solutions includes € 17 million of licence revenue (2021: € 19 million) recognised at a point in time. In the reporting period, revenue of € 2 million (2021: € 2 million) was recorded, attributable to performance obligations of earlier periods.

The net amount of commission income and commission expenses from financial assets and financial liabilities not measured at fair value amounted to € 8 million (2021: € 9 million)

(34) Net derecognition gain or loss

€ mn	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
Net gain or loss on the derecognition of financial assets (ac)		
Loan receivables	16	23
Money market and capital market receivables	-3	-3
Net gain or loss on the derecognition of financial liabilities (ac)		
Money market and capital market liabilities	-21	3
Net gain or loss on the derecognition of financial assets (fvoci)		
Money market and capital market receivables	9	0
Total	1	23

The net derecognition gain or loss amounted to € 1 million (2021: € 23 million).

Following the decision of the Governing Council of the ECB on 27 October 2022 to adjust the terms of the current third series of the targeted longer-term refinancing operations (TLTRO III), Aareal Bank already repaid € 4.3 billion of the € 5.3 billion TLTROs in November 2022. As a result of the unilateral change to the contractual terms, a valuation loss of € 24 million was realised with regard to the interest rate hedges entered into in this context, which offset the market-driven effects from early loan repayments.

(35) Net gain or loss from financial instruments (fvpl)

€ mn	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
Net gain or loss from loan receivables	-28	-30
Net gain or loss from money market and capital market receivables	0	-17
Net gain or loss from other derivatives	53	21
Currency translation	1	-4
Total	26	-30

Net gain or loss from financial instruments (fvpl) in the amount of € 26 million (2021: € -30 million) was mainly incurred by positive valuation effects resulting from market developments for currency and interest rate hedging derivatives, due to the strong market dynamics and starting from negative initial values at the beginning of 2022. To reduce volatility in the income statement brought about by these items, the Bank had concluded additional hedges in the first half of 2022.

(36) Net gain or loss from hedge accounting

€ mn	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
Ineffective portion of fair value hedges	-2	-5
Ineffective portion of net investment hedges	0	0
Total	-2	-5

Please also refer to our explanations in the Notes (9) and (72).

(37) Net gain or loss from investments accounted for using the equity method

In the past financial year, there was a net loss from investments accounted for using the equity method of € -2 million (2021: € -2 million); this was also in line with the pro-rata results from joint ventures and associates.

(38) Administrative expenses

€ mn	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
Staff expenses	341	323
Wages and salaries	277	257
Social security contributions	42	40
Pensions	22	26
Other administrative expenses	173	159
Depreciation, amortisation and impairment of property and equipment and intangible assets	57	46
Total	571	528

Administrative expenses rose to € 571 million (2021: € 528 million) as a result of two factors: on the one hand, business expansion, especially at Aareon; on the other hand, transaction costs incurred by the successful completion of the voluntary public offer made by Atlantic BidCo.

Staff expenses include contributions to defined contribution plans in the amount of € 16 million (2021: € 16 million).

Other administrative expenses include administrative costs for research and development in relation to existing and new functions and products not eligible for capitalisation in the amount of € 48 million (2021: € 30 million).

This item also includes the total fees charged by the auditor of the consolidated financial statements in the 2022 financial year, which consists of the following sub-items:

€ 000's	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
Auditing fees	3,801	4,066
Other assurance services	213	192
Tax advisory services	–	–
Other services	7	25
Total	4,021	4,283

Other assurance services include the review in accordance with the German Securities Trading Act (WpHG), the remuneration report, comfort letters and the review of the separate combined non-financial report. Other services primarily include regulatory advice.

(39) Net other operating income/expenses

	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
€ mn		
Income from properties	36	26
Income from the reversal of provisions	1	0
Income from goods and services	0	0
Other operating income	22	21
Total other operating income	59	47
Expenses for properties	48	32
Expenses for other taxes	6	8
Other operating expenses	5	19
Total other operating expenses	59	59
Total	0	-12

Income from properties was burdened by write-downs of properties held by the Bank. In the previous year, miscellaneous other operating expenses were affected by interest on tax back payments of € 11 million.

(40) Income taxes

	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
€ mn		
Current income taxes	132	93
Deferred taxes	-46	-6
Total	86	87

The differences between calculated and reported income taxes are presented in the following reconciliation:

	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
€ mn		
Operating profit (before income taxes)	239	155
Expected tax rate	31.3%	31.7%
Calculated income taxes	75	49
Reconciliation to reported income taxes		
Different foreign tax burden	-6	-3
Tax attributable to tax-exempt income	-2	0
Tax attributable to non-deductible expenses	24	22
Remeasurement of deferred taxes	-2	0
Taxes for previous years	-5	18
Effect of changes in tax rates	2	-
Non-controlling interest income	0	-
Other tax effects	-	1
Reported income taxes	86	87
Effective tax rate	36%	56%

(41) Earnings per share

Earnings per ordinary share are determined by dividing the earnings attributable to ordinary shareholders of Aareal Bank AG by the weighted average of ordinary shares outstanding during the financial year (59,857,221 shares). Basic earnings per ordinary share correspond to diluted earnings per ordinary share.

Earnings per AT1 unit (based on 100,000,000 AT1 units with a notional amount of € 3 each) are determined by dividing the earnings allocated to AT1 investors by the weighted average of AT1 units outstanding during the financial year. Basic earnings per AT1 unit correspond to diluted earnings per AT1 unit.

Notes to the Statement of Financial Position

(42) Financial assets (ac)

	31 Dec 2022	31 Dec 2021
€ mn		
Cash funds (ac)	5,424	6,942
Cash on hand	0	0
Balances with central banks	5,424	6,942
Loan receivables (ac)	29,948	29,434
Property loans	29,662	29,059
Public-sector loans	268	323
Other loan receivables	18	52
Money market and capital market receivables (ac)	5,017	5,884
Money market receivables	1,914	1,264
Promissory note loans	1,345	1,691
Bonds	1,758	2,929
Receivables from other transactions (ac)	101	85
Trade receivables	44	38
Other financial receivables	57	47
Total	40,490	42,345

(43) Loss allowance (ac)

31 December 2022

	Stage 1	Stage 2	Stage 3	Receivables from other transactions (ac)	Total loss allowance (ac)
€ mn					
Balance as at 1 January	9	77	403	3	492
Additions	33	38	206	1	278
Utilisation	–	–	198	1	199
Reversals	5	56	27	0	88
Transfer to Stage 1	10	-10	–	–	–
Transfer to Stage 2	-5	12	-7	–	–
Transfer to Stage 3	–	-3	3	–	–

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	Stage 1	Stage 2	Stage 3	Receivables from other transactions (ac)	Total loss allowance (ac)
€ mn					
Interest rate effect	–	–	15	–	15
Currency adjustments	0	1	-9	0	-8
Changes in the basis of consolidation	–	–	–	0	0
Balance as at 31 December	42	59	386	3	490

The loss allowance for financial assets measured at amortised cost refers to loan receivables, money and capital market receivables as well as receivables from other transactions (largely trade receivables) that are measured at amortised cost.

A detailed breakdown of loss allowance by classes of financial assets is disclosed in Note (65) in the chapter “Notes related to financial instruments”.

31 December 2021

	Stage 1	Stage 2	Stage 3	Receivables from other transactions (ac)	Total loss allowance(ac)
€ mn					
Balance as at 1 January	19	77	492	4	592
Additions	12	30	200	0	242
Utilisation	0	–	295	1	296
Reversals	9	43	57	0	109
Transfer to Stage 1	0	0	–	–	–
Transfer to Stage 2	-13	13	0	–	–
Transfer to Stage 3	0	-4	4	–	–
Interest rate effect	–	–	41	–	41
Currency adjustments	0	4	18	0	22
Changes in the basis of consolidation	–	–	–	–	–
Balance as at 31 December	9	77	403	3	492

(44) Financial assets (fvoci)

	31 Dec 2022	31 Dec 2021
€ mn		
Money market and capital market receivables (fvoci)	3,550	3,749
Bonds	3,550	3,749
Equity instruments (fvoci)	2	4
Equities and other non-fixed income securities	0	0
Other investments	2	4
Total	3,552	3,753

(45) Financial assets (fvpl)

	31 Dec 2022	31 Dec 2021
€ mn		
Loan receivables (fvpl)	427	598
Property loans	427	598
Money market and capital market receivables (fvpl)	5	4
Fund units	5	4
Positive market value of designated hedging derivatives (fvpl)	1,104	900
Positive market value of fair value hedges	1,102	892
Positive market value of net investment hedges	2	8
Positive market value of other derivatives (fvpl)	722	232
Positive market value of economic hedging derivatives	251	111
Positive market value of miscellaneous derivatives	471	121
Total	2,258	1,734

(46) Non-current assets held for sale

Assets of € 7 million (including € 4 million of goodwill) were due to the agreed management buyout of phi-Consulting GmbH, which was closed in January 2023. The sale is part of Aareon's strategy to boost product profitability.

(47) Investments accounted for using the equity method

Aareal Bank holds interests in seven associates (2021: seven) and two joint ventures (2021: two) that are accounted for using the equity method. The sum total of carrying amounts of the equity investments amounted to € 14 million (2021: € 19 million).

(48) Intangible assets

	31 Dec 2022	31 Dec 2021
€ mn		
Goodwill	378	235
Proprietary software	84	75
Other intangible assets	104	84
Total	566	394

Goodwill is entirely attributable to the Banking & Digital Solutions and Aareon segments and can be allocated as follows.

€ mn	31 Dec 2022 Goodwill	31 Dec 2021 Goodwill
Banking & Digital Solutions		
Germany	9	4
Aareon		
DACH	106	106
International Business		
SMB UK	51	54
Aareon Netherlands	55	47
Aareon France	11	12
Aareon Nordics	141	8
Aareon UK	5	5
Total	378	236

The increase in goodwill is attributable to acquisitions.

Goodwill is generally tested for impairment as at 31 December each year within the context of an impairment test for each cash-generating unit (“CGU”). Apart from the CGU Banking & Digital Solutions, Aareon has defined the following: CGUs: Aareon DACH, SMB (“small and medium business”) UK, Aareon Netherlands, Aareon France, Aareon Nordics and Aareon UK. The basis for the valuation is the present value of future cash flows (value in use), which are determined using medium-term projections. There is an individual planning of revenue and expense items within the first three to a maximum of six years. The parameters underlying the major assumptions are based on internal and external factors as well as on past experience. The major basis is the previous year’s planning. Revenue projections are largely subject to assumptions in relation to new business, as well as renewals of contracts and follow-up business with existing customers. At the same time, these represent the key sources for estimation uncertainty. Regular sales revenues, such as maintenance and fees from transactions with existing customers, are normally not subject to major estimation uncertainty. The projections for cost of materials are derived from revenue projections. The projections for staff expenses predominantly take into account the number of employees, as well as wage and salary trends. Other costs are projected based on the previous year’s figures, taking into account known one-off effects. Estimation uncertainties in relation to costs arise as a result of unplanned price increases or unforeseeable one-off effects. In principle, estimation uncertainty increases if assumptions are made further into the future. Cash flows beyond the individual planning horizon are usually determined by way of a perpetual annuity.

The present values of future cash flows were determined on the basis of a risk-adequate discount factor of 8.86 – 11.30 % after taxes for the Aareon segment and of 6.13 % after taxes for the Banking & Digital Solutions segment. The discount factor for the Aareon segment is calculated based on an underlying risk-free interest rate of 2.03 % – 2.86 % plus a market risk premium of 7.00 % – 7.12 %, multiplied with a beta factor of 1.02 – 1.24. The discount factor for the Banking & Digital Solutions segment is calculated based on an underlying risk-free interest rate of 2.03 % plus a market risk premium of 7.5 %, multiplied with a beta factor of 0.71. In view of the uncertainty surrounding planning beyond the detailed planning phase, the growth rate is assumed to be 2 % based on a cautious view of the market environment. The recoverable amounts show an excess compared to the carrying amounts: No impairment is incurred for all CGUs – except the SMB UK and Aareon Nordics CGUs – even if, ceteris paribus, the above-mentioned material assumptions were to change significantly (such as a 1 % increase in the risk-adequate discount factor, a 5 % decline in the EBITDA included in the cash-flow projections, or a decrease in the growth rate to 1 %). For the SMB UK CGU, the impairment would be in the low single-digit million euro range; for the Aareon Nordics CGU, it would be in the low single-digit to low double-digit million euro range.

Other intangible assets, and property and equipment, are tested for impairment if certain events (triggering events) or changed circumstances suggest that an impairment may have been incurred. Largely based on its different ERP solutions, Aareon distinguishes between 13 asset CGUs that are tested for potential impairments. Each ERP solution generates cash flows independent from those of other assets. Country-specific digital solutions, the data centre in Germany, and other non-current assets are classified as joint

assets pursuant to IAS 36, if required, and allocated to those asset CGUs that fall back on such assets using a revenue-based key. If a potential impairment is identified (triggering event), an impairment test is conducted on the concerned asset CGU in accordance with IAS 36 and in line with the principles applicable for intangible assets. In the event that an asset is impaired, the remaining useful life must be adapted accordingly. If the reasons for a previously recognised impairment no longer apply, the concerned assets are written up through profit or loss; the write-back, however, may not exceed the carrying amount which would have been recognised if no impairment had been incurred in earlier periods.

Intangible assets developed as follows:

	2022				2021			
	Goodwill	Proprietary software	Other intangible assets	Total	Goodwill	Proprietary software	Other intangible assets	Total
€ mn								
Cost								
Balance as at 1 January	276	145	160	581	140	134	133	407
Additions	0	30	3	33	–	31	2	33
Transfers	-4	-1	0	-5	–	0	0	0
Disposals	0	1	2	3	0	20	19	39
Changes in the basis of consolidation	158	0	34	192	134	–	44	178
Currency translation differences	-11	-2	-2	-15	2	0	0	2
Balance as at 31 December	419	171	193	783	276	145	160	581
Amortisation and impairment losses								
Balance as at 1 January	41	70	76	187	38	79	83	200
Amortisation and impairment losses	–	18	15	33	3	11	11	25
Transfers	–	0	0	0	–	–	–	–
Disposals	0	1	3	4	0	20	19	39
Changes in the basis of consolidation	–	–	2	2	–	–	–	–
Currency translation differences	0	0	-1	-1	0	0	1	1
Balance as at 31 December	41	87	89	217	41	70	76	187
Carrying amount as at 1 January	235	75	84	394	102	55	50	207
Carrying amount as at 31 December	378	84	104	566	235	75	84	394

(49) Property and equipment

	31 Dec 2022	31 Dec 2021
€ mn		
Land and buildings and construction in progress	210	253
Office furniture and equipment	25	25
Total	235	278

Property and equipment developed as follows:

	2022			2021		
	Land and buildings and construction in progress	Office furniture and equipment	Total	Land and buildings and construction in progress	Office furniture and equipment	Total
€ mn						
Cost						
Balance as at 1 January	368	90	458	360	90	450
Additions	13	15	28	11	8	19
Transfers	0	0	0	0	0	0
Disposals	51	15	66	7	9	16
Changes in the basis of consolidation	0	1	1	2	1	3
Currency translation differences	1	0	1	2	0	2
Balance as at 31 December	331	91	422	368	90	458
Amortisation and impairment losses						
Balance as at 1 January	115	65	180	100	61	161
Amortisation and impairment losses	18	11	29	18	12	30
of which: impairment losses	–	–	–	–	–	–
Write-ups	–	–	–	–	0	0
Transfers	–	–	–	0	–	0
Disposals	13	11	24	4	8	12
Changes in the basis of consolidation	–	1	1	–	–	–
Currency translation differences	1	0	1	1	0	1
Balance as at 31 December	121	66	187	115	65	180
Carrying amount as at 1 January	253	25	278	260	29	289
Carrying amount as at 31 December	210	25	235	253	25	278

(50) Income tax assets

Income tax assets in a total amount of € 46 million as at 31 December 2022 (2021: € 66 million) include € 19 million (2021: € 21 million) expected to be realised after a period of more than twelve months.

(51) Deferred tax assets

When recognising deferred taxes, claims and liabilities arising vis-à-vis the same tax authority, which may be netted and paid in one amount, were offset in the amount of € 661 million (2021: € 340 million).

Deferred tax assets were recognised in relation to the following items of the statement of financial position:

	31 Dec 2022	31 Dec 2021
€ mn		
Financial assets (ac)	162	90
Financial assets (fvoci)	110	1
Financial assets (fvpl)	28	2
Property and equipment	0	0
Other assets	2	0
Financial liabilities (ac)	1	242
Financial liabilities (fvpl)	400	56
Provisions	61	100
Other liabilities	2	–
Tax loss carryforwards	74	17
Deferred tax assets	840	508

Of the deferred taxes on loss carryforwards, an amount of € 47 million (2021: € 8 million) is attributable to foreign permanent establishments. The existing loss carryforwards may be carried forward for an unlimited period. Deferred taxes on losses carried forward were recognised to the extent that they are expected to be realised within the next five years. Deferred taxes on loss carryforwards also include deferred taxes on interest carryforwards under the interest deduction ceiling, provided such interest carryforwards hold value.

The deferred tax assets not recognised or not subject to valuation adjustments amount to € 68 million (2021: € 77 million). No deferred tax assets were recognised on unlimited tax loss carryforwards of € 309 million (2021: € 352 million) since it is not probable that future taxable profit will be available against which the unused tax loss carryforwards can be utilised.

Deferred tax assets in the amount of € 38 million (2021: € 66 million) were recognised under Other reserves.

(52) Other assets

	31 Dec 2022	31 Dec 2021
€ mn		
Properties	360	348
Contract assets	19	20
Miscellaneous	95	95
Total	474	463

In the reporting year, costs for value-enhancing measures were capitalised.

The portion of the unsatisfied performance obligation from IT consulting projects in the amount of € 6 million (2021: € 7 million) is expected to be realised in the amount of € 6 million (2021: € 7 million) in the subsequent year, and in the amount of € 0 million (2021: € 0 million) thereafter. We do not disclose the portion of unsatisfied performance obligations from other contracts since the consideration from the client equals the services provided.

(53) Financial liabilities (ac)

	31 Dec 2022	31 Dec 2021
€ mn		
Money market and capital market liabilities (ac)	26,425	30,597
Money market liabilities	5,761	9,501
Promissory note loans	2,573	3,373
Mortgage Pfandbriefe	10,823	10,620
Public-sector Pfandbriefe	1,296	1,734
Other debt securities	5,972	5,369
Other financial liabilities	0	–
Deposits from the housing industry (ac)	13,115	11,717
Payable on demand	10,180	9,409
Term deposits	2,935	2,308
Liabilities from other transactions (ac)	96	94
Trade payables	20	19
Other liabilities	76	75
Subordinated liabilities (ac)	386	609
Total	40,022	43,017

The changes in subordinated liabilities in the amount of € -223 million (2021: € -330 million) consist of € -177 million (2021: € -300 million) related to cash payments of principal as well as an amount of € -46 million (2021: € -30 million) related to non-cash changes in fair value and changes of accrued interest.

(54) Financial liabilities (fvpl)

	31 Dec 2022	31 Dec 2021
€ mn		
Negative market value of designated hedging derivatives (fvpl)	2,183	971
Negative market value of fair value hedges	2,141	947
Negative market value of net investment hedges	42	24
Negative market value of other derivatives (fvpl)	1,331	911
Negative market value of economic hedging derivatives	639	526
Negative market value of other derivatives	692	385
Total	3,514	1,882

(55) Non-current liabilities held for sale

Liabilities of € 1 million were due to the agreed management buyout of phi-Consulting GmbH, which was closed in January 2023. The sale is part of Aareon's strategy to boost product profitability.

(56) Provisions

€ mn	31 Dec 2022	31 Dec 2021
Provisions for pensions and similar obligations	158	425
Provisions for unrecognised lending business	4	3
Other provisions	130	130
Total	292	558

Changes in the discount rate applicable to pensions require a revaluation of the amount of obligations. This is recognised directly in other comprehensive income, under changes in the reserve from defined benefit plans. Provisions for pensions showed a marked decline, due to the strong increase in interest rates and higher funding levels.

A detailed breakdown of the provisions for unrecognised lending business by classes of financial assets is disclosed in Note (65) in the chapter “Notes related to financial instruments”.

Provisions for pensions and similar obligations

The pension obligations result mainly from retirement benefit plans maintained at Aareal Bank, Aareon, BauGrund and Westdeutsche Immobilien Servicing (former Westlmmo), which are classified as defined contribution plans or defined benefit plans in accordance with IAS 19.

Aareal Bank contributed assets held to cover existing pension obligations into a Contractual Trust Arrangement (CTA). This is to ensure improved insolvency protection of the pension claims as a result of the limited protection provided by the German Pension Guarantee Association (Pensionssicherungsverein; PSVaG). For this purpose, a bilateral trust was agreed between Aareal Bank AG (trustor) and Aareal Pensionsverein e.V. as legally independent third party (trustee). The trustee is registered in the Register of Associations at the Wiesbaden District Court.

The trustee holds in trust the special fund for the trustor (administrative trust). Simultaneously, but senior to the administrative trust, the trustee holds the special fund for all beneficiaries on trust to secure the recorded entitlements (security trust).

The security trust is established in the interest of the beneficiaries by way of a genuine agreement for the benefit of third parties (section 328 (1) of the German Civil Code (Bürgerliches Gesetzbuch – “BGB”). On the basis of this security trust, the beneficiaries may request from the trustee that the trustee holds and manages this special fund pursuant to the regulations of this trust agreement for the purpose of securing the recorded entitlements. Upon the occurrence of an insured event, the beneficiaries may, based on the security trust, request from the trustee that the trustee satisfies their recorded entitlements pursuant to the regulations of this trust agreement out of the special fund.

The Bank is the economic beneficiary of the assets. The assets are managed by HSBC INKA in a special fund under German investment law (“Spezialfonds”). Based on an investment guideline, HSBC INKA takes investment decisions for staff pensions. A joint investment committee was established, comprising staff from HSBC INKA and Aareal Bank. The Bank transfers new assets to be invested to Aareal Pensionsverein e.V. on an annual basis, which in turn acquires additional units in the special fund. The fund manager invests interest income during the course of the year.

The Bank has taken out reinsurance policies for a portion of the benefit entitlements of active members of the Management Board and former Management Board members. These policies were also transferred to Aareal Pensionsverein e.V. on a trust basis. The Bank provides corresponding funds for contribution paid to these policies.

Transferring assets to Aareal Pensionsverein e.V. on the one hand secures benefit entitlements and claims under occupational pension schemes, and on the other hand creates plan assets within the meaning of IAS 19 which may be offset with benefit obligations of the trustor.

Brief description of the material pension plans

DePfa Bank Betriebsvereinbarung dated 14 December 1999 (BV 97)

BV 97 applies for new joiners since 1 January 1997. The following benefits are granted after a waiting period of five pensionable service years: old-age pension after completing the 65th year of age (also after any previous disability), early old-age pension, disability pension until completing the 65th year of age, as well as widow(er)'s pension.

The Bank shall grant its employees a basic pension from own contributions and additional benefits in the form of corresponding individual agreements on deferred compensation. The basic pension for the pensionable service period is calculated based on an annual benefit expense of 3.5 % for portions of the pensionable income below the contribution ceiling and 10 % for portions of pensionable income above the contribution ceiling. The employer contributions thus calculated as well as the contributions from deferred compensation are contributed into a CTA at the end of each financial year. The benefit assets, including any allocated surpluses, bear interest at a rate of at least 4 %. The annual benefit payments are calculated based on an annuitisation of the benefit assets upon occurrence of the insured event, using a fixed annuitisation table.

The pensionable service period is deemed to be the period from completing the 20th year of age to completing the 65th year of age. Pensionable income is the gross remuneration received within one year.

Any actuarial deductions upon claiming old-age pensions before completing the 65th year of age are taken into account through an annuitisation of the benefit assets. The widow(er)'s pension amounts to 60 % of the employee pension. The Bank increases the current benefit payments annually by 1 %; there is no obligation to provide for an inflation adjustment.

Management Board

The four active Management Board members receive their benefits based on individual commitments.

Two individual benefit commitments are aligned to the fixed annual employer contributions and the amounts from deferred compensation, which are paid to the relevant benefit account and bear interest at a rate of 4 %. In the case of disability or death, the existing benefit assets from the employer contributions are increased by the sum total of the amounts that would have been credited in future (up to a maximum contribution period of ten years) for each full calendar year prior to turning 62 or 63. The benefit assets and the assets from deferred compensation are translated into a lifelong old-age or disability pension upon the occurrence of an insured event, using actuarial principles. Annuitisation is based on biometric principles and a notional interest rate of 4 % p.a. and takes into account a guaranteed pension increase of 1 % p.a. The widow pension amounts to 60 % of the beneficiary's pension entitlement. The current benefit payments are increased annually by 1 %; there is no obligation to provide for an inflation adjustment. The old-age pension benefits based on one of these individual commitments were secured through reinsurance policies. These reinsurance policies include benefits in the case of disability or death.

The two other individual commitments involve the provision of an annual fixed employer's contribution which is credited to the personal benefit account. The benefit assets bear interest that corresponds to the capital gains generated in the form of a real or virtual financial investment. The investment is made in form of a real investment as part of the Contractual Trust Agreement (CTA) to the extent that the benefit contribution is paid into the CTA established for the Bank as trust assets. To the extent that the benefit contribution is not paid into the CTA's trust assets, the investment is made and the capital gains are determined on a virtual basis so that the result of the virtual investment corresponds to the result of the investment as if the investment had been made entirely in form of a real investment. In the case of disability or death, the existing benefit assets are increased by the sum total of the amounts that would have been credited in future (up to a maximum contribution period of five years) for each full calendar year prior to turning 62. The benefit assets are generally disbursed in form of a one-off payment. The pension for the surviving dependants amounts to 60 % of the beneficiary's pension entitlement. To the extent that the benefits are paid in form of an annuity, the benefits are increased by 1 % each year.

DePfa Bank Dienstvereinbarung dated 30 December 1955 (DePfa 55)

DePfa 55 is a pay-related benefit commitment for new entrants before 31 December 1988. It provides for benefit payments after completing the 65th year of age after a waiting period of five service years and benefits paid in case of occupational incapacity (disability) as well as benefits for surviving dependants, each in form of a monthly annuity.

The amount of the entitlement is based on the following increases: 5 % of the last annual salary for the first five service years each, 2 % of the last annual salary for the next 20 service years each, and 1 % of the last annual salary for any following service year, up to a maximum percentage of 75 % of the last annual salary after 35 service years. The widow(er)'s pension amounts to 60 % of the old-age or disability pension. Benefits paid by social security insurance and VBL/Gerling are charged to the benefit entitlements. DePfa 55 does not include any provision allowing for an early payout of old-age pensions or for an adjustment of current benefit payments.

These commitments are based on final salary. The obligation resulting from the respective benefit commitment is therefore very sensitive to unexpected salary changes.

Current benefits are not subject to a fixed adjustment rate; therefore, the adjustment is made pursuant to section 16 of the German Occupational Pensions Act (BetrAVG). Accordingly, an inflation adjustment has to be made every three years given an appropriate economic situation of the Bank. Changes in inflation and, hence, pension increases have an impact on the benefit volume as regards these commitments.

BauBoden agreement dated 1 July 1968 (BauBoden 68)

This agreement applies to employees after completing their 18th year of age who were employed by the Bank on 1 January 1967 or joined the Bank not later than on 31 December 1983. The following benefits are granted after a waiting period of ten service years: old-age pension after completing the 65th year of age, early old-age pension, (total) occupational incapacity pension as well as widow(er)'s pension.

Benefits consist of an overall pension, comprising the statutory pension insurance scheme, the additional pension insurance scheme at VBL or BVV (which is taken into account), or the group insurance contracts and the bank subsidy. The overall pension amounts to 55 % of the pensionable salary after ten years of service. The overall pension is increased by 1 % of the pensionable salary for any further service year, up to the maximum rate of 75 %. The pensionable salary is the last monthly gross salary received during service.

No actuarial deductions are made upon claiming old-age pensions before completing the 65th year of age. The widow(er)'s pension amounts to 60 % of the bank subsidy. The current pension payments are adjusted pursuant to section 16 of the German Occupational Pensions Act (Betriebsrentengesetz; "BetrAVG").

These commitments are based on final salary. The obligation resulting from the respective benefit commitment is therefore very sensitive to unexpected salary changes.

Current benefits are not subject to a fixed adjustment rate; therefore, the adjustment is made pursuant to section 16 of the German Occupational Pensions Act (BetrAVG). Accordingly, an inflation adjustment has to be made every three years given an appropriate economic situation of the Bank. Changes in inflation and, hence, pension increases have an impact on the benefit volume as regards these commitments.

BauBoden agreement dated 12 December 1984 (BauBoden 84) and DePfa Bank Versorgungsordnung dated 28 November 1990 (DePfa 90)

BauBoden 84 applies to employees who joined the Company after 31 December 1983 and have completed their 20th year of age. DePfa 90 applies to employees who joined the Company after 31 December 1988. The following benefits are granted after a waiting period of ten service years: old-age pension and early old-age pension, (total) occupational incapacity pension as well as widow(er)'s pension.

The benefit entitlements of the employees vest after completing their 65th year of age. The amount of the monthly pension entitlement is calculated for each pensionable service year (up to a maximum of 40 service years) as follows: 0.6 % of pensionable salary up to the contribution ceiling, 2 % of the portion of pensionable salary exceeding the contribution ceiling, with pensionable salary and contribution ceiling being calculated using the average for the last twelve months. Benefits paid by BVV are charged to the benefit entitlements under BauBoden 84.

The Bank does not make any actuarial deductions upon claiming early old-age pensions. The widow(er)'s pension amounts to 60 % of the entitlements to benefit payments. The current pension payments are adjusted pursuant to section 16 of the BetrAVG.

These commitments are based on final salary. The obligation resulting from the respective benefit commitment is therefore very sensitive to unexpected salary changes.

Current benefits are not subject to a fixed adjustment rate; therefore, the adjustment is made pursuant to section 16 of the BetrAVG. Accordingly, an inflation adjustment has to be made every three years given an appropriate economic situation of the Bank. Changes in inflation and, hence, pension increases have an impact on the benefit volume as regards these commitments.

AHB – General works agreement on additional pension benefits (company pension scheme) of former Corealcredit

The pension benefits to former employees of Allgemeine Hypothekenbank AG, whose employment relationship began prior to 1 January 1994, are governed by the additional benefit arrangement dated 29 August 1995 on the basis of the complementing general works agreement dated 7 March 1995.

This benefit commitment is based on aggregate benefits derived from pension benefits for civil servants. After a waiting period of five years of service, the aggregate benefit rate is 50 % of pensionable income. For each year after completing the 37th year of age, the aggregate benefit rate increases by 1 % of pensionable income, up to a maximum 75 % of pensionable income. The entitlement amounts to at least 65 % of pensionable income in the case of (total) occupational incapacity and 75 % of pensionable income in the case of workplace accidents. Pensionable income is the annual income (calculated on the basis of 14 monthly salaries), divided by 12.

The pension benefits of the statutory pension insurance and the BVV, which are based on mandatory contributions, are taken into account in the pension determined as described. To that extent, the benefit obligation directly depends on the development of the level of pensions from the statutory pension insurance on the one hand and from the BVV on the other.

As a result of the German Pension Reform Act of 1992 and the associated cuts in statutory pension insurance, the pension scheme was restructured in 1995. The main pillar of the new structure is the limitation of the Bank's deficiency guarantee for the declining level of statutory pensions due to deduction factors applied at early retirement (Rentenzugangsfaktor) and the lower adjustment of the pension value. Accordingly, the Bank continues to assume the deficiency guarantee on a pro-rata basis for the periods of service until the restructuring on 31 December 1995 in relation to the deduction factors applied at early retirement and for the reduced level of the current pension value (net adjustment factor). The reduction in the level of statutory pensions that occurred during the service periods from the restructuring date until retirement is taken into account at the expense of the beneficiary.

From the start of retirement, the AHB pension is decoupled from the development of the statutory pension and the BVV pension already prior to the restructuring since only the AHB pension is adjusted for inflation on an annual basis.

Accordingly, the obligation for the pension commitment during the qualification period is, on the one hand, directly dependent upon the development of the statutory pension and the BVV pension. On the other hand, it is fully dependent upon salary development for all years of service, even including past service. The volume of the obligation also depends upon the fluctuation of inflation and hence pension increases.

Rheinboden Hypothekenbank AG – pension scheme in the version dated 1 December 1991 of former Corealcredit

The former employees of Rheinboden Hypothekenbank AG are entitled to old-age and disability pensions as well as surviving dependant's benefits in accordance with the pension schemes in the version dated 1 December 1991.

The monthly benefits for employees who commenced service prior to 1 October 1978 amount to 5 % of pensionable remuneration (most recent monthly salary based on collective or individual agreements) after ten service years and increase by 0.5 % of pensionable remuneration for each service year, up to 14 % of pensionable remuneration after 15 service years. The monthly benefit entitlement increases by 0.3 % of pensionable remuneration for any additional service years, up to a maximum of 20 %. The BVV benefits are taken into account in such entitlement to the extent that these are based on employer contributions.

The benefits for employees who commenced service after 30 September 1978 amount to 0.15 % of pensionable remuneration up to the contribution ceiling as well as 1.5 % of pensionable remuneration above the contribution ceiling for each year of service between the 25th and 65th year of age. The maximum number of recognisable service years is 35.

The old-age pension under the Rheinboden pension schemes is paid after completing the 65th year of age or upon commencement of old-age pension under the statutory pension insurance scheme (full pension). In case of early retirement, the benefits are subject to deductions of 0.3 % per month of early retirement prior to the age of 65 as a partial compensation for the additional costs associated with early retirement. The surviving dependant's benefits amount to 60 % of the employee's pension entitlement for widow(er)s as well as 15 % for half-orphans and 20 % for orphans, however, in aggregate not exceeding the amount of the employee's pension entitlement.

Supplementary individual contractual arrangements were agreed with individual pensioners and leavers with vested benefits for the purpose of the transition from the old to the new Rheinboden pension scheme and the application of the BVV benefits.

In addition, individual contractual commitments apply to former management board members and general managers – currently pensioners and one leaver with vested benefits.

The adjustment of current pensions on the basis of the Rheinboden commitments is performed on the basis of the inflation allowance set out in section 16 of the German Occupational Pensions Act (BetrAVG), with the exception of a small group of approximately ten pensioners where adjustment is made pursuant to the collective agreement for banks.

WestImmo – Pension fund rules dated 1 October 1995

The pension fund rules dated 1 October 1995 represent a defined contribution scheme. The following benefits are paid after a waiting period of five year of service: old-age pension, early old-age pension, (total) occupational incapacity pension as well as widow(er)'s and orphan's pension.

The amount of the old-age pension, the early old-age pension and the (total) occupational incapacity pension is calculated based on the sum of the pension components earned during the pensionable service period. If the pensionable service period exceeds 40 years, the monthly pension is calculated based on the sum of the highest 40 pension components earned during the pensionable service period. The amount of one pension component is derived from multiplying the reference contribution (since 2021: € 311), the personal earnings relation (relation between pensionable income and contribution ceiling of the German statutory pension insurance; earnings components above the contribution ceiling are weighted with a factor of 3.75) and the annuitisation factor in the relevant age pursuant to the annuitisation table. The amount of the early old-age pension is reduced by 0.5 % for each month in which annuity is paid prior to completing the 65th year of age. The widow(er)'s pension entitlement amounts to 60 %.

If necessary, the determination of the amount of pension obligations is based on the following actuarial assumptions applied consistently throughout the Group:

	31 Dec 2022	31 Dec 2021
Calculation method	Projected unit credit method	Projected unit credit method
Calculation basis	Actuarial tables issued by K. Heubeck in 2018	Actuarial tables issued by K. Heubeck in 2018
Actuarial assumptions (in %)		
Interest rate used for valuation	3.68	1.17
Development of salaries	2.25	2.00
Pension increase	1.79	1.47
Rate of inflation	2.25	1.75
Staff turnover rate	3.00	3.00

Development of net pension liabilities:

	Present value of pension obligations	Fair value of plan assets	Net pension liability
€ mn			
Balance as at 1 January 2022	539	-114	425
Pension expense	19	-3	16
Current service cost	13	–	13
Net interest cost	6	-3	3
Payments	-11	-184	-195
Pension benefits paid	-15	2	-13
Employer's contributions	–	-182	-182
Contributions made by beneficiaries of defined benefit plans	4	-4	0
Remeasurements	-176	88	-88
due to experience adjustments	-1	–	-1
due to changes in financial assumptions	-175	–	-175
due to changes in demographic assumptions	–	–	–
Difference between actual return and return calculated using an internal rate of interest (plan assets)	–	88	88
Changes in the basis of consolidation	–	–	–
Balance as at 31 December 2022	371	-213	158

	Present value of pension obligations	Fair value of plan assets	Net pension liability
€ mn			
Balance as at 1 January 2021	580	-106	474
Pension expense	21	-1	20
Current service cost	17	–	17
Net interest cost	4	-1	3
Payments	-17	-3	-20
Pension benefits paid	-21	8	-13
Employer's contributions	–	-7	-7
Contributions made by beneficiaries of defined benefit plans	4	-4	0
Remeasurements	-46	-4	-50
due to experience adjustments	2	–	2
due to changes in financial assumptions	-48	–	-48
due to changes in demographic assumptions	0	–	0
Difference between actual return and return calculated using an internal rate of interest (plan assets)	–	-4	-4
Changes in the basis of consolidation	1	–	1
Balance as at 31 December 2021	539	-114	425

The weighted duration of pension liabilities is 15.5 years as at 31 December 2022 (2021: 19.2 years).

Expected maturities of the defined benefit obligation (DBO):

	31 Dec 2022	31 Dec 2021
€ mn		
Up to 1 year	16	15
Between 1 year and 5 years	67	65
Between 5 years and 10 years	93	88
Total	176	168

Plan contributions in the amount of € 5 million (2022: € 13 million) are expected to be paid in the financial year 2023.

Sensitivity of the defined benefit obligation (DBO) compared to the central actuarial assumptions

Based on the qualitative plan description, the valuation parameters significant for calculating the amount of the obligation were derived and corresponding calculations were made as regards sensitivity:

	Defined benefit obligation 2022	Change	Defined benefit obligation 2021	Change
	€ mn	%	€ mn	%
Present value of obligations	371		539	
Interest rate used for valuation				
Increase by 1.0 percentage points	322	-13	449	-17
Decrease by 1.0 percentage points	434	17	656	22
Development of salaries				
Increase by 0.5 percentage points	377	2	549	2
Decrease by 0.5 percentage points	365	-2	529	-2
Pension increase				
Increase by 0.25 percentage points	376	1	546	1
Decrease by 0.25 percentage points	367	-1	531	-1
Life expectancy				
Increase by 1 year	387	4	567	5
Decrease by 1 year	355	-4	510	-5

The sensitivity analysis takes into account, in each case, the change of an assumption, while the other assumptions remain unchanged compared to the original calculation, i.e. any potential correlation effects between the individual assumptions are not taken into consideration.

Plan assets can be broken down as follows:

	31 Dec 2022	31 Dec 2021
€ mn		
Cash	0	0
Investment funds including derivatives	191	82
Reinsurance	23	32
Total	214	114

Apart from the usual actuarial risks, the risks associated with defined benefit obligations primarily relate to financial risks in connection with plan assets. Amongst others, these may include counterparty credit risks and market price risks. These risks are taken into account in the risk management of Aareal Bank Group. The measurement of investment funds has to be allocated to Level 2 of the fair value hierarchy.

Other provisions

Other provisions developed as follows:

	Provisions for staff expenses and non-staff operating costs	Provisions for legal and tax risks	Other provisions	Total
€ mn				
Carrying amount as at 1 Jan 2022	103	3	24	130
Additions	61	0	1	62
Utilisation	53	0	0	53
Reversals	5	–	3	8
Interest	-3	–	0	-3
Reclassifications	0	–	0	0
Changes in the basis of consolidation	0	–	1	1
Exchange rate fluctuations	1	–	0	1
Carrying amount as at 31 Dec 2022	104	3	23	130

	Provisions for staff expenses and non-staff operating costs	Provisions for legal and tax risks	Other provisions	Total
€ mn				
Carrying amount as at 1 Jan 2021	89	2	14	105
Additions	57	1	13	71
Utilisation	39	0	2	41
Reversals	6	0	1	7
Interest	0	–	0	0
Reclassifications	0	–	–	0
Changes in the basis of consolidation	–	–	–	–
Exchange rate fluctuations	2	–	0	2
Carrying amount as at 31 Dec 2021	103	3	24	130

Other provisions of € 130 million include € 31 million expected to be realised after a period exceeding twelve months (2021: € 27 million).

Provisions for staff expenses and non-staff operating costs refer to personnel provisions in the amount of € 75 million (2021: € 74 million) and provisions for non-staff operating costs in the amount of € 29 million (2021: € 29 million). Provisions for staff expenses consist of, among other things, provisions for bonuses (cash and share-based), partial retirement, severance payments and existing working hours accounts; Provisions for staff expenses include € 3 million in provisions for severance payments and for partial retirement (2021: € 4 million). Provisions for non-staff operating expenses mainly include provisions for professional and legal advice.

(57) Income tax liabilities

Income tax liabilities in a total amount of € 76 million as at 31 December 2022 (2021: € 17 million) include € 7 million (2021: € 4 million) expected to be realised after a period of more than twelve months.

(58) Deferred tax liabilities

When recognising deferred taxes, claims and liabilities arising vis-à-vis the same tax authority, which may be netted and paid in one amount, were offset in the amount of € 661 million (2021: € 340 million).

Share price gains may arise in the amount of approximately € 47 million may arise in connection with a special investment fund which would be taxable upon disposal of that special fund. However, since there are no plans to dispose of this special fund, no deferred tax liabilities need to be recognised.

Deferred tax liabilities were recognised in relation to the following items of the statement of financial position:

	31 Dec 2022	31 Dec 2021
€ mn		
Financial assets (ac)	67	325
Financial assets (fvoci)	7	30
Financial assets (fvpl)	–	1
Intangible assets	24	20
Property and equipment	16	10
Other assets	15	6
Financial liabilities (ac)	576	2
Provisions	13	–
Other liabilities	0	2
Deferred tax liabilities	718	396

(59) Other liabilities

	31 Dec 2022	31 Dec 2021
€ mn		
Lease liabilities	44	81
Deferred income	1	3
Liabilities from other taxes	23	21
Contract liabilities	25	24
Miscellaneous	18	8
Total	111	137

An amount of € 20 million (2021: € 17 million) of the contract liabilities was recorded in profit or loss in the current reporting period.

(60) Equity

	31 Dec 2022	31 Dec 2021
€ mn		
Subscribed capital	180	180
Capital reserves	721	721
Retained earnings	2,076	1,937
AT1 bond	300	300
Other reserves		
Reserve from remeasurements of defined benefit plans	-73	-133
Reserve from the measurement of equity instruments (fvoci)	-4	-3
Reserve from the measurement of debt instruments (fvoci)	4	16
Reserve from foreign currency basis spreads	-8	-23
Currency translation reserves	-7	0
Non-controlling interests	69	66
Total	3,258	3,061

Equity increased due to the retention of the originally planned dividend and consolidated net income for 2022. In addition, a decline in the negative amount of the reserve from remeasurements of defined benefit plans was seen due to the strong increase in interest rates.

The item “Reserve from the measurement of debt instruments (fvoci)” includes loss allowance of € 1 million (2021: € 0 million).

Subscribed capital

Aareal Bank AG’s subscribed capital amounted to € 180 million as at the reporting date (2021: € 180 million). It is divided into 59,857,221 notional fully-paid no-par value shares (“unit shares”) with a notional value of € 3 per share. The shares are bearer shares. Each share carries one vote. There are no pre-emptive rights or constraints with respect to dividend payouts.

Treasury shares

The General Meeting authorised the Management Board by way of a resolution dated 27 May 2020, pursuant to section 71 (1) no. 7 of the German Public Limited Companies Act (Aktiengesetz – “AktG”), to purchase and sell treasury shares for the purposes of securities trading, at a price not falling below or exceeding the average closing price of the Company’s share in Xetra trading (or a comparable successor system) during the three trading days on the Frankfurt Stock Exchange prior to the relevant purchase or prior to assuming a purchase obligation by more than 10%. This authorisation expires on 26 May 2025. The volume of shares acquired for this purpose must not exceed 5% of the share capital of Aareal Bank AG at the end of any given day.

Furthermore, the Management Board was authorised by means of a resolution of the General Meeting held on 27 May 2020, pursuant to section 71 (1) no. 8 of the AktG, to purchase treasury shares in a volume of up to 10% of the share capital for any permitted purposes. This authorisation expires on 26 May 2025. Shares may be acquired via the stock exchange or by means of a public offer to buy directed at all shareholders, and at purchase prices stipulated in the authorisation and based on the prevailing market price of the Company’s shares. This authorisation may be exercised – also by the direct or indirect subsidiaries of Aareal Bank AG – in full or in part, on one or more occasions.

The shares acquired in accordance with this or an earlier authorisation may be sold, subject to Supervisory Board approval, outside the stock exchange and without an offer directed at all shareholders, subject to the exclusion of shareholders’ pre-emptive rights, when the shares sold do not exceed 10% of the share capital and the issue price is not significantly below the prevailing stock exchange price or in the event of a sale against contributions in kind, or when the shares sold are used to service rights from convertible bonds or bonds with warrants. This also applies to shares issued by subsidiaries. The treasury shares may also be given to the holders of conversion or option rights in lieu of new shares from a contingent capital increase. The shares can also be withdrawn, without such a withdrawal or its implementation requiring a further resolution by the General Meeting.

The Management Board was also authorised to effect the acquisition of treasury shares by using put or call options. Any acquisition of shares using derivatives is limited to 5 % of share capital. In addition, any acquisition of shares shall count towards the 10 % threshold for the authorisation for the acquisition of treasury shares. Where treasury shares are acquired using equity derivatives, the shareholders' right to enter into such derivative transactions with the Company is excluded in analogous application of section 186 (3) sentence 4 of the AktG.

Authorised capital

Aareal Bank has authorised capital pursuant to the resolution by the Annual General Meeting held on 31 August 2022. Accordingly, the Management Board is authorised to increase, on one or more occasions, the Company's share capital by up to a maximum total amount of € 35,914,329 (Authorised Capital 2022) by issuance of new no-par value bearer shares for contribution in cash or in kind, subject to the approval of the Supervisory Board; this authority will expire on 30 August 2027. In the event of a capital increase against cash contributions, the shareholders shall be granted a subscription right, unless the Management Board exercises its authority to exclude shareholder's pre-emptive subscription rights. The Management Board may exclude shareholders' subscription rights, subject to approval by the Supervisory Board and the conditions set out below:

- a) In the event of a capital increase against cash contributions, provided that the issue price of the new shares is not significantly below the prevailing stock exchange price of the Company's listed shares at the time of the final determination of the issue price. However, this authorisation shall be subject to the proviso that the aggregate value of shares sold to the exclusion of shareholders' subscription rights, in accordance with section 203 (1) and (2) and section 186 (3) sentence 4 of the AktG, shall not exceed 10 % of the issued share capital at the time said authorisation comes into effect or – if lower – at the time it is exercised. Any shares that were issued or sold during the term and prior to the exercising of said authorisation, in direct or analogous application of section 186 (3) sentence 4 of the AktG, shall count towards the above threshold of 10 % of the issued share capital. Said ten-per-cent threshold shall also include shares the issuance of which is required under the terms of debt securities with embedded conversion or option rights on shares issued pursuant to section 186 (3) sentence 4 of the AktG (excluding shareholders' subscription rights), which were (or may be) issued during the validity of this authorisation;
- b) for fractional amounts arising from the determination of the applicable subscription ratio;
- c) where this is necessary to grant subscription rights to the holders of bonds with warrants or convertible bonds issued (or to be issued) by the Company or its affiliated companies, which subscription rights are required to entitle these holders to the same extent as they would have been entitled to upon exercising their conversion or option rights or upon performance of a conversion obligation, if any, thus protecting such holders against dilution;
- d) for an amount of up to € 4,000,000, to offer employees (of the Company or its affiliated companies) shares for subscription;
- e) in the event of a capital increase against contributions in kind for the purpose of acquiring companies, divisions of companies or interests in companies or other assets.

The above authorisation for the exclusion of shareholders' subscription rights in the case of capital increases against contributions in cash or in kind is limited to a total of 10 % of the share capital; this limit may be exceeded neither at the time said authorisation comes into effect, nor at the time it is exercised. The above-mentioned 10 % threshold shall furthermore include treasury shares which are sold to the exclusion of shareholders' subscription rights during the validity of this authorisation as well as such shares which are issued to service debt securities, provided that the debt securities were issued to the exclusion of shareholders' subscription rights during the validity of this authorisation due to the authorisation under agenda item 6 of the Annual General Meeting on 22 May 2019. When a new authorisation for the exclusion of shareholders' subscription rights is resolved after the reduction and said new authorisation comes into effect, the upper limit, reduced in accordance with the above-mentioned requirements, shall be increased again to the amount permitted by the new authorisation, with a maximum total of 10 % of the share capital in accordance with the above-mentioned requirements.

The authorised capital has not yet been utilised.

Conditional capital

Based on a resolution passed by the General Meeting on 22 May 2019, the Management Board was authorised to issue, on one or more occasions until 21 May 2024, profit-participation certificates with a limited or unlimited term for contribution in cash or in kind of up to € 900,000,000. The profit-participation certificates must be constructed in such a way that the funds paid for them after issuance can be recognised as banking regulatory capital pursuant to the legal regulations applicable as at the time of issuance. Profit-participation certificates and other hybrid promissory note loans to be issued according to this authorisation shall be connected with conversion rights, entitling or compelling, in accordance with their respective conditions, the holder to purchase Company shares. Conversion rights or obligations may be attached exclusively to bearer no-par value shares of the Company following the reduction of the existing 2019 Conditional Capital resolved upon at the 2022 Annual General Meeting, and are limited to a maximum amount of € 35,914,329 of the Company's share capital. The sum of shares to be issued so as to service conversion or option rights or conversion obligations from profit-participation certificates or hybrid promissory note loans issued pursuant to this authorisation, including shares issued during validity of this authorisation as a result of another authorisation (especially from the Authorised Capital 2017), may not exceed an amount of € 71,828,664.00 (which equals approx. 40 % of the current share capital). Subject to the approval of the Supervisory Board, the Management Board may exclude shareholders' pre-emptive rights in relation to the profit-participation rights in certain cases.

Accordingly, the Company's share capital is subject to a conditional capital increase not exceeding € 35,914,329 by issuance of up to 11,971,443 new no-par value bearer shares ("Conditional Capital 2019"). The conditional capital increase shall be implemented only insofar as (i) the holders of convertible bonds issued by the Company (or by an enterprise in which the Company either directly or indirectly holds a majority interest) until 21 May 2024 on the basis of the Annual General Meeting's authorisation resolution of 22 May 2019 exercise their conversion rights from these convertible bonds or (ii) the holders of convertible bonds issued by the Company (or by an enterprise in which the Company either directly or indirectly holds a majority interest) until 21 May 2024 on the basis of the Annual General Meeting's authorisation resolution of 22 May 2019, with such holders being obliged to exercise those rights, fulfil their obligation or (iii) the Company makes use of alternative performance; insofar as treasury shares are not used to service the rights or, in the aforementioned cases (i) and (ii), no cash compensation is granted. The new shares shall be entitled to a share in the profits from the beginning of the financial year in which they come into existence, through the exercise of conversion rights or the fulfilment of conversion obligations. The Management Board is authorised to determine the details of the conditional capital increase.

To date, the Conditional Capital has not yet been utilised.

Capital reserves

The capital reserves contain premiums received upon the issuance of shares. Costs incurred within the framework of a capital increase reduce capital reserves.

Retained earnings

Retained earnings are comprised of statutory reserves (pursuant to section 150 of the AktG) of € 5 million (2021: € 5 million) and of other retained earnings of € 2,072 million (2021: € 1,932 million).

Additional Tier 1 bond (AT1 bond)

On 13 November 2014, the Management Board issued notes in an aggregate nominal amount of € 300 million with a denomination of €200,000 and an initial interest rate of 7.625 % p. a., based on the authorisation granted by the Annual General Meeting on 21 May 2014.

The notes bore interest of 7.625 % p. a. from the interest commencement date to 30 April 2020. The rate of interest for any interest period commencing on or after 30 April 2020 shall be equal to the reference rate (one-year EUR swap rate) determined on the relevant interest determination date plus a margin of 7.18 % p. a.

The notes constitute unsecured and subordinated obligations of the issuer.

Upon the occurrence of a trigger event, the redemption amount and the principal amount of each note shall be reduced by the amount of the relevant write-down. The write-down shall be effected pro rata with all other Additional Tier I instruments within the meaning of the CRR, the terms of which provide for a write-down upon the occurrence of the trigger event. A trigger event occurs if the Common Equity Tier I capital ratio, pursuant to Article 92 (1) (a) CRR or a successor provision, and determined on a consolidated basis, falls below 7.0%. After a write-down has been effected, the principal amount and the redemption amount of each note, unless previously redeemed or repurchased and cancelled, may be written up in each of the financial years of the issuer subsequent to such write-down until the full initial principal amount has been reached.

The notes may be redeemed, in whole but not in part, at any time at the option of the issuer, subject to prior consent of the competent supervisory authority, upon not less than 30 and not more than 60 days' prior notice of redemption at their redemption amount (taking into account a potential write-down) together with interest accrued until the redemption date (to the extent that interest payment is not cancelled or ruled out in accordance with the terms and conditions of the notes), when the tax or regulatory reasons set out in the terms and conditions of the notes apply. The issuer may also redeem the notes, in whole but not in part, at any time, subject to the prior consent of the competent supervisory authority, upon not less than 30 days' notice of redemption for the first time with effect as at 30 April 2020 and, thereafter, with effect as at each interest payment date at their redemption amount together with interest (if any) accrued to the redemption date.

Distributions

Consistent with its strategy, Aareal Bank does not plan to distribute dividends in 2023 for the 2022 financial year. At the Annual General Meeting held on 31 August 2022, it already had been resolved not to pay dividends in 2022.

The Management Board proposes to the Annual General Meeting that the net retained profit of € 61,054,365.42 for the 2022 financial year, as reported under the German Commercial Code (HGB), be carried forward.

In addition, on 30 April 2023, the Management Board will resolve on a distribution in relation to the ATI instruments, pursuant to the terms and conditions of the notes.

Notes to Financial Instruments

A detailed description of the system in place at Aareal Bank Group to measure, limit, and manage risks throughout Aareal Bank Group is presented in the Risk Report as part of the Group Management Report. The disclosures on the description and the extent of the risks arising from financial instruments in accordance with IFRS 7 are included (in part) in the Risk Report.

(61) Net gains/losses of financial instruments by category

The following overview shows the net gains or net losses from financial instruments in accordance with the classification and measurement categories of financial assets and liabilities (from which the results are generated):

€ mn	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
Net gain or loss from financial assets (ac)	-195	-115
Net gain or loss from financial liabilities (ac)	-21	3
Net gain or loss from financial assets (fvoci) recognised in other comprehensive income	-8	6
Net gain or loss from financial assets (fvoci) transferred to the income statement	9	0
Net gain or loss from equity instruments (fvoci)	-1	1
Net gain or loss from financial instruments (fvpl)	26	-30
Net gain or loss from financial guarantee contracts and loan commitments	-1	1

The net results include measurement gains and losses, realised gains/losses on disposal, subsequent recoveries on loans and advances previously written off in relation to all financial instruments of the respective measurement category. The net gain or loss from financial instruments (fvpl) also comprises the net gain or loss from currency translation.

The hedge result from hedged items is aggregated with the hedge result from derivative hedging instruments in one line item, and amounted to € -2 million (2021: € -5 million) in the year under review. Moreover, the change in the reserve from foreign-currency basis spreads amounted to € 22 million (2021: € 4 million).

(62) Fair value hierarchy in accordance with IFRS 13

The carrying amounts of financial instruments held by Aareal Bank Group which are reported at fair value in the statement of financial position are presented in the following table according to the three-tier fair value hierarchy pursuant to IFRS 13.72 et seq. The presentation is made for each class of financial instrument.

31 December 2022

	Total fair value	Fair value level 1	Fair value level 2	Fair value level 3
€ mn				
Financial assets (fvoci)	3,552	2,162	1,388	2
Money market and capital market receivables (fvoci)	3,550	2,162	1,388	–
Equity instruments (fvoci)	2	–	0	2
Financial assets (fvpl)	2,258	0	1,826	432
Loan receivables (fvpl)	427	–	–	427
Money market and capital market receivables (fvpl)	5	0	–	5
Positive market value of designated hedging derivatives (fvpl)	1,104	–	1,104	–
Positive market value of other derivatives (fvpl)	722	–	722	–
Financial liabilities (fvpl)	3,514	–	3,514	–
Negative market value of designated hedging derivatives (fvpl)	2,183	–	2,183	–
Negative market value of other derivatives (fvpl)	1,331	–	1,331	–

As at year-end, € 1,185 million (2021: € 353 million) in financial assets (fvoci) were transferred from Level 1 to Level 2, and € 29 million (2021: € – million) were transferred from Level 2 to Level 1.

31 December 2021

	Total fair value	Fair value level 1	Fair value level 2	Fair value level 3
€ mn				
Financial assets (fvoci)	3,753	3,365	386	2
Money market and capital market receivables (fvoci)	3,749	3,365	384	–
Equity instruments (fvoci)	4	–	2	2
Financial assets (fvpl)	1,734	0	1,132	602
Loan receivables (fvpl)	598	–	–	598
Money market and capital market receivables (fvpl)	4	0	–	4
Positive market value of designated hedging derivatives (fvpl)	900	–	900	–
Positive market value of other derivatives (fvpl)	232	–	232	–
Financial liabilities (fvpl)	1,882	–	1,882	–
Negative market value of designated hedging derivatives (fvpl)	971	–	971	–
Negative market value of other derivatives (fvpl)	911	–	911	–

The fair values of loan receivables recognised at fair value in the statement of financial position that are assigned to Level 3 of the fair value hierarchy developed as follows during the period under review:

Loan receivables (fvpl)

	2022	2021
€ mn		
Fair value as at 1 January	598	856
Change in measurement	-24	-29
Portfolio changes		
Additions	84	85
Derecognition	231	314
Deferred interest	0	0
Fair value as at 31 December	427	598

Receivables held in the Bank's portfolio contributed € -29 million to the net gain or loss from loan receivables (fvpl) (2021: € -32 million). The net gain or loss from loan receivables (fvpl) is reported in the net gain or loss from financial instruments (fvpl).

Regarding loan receivables (fvpl), the add-ons for risks specific to the counterparty represent the material input parameter not observable in the market. In addition, transactions-specific parameters such as liquidity spread and equity and processing costs are taken into account in measurement. Regarding the non-defaulted loans, an increase/decrease by 1 % would lead to a decrease/increase of the fair value by approximately € 5 million (2021: approximately € 10 million).

The fair values of financial instruments held by Aareal Bank Group which are reported at amortised cost in the statement of financial position are presented in the following table according to the three-tier fair value hierarchy pursuant to IFRS 13.72 et seq. The presentation is made for each class of financial instrument:

31 December 2022

	Total fair value	Fair value level 1	Fair value level 2	Fair value level 3
€ mn				
Financial assets (ac)	39,302	353	9,931	29,018
Cash funds (ac)	5,424	–	5,424	–
Loan receivables (ac)	28,959	–	1	28,958
Money market and capital market receivables (ac)	4,822	353	4,469	–
Receivables from other transactions (ac)	97	–	37	60
Financial liabilities (ac)	39,746	6,277	33,376	93
Money market and capital market liabilities (ac)	26,138	6,277	19,840	21
Deposits from the housing industry (ac)	13,115	–	13,115	–
Liabilities from other transactions (ac)	96	–	24	72
Subordinated liabilities (ac)	397	–	397	–

As at year-end, € 705 million (2021: € 807 million) in financial assets (ac) were transferred from Level 1 to Level 2, and € 6 million (2021: € – million) were transferred from Level 2 to Level 1.

Financial liabilities (ac) of € 3,566 million (2021: € – million) were transferred from Level 1 to Level 2; none (2021: € 6,170 million) were transferred from Level 2 to Level 1.

31 December 2021

	Total fair value	Fair value level 1	Fair value level 2	Fair value level 3
€ mn				
Financial assets (ac)	41,960	1,879	10,829	29,252
Cash funds (ac)	6,942	–	6,942	–
Loan receivables (ac)	29,100	–	0	29,100
Money market and capital market receivables (ac)	5,836	1,879	3,852	105
Receivables from other transactions (ac)	82	–	35	47
Financial liabilities (ac)	43,242	7,692	35,431	119
Money market and capital market liabilities (ac)	30,782	7,692	23,062	28
Deposits from the housing industry (ac)	11,717	–	11,717	–
Liabilities from other transactions (ac)	94	–	3	91
Subordinated liabilities (ac)	649	–	649	–

(63) Comparison of carrying amounts and fair values of financial instruments

The fair values of financial instruments are compared with their carrying amounts (including loss allowance) in the following table. The presentation is made for each class of financial instrument:

	31 Dec 2022 Carrying amount	31 Dec 2022 Fair Value	31 Dec 2021 Carrying amount	31 Dec 2021 Fair Value
€ mn				
Financial assets (ac)	40,000	39,302	41,853	41,960
Cash funds (ac)	5,424	5,424	6,942	6,942
Loan receivables (ac)	29,463	28,959	28,948	29,100
Money market and capital market receivables (ac)	5,016	4,822	5,881	5,836
Receivables from other transactions (ac)	97	97	82	82
Financial assets (fvoci)	3,552	3,552	3,753	3,753
Money market and capital market receivables (fvoci)	3,550	3,550	3,749	3,749
Equity instruments (fvoci)	2	2	4	4
Financial assets (fvpl)	2,258	2,258	1,734	1,734
Loan receivables (fvpl)	427	427	598	598
Money market and capital market receivables (fvpl)	5	5	4	4
Positive market value of designated hedging derivatives (fvpl)	1,104	1,104	900	900
Positive market value of other derivatives (fvpl)	722	722	232	232
Financial liabilities (ac)	40,022	39,746	43,017	43,242
Money market and capital market liabilities (ac)	26,425	26,138	30,597	30,782
Deposits from the housing industry (ac)	13,115	13,115	11,717	11,717
Liabilities from other transactions (ac)	96	96	94	94
Subordinated liabilities (ac)	386	397	609	649
Financial liabilities (fvpl)	3,514	3,514	1,882	1,882
Negative market value of designated hedging derivatives (fvpl)	2,183	2,183	971	971
Negative market value of other derivatives (fvpl)	1,331	1,331	911	911

(64) Financial instruments that have not yet been switched to an alternative benchmark rate

The following table presents the nominal amounts for derivative and non-derivative financial instruments for which no official cessation effective date has been communicated and/or for which no contractual arrangements for transition have been made. Aareal Bank has become an adhering party to the ISDA protocol and is gradually concluding so-called IBOR Supplemental Agreements to the German Master Agreement for Financial Derivatives Transactions (Deutscher Rahmenvertrag für Finanztermingeschäfte) on a bilateral basis with the counterparties. In the case of derivatives, the presentation is made per cash flow leg:

2022

	Non-derivative financial assets	Non-derivative financial liabilities ³⁾	Derivative financial assets	Derivative financial liabilities
€ mn				
EURIBOR ¹⁾	6,106	549	26,343	35,959
USD LIBOR	3,795	–	–	–
CAD CDOR	177	–	1,207	1,336
SEK STIBOR ¹⁾	245	42	843	1,109
DKK CIBOR ¹⁾	168	–	353	407
GBP LIBOR ²⁾	2	–	–	–
Total	10,493	591	28,746	38,811

¹⁾ cessation effective date not yet announced

²⁾ one defaulted loan

³⁾ including AT1 bond

2021

	Non-derivative financial assets	Non-derivative financial liabilities ³⁾	Derivative financial assets	Derivative financial liabilities
€ mn				
EURIBOR ¹⁾	6,558	764	29,371	23,429
USD LIBOR	6,830	–	–	–
CAD CDOR	197	–	1,217	1,352
SEK STIBOR	264	3	787	1,016
DKK CIBOR	78	–	99	130
AUD BBSW ¹⁾	461	–	139	404
GBP LIBOR ²⁾	171	–	–	–
Total	14,559	767	31,613	26,331

¹⁾ cessation effective date not announced as at year-end closing 2021

²⁾ one syndicated financing (changeover in January 2022) and two defaulted loans

³⁾ including AT1 bond

The effects of the IBOR reform are analysed and monitored, and any resulting new requirements are implemented, as part of a separate project. The transition of collateral agreements and of discounting OTC derivatives was implemented on a case-by-case basis until 2021 in accordance with the bilateral agreements between the counterparties. Any existing hedging relationships did not have to be discontinued.

The necessary adjustments for new business were made in 2021 to account for the new benchmark interest rates; corresponding transactions were concluded. The adjustments referred to the currencies EUR (€STR), GBP (SONIA), USD (SOFR) and CHF (SARON). In 2022, preparations necessary for the introduction of the Canadian risk-free rate CORRA commenced.

The existing transactions will be changed on a currency-by-currency basis. Transactions based on EONIA interest and CHF or GBP LIBOR, respectively, were modified, except for one defaulted loan. The current modification of transactions based on USD LIBOR interest has to be completed by 30 June 2023. This was partly implemented using the practical relief applicable to the accounting treatment for modifications. The modification was made using prevailing market conditions; there were no material effects from transition. Such effects are neither expected from further transition.

The new yield curves are taken into account as part of the risk management strategy and integrated into risk management so that transactions based on new reference interest rates can be appropriately assessed and managed. Apart from the major market price risks (interest rate and basis risks), additional risks such as process, legal and documentation risks are addressed and implemented within the context of the project. If the discontinuation of reference interest rates requires contracts to be modified, such modifications are discussed with the customers and contracts adjusted accordingly. Any newly concluded contracts already refer to the new reference interest rates to the extent possible. Any necessary adjustments to processes, the Written Set of Procedural Rules and documentation requirements are developed as part of the project and transferred to line activities.

(65) Disclosures on credit risk

For information on risk management practice and input factors, please refer to the chapter “Credit default risk” in the Risk Report included in the Management Report. The chapter also provides a breakdown of gross carrying amounts of on-balance sheet as well as off-balance sheet credit business, money-market business, and capital markets business, by rating class and loss allowance stages.

The following overviews present the loss allowance and the provisions for credit risks per stage and separately by product groups.

Loss allowance (ac)

2022

	Balance as at 1 January	Additions	Utilisation	Reversals	Transfer to Stage 1	Transfer to Stage 2	Transfer to Stage 3	Interest effect	Currency adjustment	Balance as at 31 December
€ mn										
Stage 1	9	33	-	5	10	-5	-	-	0	42
Loan receivables (ac)	8	32	-	4	10	-5	-	-	0	41
Money market and capital market receivables (ac)	1	1	-	1	0	0	-	-	0	1
Stage 2	77	38	-	56	-10	12	-3	-	1	59
Loan receivables (ac)	75	38	-	54	-10	12	-3	-	1	59
Money market and capital market receivables (ac)	2	0	-	2	0	0	-	-	-	0
Stage 3	403	206	198	27	-	-7	3	15	-9	386
Loan receivables (ac)	403	206	198	27	-	-7	3	15	-9	386
Receivables from other transactions (ac)	3	1	1	0	-	-	-	-	0	3
Total	492	278	199	88	-	-	-	15	-8	490

2021

	Balance as at 1 January	Additions	Utilisation	Reversals	Transfer to Stage 1	Transfer to Stage 2	Transfer to Stage 2	Interest effect	Currency adjustment	Balance as at 31 December
€ mn										
Stage 1	19	12	-	9	0	-13	0	-	0	19
Loan receivables (ac)	18	11	-	8	0	-13	0	-	0	18
Money market and capital market receivables (ac)	1	1	-	1	0	0	-	-	0	1
Stage 2	77	30	-	43	0	13	-4	-	4	77
Loan receivables (ac)	71	30	-	39	0	13	-4	-	4	71
Money market and capital market receivables (ac)	6	0	-	4	0	0	-	-	-	6
Stage 3	492	200	295	57	-	0	4	41	18	492
Loan receivables (ac)	492	200	295	57	-	0	4	41	18	492
Receivables from other transactions (ac)	4	0	1	0	-	-	-	-	0	4
Total	592	242	296	109	-	0	-	41	22	592

The loss allowance for financial assets (ac) is reported in the item “Loss allowance (ac)” on the assets side of the statement of financial position.

Loss allowance in the reserve from the measurement of debt instruments (fvoci)

The loss allowance for debt instruments (fvoci) amounts to € 1 million (2021: € 0 million) and is reported on the equity and liabilities side of the statement of financial position under other reserves.

Provisions for unrecognised lending business

2022

	Provisions as at 1 Jan	Additions	Utilisation	Reversals	Transfer to Stage 1	Transfer to Stage 2	Transfer to Stage 3	Interest effect	Currency adjustment	Provisions as at 31 Dec
€ mn										
Stage 1	1	3	-	1	1	0	-	-	0	2
Stage 2	2	1	-	2	-1	0	0	-	0	2
Stage 3	0	-	-	-	-	-	-	-	-	0
Total	3	4	-	3	-	-	-	-	0	4

2021

	Provisions as at 1 Jan	Additions	Utilisation	Reversals	Transfer to Stage 1	Transfer to Stage 2	Transfer to Stage 2	Interest effect	Currency adjustment	Provisions as at 31 Dec
€ mn										
Stage 1	2	1	-	2	0	0	-	-	0	1
Stage 2	2	1	-	1	0	0	-	-	0	2
Stage 3	0	-	-	-	-	-	-	-	-	0
Total	4	2	-	3	-	-	-	-	0	3

The provisions for unrecognised lending business refer to loan commitments and contingent liabilities and are reported on the equity and liabilities side of the statement of financial position under provisions.

No impaired financial assets were recognised for the first time in the financial year 2022, nor were assets acquired within the context of the realisation of collateral (2021: € – million).

Credit quality of financial receivables from other transactions

Financial receivables from other transactions are subject to credit risk. Of the receivables from other transactions in the amount of € 101 million (2021: € 85 million), € 98 million (2021: € 79 million) were neither overdue nor impaired, € 0 million (2021: € 3 million) were overdue but not impaired and € 3 million (2021: € 3 million) were impaired.

(66) Reconciliation of gross carrying amounts of financial assets

The following tables show the development of the gross carrying amounts of financial assets that are subject to the impairment rules and to which the loss allowance mentioned above can be attributed.

Financial assets (ac)

2022

	Gross carrying amount as at 1 Jan	Additions	Disposals	Transfer to Stage 1	Transfer to Stage 2	Transfer to Stage 3	Impairment and reversals of impairment	Net modification gain or loss	Currency and other changes	Gross carrying amount as at 31 Dec
€ mn										
Loan receivables (ac)	29,434	13,884	12,793	–	–	–	-192	-5	-380	29,948
Stage 1	19,141	11,944	9,157	3,746	-3,314	0	–	-2	-172	22,186
Stage 2	8,788	1,974	3,451	-3,746	3,585	-270	–	0	-103	6,777
Stage 3	1,505	-34	185	–	-271	270	-192	-3	-105	985
POCI	–	–	–	–	–	–	–	–	–	–
Money market and capital market receivables (ac)	5,884	1,862	2,087	–	–	–	–	–	-642	5,017
Stage 1	5,695	1,860	2,007	120	–	–	–	–	-600	5,068
Stage 2	189	2	80	-120	–	–	–	–	-42	-51
Receivables from other transactions (ac)	85	108	92	–	–	–	–	–	0	101
Total	35,403	15,854	14,972	–	–	–	-192	-5	-1,022	35,066

2021

	Gross carrying amount as at 1 Jan	Additions	Disposals	Transfer in Stage 1	Transfer in Stage 2	Transfer in Stage 3	Impairment and reversals of impairment	Net modification gain or loss	Currency and other changes	Gross carrying amount as at 31 Dec
€ mn										
Loan receivables (ac)	27,277	10,151	8,554	-	-	-	-283	-4	847	29,434
Stage 1	19,318	9,603	6,084	544	-4,667	-129	-	-2	558	19,141
Stage 2	6,410	546	2,110	-500	4,682	-487	-	0	247	8,788
Stage 3	1,549	2	360	-44	-15	616	-283	-2	42	1,505
POCI	-	-	-	-	-	-	-	-	-	-
Money market and capital market receivables (ac)	5,884	1,593	1,395	-	-	-	-	-	-198	5,884
Stage 1	5,328	1,593	1,300	249	-14	-	-	-	-161	5,695
Stage 2	556	0	95	-249	14	-	-	-	-37	189
Receivables from other transactions (ac)	94	39	50	-	-	-	-	-	2	85
Total	33,255	11,783	9,999	-	-	-	-283	-4	651	35,403

Financial assets (fvoci)

2022

	Gross carrying amount as at 1 Jan	Additions	Disposals	Transfer to Stage 1	Transfer to Stage 2	Transfer to Stage 3	Impairment and reversals of impairment	Net modification gain or loss	Currency and other changes	Gross carrying amount as at 31 Dec
€ mn										
Money market and capital market receivables (fvoci)	3,749	1,178	946	-	-	-	-	-	-431	3,550
Stage 1	3,749	1,178	946	-	-	-	-	-	-431	3,550
Equity instruments (fvoci)	4	-	2	-	-	-	-	-	0	2
Stage 1	4	-	2	-	-	-	-	-	0	2
Total	3,753	1,178	948	-	-	-	-	-	-431	3,552

2021

	Gross carrying amount as at 1 Jan	Additions	Disposals	Transfer to Stage 1	Transfer to Stage 2	Transfer to Stage 3	Impairment and reversals of impairment	Net modification gain or loss	Currency and other changes	Gross carrying amount as at 31 Dec
€ mn										
Money market and capital market receivables (fvoci)	3,667	947	752	-	-	-	-	-	-113	3,749
Stage 1	3,667	947	752	-	-	-	-	-	-113	3,749
Equity instruments (fvoci)	5	-	1	-	-	-	-	-	0	4
Stage 1	5	-	1	-	-	-	-	-	0	4
Total	3,672	947	753	-	-	-	-	-	-113	3,753

Please refer to the presentation of the items of the statement of financial position in the section “Notes to the statement of financial position” for information on maximum credit risk exposure since the carrying amount corresponds to the maximum credit risk exposure of Aareal Bank as at the balance sheet date, for both items that are subject to the impairment rules and for financial assets that are not subject to the impairment rules. The collateral received is described in the Report on the Economic Position and in the Risk Report as part of the Group Management Report.

As at the current reporting date, no receivables from the lending business that were written off during the reporting year were still the subject matter of foreclosure proceedings (2021: € 1 million).

(67) Modification effects

If modifications are made to financial assets during the contract term leading to changes in the contractual cash flows and if these changes are not that extensive that the financial asset is derecognised and a new asset is recognised, such modifications are non-substantial modifications. Following a non-substantial modification, the carrying amount of a financial asset is remeasured and a net modification gain or loss is recorded in net interest income or in the loss allowance.

The following table shows the amortised cost before modification of financial assets that were subject to non-substantial modifications in the reporting period as well as the related modification gain or loss.

	2022			2021		
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3
€ mn						
Amortised cost before modification	211	128	46	45	836	283
Net gain or loss on modification	-2	0	-3	-2	0	-2
Amortised cost after modification	209	128	43	43	836	281

During the financial year 2022, receivables from the lending business in the amount of € 20 million were reclassified from Stage 2 or Stage 3 to Stage 1, which had been modified since they were first classified as Stage 2 or Stage 3 receivables (2021: € 99 million).

(68) Offsetting financial instruments

Financial assets and financial liabilities are offset and the net amount is presented in the statement of financial position when currently there is a legally enforceable right to set off the recognised amounts, and when the Bank intends either to settle on a net basis – or to realise the asset and settle the liability simultaneously. The following overviews show whether and to what extent financial instruments were actually offset as at the current reporting date. The tables also include disclosures on financial instruments that are part of an enforceable master netting or similar arrangement that do not meet the criteria for offsetting in the statement of financial position.

Financial assets

31 December 2022

	Gross carrying amounts of recognised financial assets	Gross carrying amounts of offset amounts	Net carrying amount reported in the statement of financial position	Financial liabilities which were not subject to offsetting	Collateral received	Remaining net amount
€ mn						
Derivatives	1,825	–	1,825	1,674	147	4
Reverse repos	–	–	–	–	–	–
Total	1,825	–	1,825	1,674	147	4

31 December 2021

	Gross carrying amounts of recognised financial assets	Gross carrying amounts of offset amounts	Net carrying amount reported in the statement of financial position	Financial liabilities which were not subject to offsetting	Collateral received	Remaining net amount
€ mn						
Derivatives	1,143	–	1,143	877	251	15
Reverse repos	–	–	–	–	–	–
Total	1,143	–	1,143	877	251	15

Financial liabilities**31 December 2022**

	Gross carrying amounts of recognised financial liabilities	Gross carrying amounts of offset amounts	Net carrying amount reported in the statement of financial position	Financial assets which were not subject to offsetting	Collateral provided	Remaining net amount
€ mn						
Derivatives	3,514	–	3,514	1,674	1,555	285
Repos	97	–	97	–	97	–
Total	3,611	–	3,611	1,674	1,652	285

31 December 2021

	Gross carrying amounts of recognised financial liabilities	Gross carrying amounts of offset amounts	Net carrying amount reported in the statement of financial position	Financial assets which were not subject to offsetting	Collateral provided	Remaining net amount
€ mn						
Derivatives	1,884	–	1,884	877	900	107
Repos	–	–	–	–	–	–
Total	1,884	–	1,884	877	900	107

To reduce counterparty risk, Aareal Bank Group concludes standardised master agreements for financial derivatives and securities repurchase agreements, such as the ISDA Master Agreement, the German Master Agreement on Financial Derivatives or the Master Agreement for Securities Repurchase Transactions. In addition, Aareal Bank enters into collateral agreements (Credit Support Annex to the ISDA Master Agreement and Collateral Annex to the German Master Agreement on Financial Derivatives) in which a mutual collateralisation of all claims between the contracting parties is agreed and which include netting arrangements.

The master agreements for financial derivatives used by Aareal Bank include netting arrangements at a single transaction level (so-called “payment netting”), which provide for a netting of payments when both parties need to make payments in the same currency on the same date, as set out in the contract. Aareal Bank does not offset financial derivatives according to the rules related to payment netting, as the transactions are not settled on a net basis. Aareal Bank Group has not entered into arrangements providing for netting of derivatives across several transactions.

For securities repurchase transactions (repo), depending on the counterparty, payment or delivery netting is made. In line with the rules set out in the master agreement for repo transactions, payments or deliveries of securities may be offset when both counterparties have to make payments in the same currency on the same date, or have to deliver securities of the same type. Transactions effected on the basis of the master agreement for repo transactions generally meet the offsetting requirements of IAS 32.

(69) Assets provided or accepted as collateral

Assets provided as collateral

Aareal Bank Group has provided financial assets as collateral for its liabilities, including TLTRO, or contingent liabilities. The following overview shows the carrying amount of the collateral provided and the items of the statement of financial position in which they are reported.

	31 Dec 2022	31 Dec 2021
€ mn		
Money market and capital market receivables (ac, fvoci and fvpI)	3,590	5,695
Receivables from other transactions (ac)	41	35
Total	3,631	5,730

The protection buyer has no right to sell or re-pledge any of the financial assets pledged as collateral (2021: € – million). There is a fully cash-collateralised and irrevocable payment obligation in the amount of € 41 million (2021: € 35 million) from the bank levy and also for the deposit guarantee scheme of German banks. This obligation is reported under receivables from other transactions (ac).

Assets accepted as collateral

Aareal Bank Group accepts financial assets as collateral. These assets may be sold or pledged without the collateral owner being in default. No fixed-income securities were accepted as collateral for repo transactions as at the reporting date (2021: € – million).

Collateral is provided and accepted predominantly on the basis of standardised agreements on securities repurchase transactions and on the collateralisation of forward transactions.

(70) Transfer of financial assets without derecognition

Aareal Bank Group sells securities subject to a take-back requirement as borrower within the framework of genuine repurchase agreements. Within the scope of such agreements, securities were transferred to lenders without resulting in the securities being derecognised since Aareal Bank Group retains the substantial risks and rewards from the securities. The risks to which Aareal Bank Group is still exposed comprise the default risk, the interest rate risk and other price risks. The equivalent values received as collateral during the transfer of securities are accounted as money-market receivables or liabilities. Within the context of securities repurchase transactions, the unrestricted title and the unrestricted power of disposition is transferred to the lender upon delivery of the securities. The lender has the right to sell or pledge these securities, however, he is required to retransfer securities of the same type and in the same amount as at the repurchase date.

As at the reporting date, securities with a carrying amount of € 96 million were used as part of repurchase agreements (2021: € – million).

(71) Derivative financial instruments

The following table shows positive and negative market values (including pro-rata interest) of all derivative financial instruments by hedge and risk types:

€ mn	Fair value as at 31 Dec 2022		Fair value as at 31 Dec 2021	
	positive	negative	positive	negative
Fair value hedge derivatives	1,102	2,141	892	947
Interest rate risk	1,093	2,141	892	919
Interest rate swaps	1,093	2,141	892	919
Interest rate and currency risk	9	–	–	28
Cross-currency swaps	9	–	–	28
Hedge of net investments	1	42	8	24
Currency risk	1	42	8	24
Cross-currency swaps	1	42	8	24
Other derivatives	722	1,331	232	911
Interest rate risk	486	692	123	384
Interest rate swaps	347	554	112	373
Caps, floors	139	138	11	11
Interest rate and currency risk	236	639	109	527
Spot and forward foreign exchange transactions	15	4	2	10
Cross-currency swaps	221	635	107	517
Total	1,825	3,514	1,132	1,882

Derivatives have been entered into with the following counterparties:

€ mn	Fair value as at 31 Dec 2022		Fair value as at 31 Dec 2021	
	positive	negative	positive	negative
OECD banks and central governments	1,823	3,343	1,073	1,785
Companies and private individuals	2	171	59	97
Total	1,825	3,514	1,132	1,882

The following overview shows the cash flows of derivative financial instruments by risk types, based on the contractual maturity. The amounts shown in the table represent the contractually agreed future undiscounted cash flows.

31 December 2022

	Up to 3 months	3 months to 1 year	1 year to 5 years	More than 5 years	Total
€ mn					
Interest rate risk					
Interest rate swaps					
Cash inflows	256	970	2,293	546	4,065
Cash outflows	298	1,056	2,787	724	4,865
Caps, floors					
Cash inflows	6	51	85	0	142
Cash outflows	6	50	85	0	141
Interest rate and currency risk					
Spot and forward foreign exchange transactions					
Cash inflows	1,606	163	–	–	1,769
Cash outflows	1,594	163	–	–	1,757
Cross-currency swaps					
Cash inflows	964	3,714	11,039	-7	15,710
Cash outflows	1,102	4,025	11,419	–	16,546
Total cash inflows	2,832	4,898	13,417	539	21,686
Total cash outflows	3,000	5,294	14,291	724	23,309

31 December 2021

	Up to 3 months	3 months to 1 year	1 year to 5 years	More than 5 years	Total
€ mn					
Interest rate risk					
Interest rate swaps					
Cash inflows	92	265	641	152	1,150
Cash outflows	114	204	579	166	1,063
Caps, floors					
Cash inflows	0	0	11	0	11
Cash outflows	0	0	11	0	11
Interest rate and currency risk					
Spot and forward foreign exchange transactions					
Cash inflows	1,407	174	–	–	1,581
Cash outflows	1,416	174	–	–	1,590
Cross-currency swaps					
Cash inflows	528	1,929	10,813	-9	13,261
Cash outflows	583	2,116	11,395	–	14,094
Total cash inflows	2,027	2,368	11,465	143	16,003
Total cash outflows	2,113	2,494	11,985	166	16,758

The procedure for measuring and monitoring liquidity risk is described in the Risk Report, part of the Group Management Report.

(72) Disclosures on hedging relationships**Disclosures on hedging derivatives**

The following tables show designated hedging derivatives separately for each type of hedging relationship, risk category and product type:

Positive market value of designated hedging derivatives

	Carrying amount 31 Dec 2022	Nominal amount 31 Dec 2022	Fair value change 1 Jan - 31 Dec 2022	Carrying amount 31 Dec 2021	Nominal amount 31 Dec 2021	Fair value change 1 Jan - 31 Dec 2021
€ mn						
Fair value hedges						
Interest rate risk						
Interest rate swaps	1,093	13,204	752	892	16,618	-268
Interest rate and currency risk						
Cross-currency swaps	9	113	31	–	–	–
Hedge of net investments						
Currency risk						
Cross-currency swaps	1	90	0	8	441	0
Spot and forward foreign exchange transactions	0	24	0	–	–	–
Total	1,103	13,431	783	900	17,059	-268

Negative market value of designated hedging derivatives

	Carrying amount 31 Dec 2022	Nominal amount 31 Dec 2022	Fair value change 1 Jan - 31 Dec 2022	Carrying amount 31 Dec 2021	Nominal amount 31 Dec 2021	Fair value change 1 Jan - 31 Dec 2021
€ mn						
Fair value hedges						
Interest rate risk						
Interest rate swaps	2,141	21,934	1,790	919	14,841	-159
Interest rate and currency risk						
Cross-currency swaps	–	–	–	28	119	-12
Hedge of net investments						
Currency risk						
Cross-currency swaps	42	760	0	24	670	0
Currency swaps	–	–	–	0	19	0
Total	2,183	22,694	1,790	971	15,630	-171

The following overview presents the nominal amounts of the hedging derivatives by maturities:

31 December 2022

	Up to 3 months	3 months to 1 year	1 year to 5 years	More than 5 years	Total
€ mn					
Fair value hedges					
Interest rate risk					
Interest rate swaps	1,672	5,058	20,140	8,269	35,139
Interest rate and currency risks					
Cross-currency swaps	–	113	–	–	113
Hedge of net investments					
Currency risk					
Cross-currency swaps	219	396	234	–	849
Currency swaps	24	–	–	–	24
Total nominal amounts	1,915	5,567	20,374	8,269	36,125

Aareal Bank applies the standard amendments from the first part of the effects of the interest rate benchmark reform (IBOR reform) on financial reporting in the period prior to the replacement of an existing interest rate benchmark. The uncertainties refer to the hedging of changes in fair value from interest rate risk. This applies to variable reference rates with terms of one to six months for the currencies CAD, DKK, EUR, SEK and USD. An amount of € 28.6 billion of the total of € 36.1 billion is attributable to benchmark interest rates for which no official cessation effective date has been announced and/or for which no contractual arrangements for transition have been made. Aareal Bank still does not expect the changes from the IBOR reform to require the discontinuation of hedging relationships.

31 December 2021

	Up to 3 months	3 months to 1 year	1 year to 5 years	More than 5 years	Total
€ mn					
Fair value hedges					
Interest rate risk					
Interest rate swaps	1,335	3,880	19,057	7,186	31,458
Interest rate and currency risks					
Cross-currency swaps	–	–	119	–	119
Hedge of net investments					
Currency risk					
Cross-currency swaps	90	359	662	–	1,111
Currency swaps	19	–	–	–	19
Total nominal amounts	1,444	4,239	19,838	7,186	32,688

Disclosures on hedged items

Hedged items of fair value hedges

The following tables show hedged items and hedge adjustments from discontinued hedging relationships separately for each type of hedging relationship and risk category:

	Active hedging relationships			Discontinued hedging relationships
	Carrying amount 31 Dec 2022	Accumulated hedge adjustment 31 Dec 2022	Change in hedged fair values 1 Jan - 31 Dec 2022	Balance of hedge adjustments 31 Dec 2022
€ mn				
Interest rate risk				
Loan receivables (ac)	6,991	-509	-736	1
Money market and capital market receivables (ac)	1,965	-31	-287	125
Money market and capital market receivables (fvoci)	3,362	-353	-407	1
Money market and capital market liabilities (ac)	19,841	-1,961	-2,400	18
Subordinated liabilities (ac)	295	-14	-39	2
Interest rate and currency risk				
Money market and capital market receivables (ac)	119	6	-31	-

	Active hedging relationships			Discontinued hedging relationships
	Carrying amount 31 Dec 2021	Accumulated hedge adjustment 31 Dec 2021	Change in hedged fair values 1 Jan - 31 Dec 2021	Balance of hedge adjustments 31 Dec 2021
€ mn				
Interest rate risk				
Loan receivables (ac)	7,765	8	-247	42
Money market and capital market receivables (ac)	2,935	514	-114	143
Money market and capital market receivables (fvoci)	3,617	51	-87	1
Money market and capital market liabilities (ac)	18,026	503	-553	37
Subordinated liabilities (ac)	489	28	-16	2
Interest rate and currency risk				
Money market and capital market receivables (ac)	156	37	-12	-

Hedge of net investments

The change in value of currency-hedged net investments in foreign operations amounted to € 51 million (2021: € -85 million) in the financial year under review. The balance of the hedging reserve (net) stood at € -62 million (2021: € -10 million) at year-end.

Net gain or loss from hedge accounting

Fair value hedges

The net gain or loss from hedge accounting includes the following ineffective portions of fair value hedges by risk categories:

	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
€ mn		
Interest rate risks	-2	-6
Interest rate and currency risks	0	1
Total	-2	-5

Hedge of net investments

The ineffective portion of currency-hedged net investments in foreign operations amounted to € 0 million (2021: € 0 million), reported in the item “Net gain or loss from hedge accounting”. € -5 million (2021: € – million) was reclassified from the reserve for currency-hedged net investments to the income statement.

Please also refer to our explanations in the Notes (9) and (36).

(73) Maturities of financial liabilities

The following overview shows the future undiscounted cash flows of non-derivative financial liabilities and of loan commitments.

Maturities as at 31 December 2022

	Payable on demand	Up to 3 months	3 months to 1 year	1 year to 5 years	More than 5 years	Total
€ mn						
Money market and capital market liabilities (ac)	819	3,292	4,135	12,832	9,637	30,715
Deposits from the housing industry (ac)	10,181	2,653	272	9	–	13,115
Subordinated liabilities (ac)	–	4	50	245	156	455
Financial liabilities from other transactions (ac)	94	–	1	–	–	95
Lease liabilities	–	3	9	27	5	44
Financial guarantees	129	–	–	–	2	131
Loan commitments	1,230	–	–	–	–	1,230

Maturities as at 31 December 2021

	Payable on demand	Up to 3 months	3 months to 1 year	1 year to 5 years	More than 5 years	Total
€ mn						
Money market and capital market liabilities (ac)	605	2,884	8,593	11,362	8,489	31,933
Deposits from the housing industry (ac)	9,409	2,307	1	1	–	11,718
Subordinated liabilities (ac)	–	4	198	319	135	656
Financial liabilities from other transactions (ac)	93	–	1	–	–	94
Lease liabilities	–	3	9	35	34	81
Financial guarantees	120	–	–	–	2	122
Loan commitments	1,062	–	–	–	–	1,062

The Risk Report, part of the Group Management Report, includes a detailed description of the liquidity risk associated with financial liabilities.

Segment Reporting

(74) Operating segments of Aareal Bank

Aareal Bank prepares its segment reporting in accordance with IFRS 8 Operating Segments.

In accordance with the “management approach” set out in IFRS 8, the segment report discloses, on a segment-specific basis, financial information which is relevant for internal control of an entity and which is also used by such entity’s management to make decisions on the allocation of resources as well as to measure the financial performance of segments.

Three operating segments were defined within Aareal Bank in line with internal management reporting, based on the organisational structure established according to the various products and services offered.

The **Structured Property Financing segment** comprises the property financing and refinancing activities. In this segment, Aareal Bank facilitates property investments for its domestic and international clients, and is active in Europe, North America and Asia/Pacific. It offers commercial property financing solutions, especially for office buildings, hotels, retail, logistics and residential properties. Its particular strength lies in its success in combining local market expertise and sector-specific know-how. In addition to local experts, the Bank also has industry specialists at its disposal, to create financing packages for logistics and retail properties and hotels. This enables Aareal Bank to offer tailor-made financing concepts that meet the special requirements of its national and international clients. What makes Aareal Bank special are its direct client relationships, which – in very many cases – it has maintained for many years.

Aareal Bank is an active issuer of Pfandbriefe, which account for a major share of its long-term funding. Moody’s Aaa rating of the Pfandbriefe confirms the quality of the cover assets pool. To cater to a broad investor base, Aareal Bank uses a wide range of other refinancing tools, including senior preferred and senior non-preferred bonds, as well as other promissory notes and bonds. Depending on market conditions, the Bank places large-sized public issues or private placements. In the Banking & Digital Solutions segment, the Bank also generates bank deposits from the housing industry, which represent a strategically important additional source of funding. Furthermore, it has recourse to deposits from institutional money market investors, as well as to retail deposits by way of a trust model.

In the **Banking & Digital Solutions segment**, Aareal Bank Group offers services, products and solutions to the housing and commercial property industries to optimise digital payment, electronic banking and cash management processes. With its BK01 software, it offers a procedure for the automated settlement of mass payments, in the German property industry. The procedure is integrated in licenced ERP systems. Therefore, customers in Germany may process their payment transactions and account management from the administration software employed. Apart from the German residential and commercial property sector, the German energy and waste disposal industry is a second important customer group of the segment. This enables the offer of further products, facilitating the cross-sector cooperation of target groups and realising synergy effects via end-to-end digital processes. The use of the payment transaction products of Aareal Bank generates deposits that contribute significantly to Aareal Bank Group’s refinancing base.

As part of the **Aareon segment**, the Aareon sub-group offers the IT systems and advisory business for the housing and commercial property sector. Aareon offers its customers reliable, pioneering solutions in the fields of consulting, software and services to optimise IT-supported business processes in the digital age. The ERP (Enterprise Resource Planning) systems, which are tailored to the needs of the respective market, may be supplemented by further digital solutions for purposes of process optimisation. The majority of these integrated systems forms the digital ecosystem “Aareon Smart World”. It connects property companies with customers, employees and business partners as well as technical “equipment” in apartments and buildings. Aareon Smart World can be used to restructure and optimise processes. The applications help to reduce costs, enable the creation of new business models by providing links between all participants and offer more ease-of-use in the dialogue between tenants and employees of the housing industry.

Aareon offers software solutions both in Germany and abroad that may be used in various types of operating environments: in-house services, hosting and Software as a Service (SaaS) from the exclusive Aareon Cloud. Data from Aareon’s Cloud Computing is held

in Aareon's certified data-processing centre in Mainz, which guarantees data security and protection at the highest level. Following successful advice, implementation and training, customers usually opt for a maintenance model covering regular support services.

Income and expenses within Aareal Bank are predominantly attributable to transactions with third parties, and are directly allocated to the responsible business segment. Revenue from transactions between Aareal Bank's segments was not generated in a significant amount. Therefore, we elected not to distinguish between internal and external revenue in the following disclosures. Administrative expenses not directly attributable to any of the business segments are segmented in line with the internal cost allocation, based on the principle of causation.

The results of the business segments are measured by the operating profit and the return on equity (RoE). RoE, which indicates a segment's profitability, is calculated as the ratio of the segment's operating result (after non-controlling interests and after AT I interest) to the portion of equity allocated to that segment on average. Allocated equity is calculated on the basis of standardised capital requirements pursuant to Basel IV (phase-in) of 15 %.

(75) Segment results

	Structured Property Financing		Banking & Digital Solutions		Aareon		Consolidation/ Reconciliation		Aareal Bank Group	
	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
€ mn										
Net interest income	627	560	92	43	-17	-6	0	0	702	597
Loss allowance	192	133	0	0	0	0			192	133
Net commission income	6	8	31	28	252	221	-12	-12	277	245
Net derecognition gain or loss	1	23							1	23
Net gain or loss from financial instruments (fvpl)	26	-30	0	0	0				26	-30
Net gain or loss from hedge accounting	-2	-5							-2	-5
Net gain or loss from investments accounted for using the equity method	0	0	-1	-1	-1	-1			-2	-2
Administrative expenses	260	256	79	73	244	211	-12	-12	571	528
Net other operating income/expenses	-6	-13	-1	-1	7	2	0	0	0	-12
Operating profit	200	154	42	-4	-3	5	0	0	239	155
Income taxes	70	82	14	-1	2	6			86	87
Consolidated net income	130	72	28	-3	-5	-1	0	0	153	68
Consolidated net income attributable to non-controlling interests	0	0	0	0	0	1			0	1
Consolidated net income attributable to shareholders of Aareal Bank AG	130	72	28	-3	-5	-2	0	0	153	67

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	Structured Property Financing		Banking & Digital Solutions		Aareon		Consolidation/ Reconciliation		Aareal Bank Group	
	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
€ mn										
Allocated equity ¹⁾	1,501	1,664	404	262	49	39	824	578	2,778	2,543
RoE after taxes (%) ²⁾	7.7	3.5	6.9	-1.3	-10.1	-4.8			5.0	2.1
Employees (average)	802	785	404	378	2,030	1,914			3,236	3,077
Segment assets	33,139	36,095	13,497	12,084	694	549			47,330	48,728

¹⁾ For management purposes, the allocated equity is calculated for all segments on the basis of a standardised capital requirement pursuant to Basel IV (phase-in) of 15%. Until 30 September 2022, the calculated output floor for the BDS and Aareon segments was 72.5%. Reported equity on the statement of financial position differs from this. Aareon's total equity as disclosed in the statement of financial position amounts to € 150 million (2021: € 143 million).

²⁾ The allocation of earnings is based on the assumption that net interest payable on the AT1 bond is recognised on an accrual basis

Commission income from contracts with clients (revenue within the meaning of IFRS 15) is allocated to the segments as follows:

	Structured Property Financing		Banking & Digital Solutions		Aareon		Consolidation/ Reconciliation		Aareal Bank Group	
	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021	1 Jan - 31 Dec 2022	1 Jan - 31 Dec 2021
€ mn										
ERP products (incl. add-on products)					223	200	-17	-18	206	182
Digital solutions					85	70			85	70
Banking business and other activities	9	10	37	35	0	0			46	45
Total	9	10	37	35	308	270	-17	-18	337	297

(76) Income by geographical markets

	2022	2021
€ mn		
Germany	691	563
Rest of Europe	155	145
North America	134	120
Asia/Pacific	12	7
Total	992	835

Income includes net interest income (excluding loss allowance), net commission income, net gain or loss on derecognition and net gain or loss from financial instruments (fvpl). Allocation to geographical markets is based on the registered office or domicile of the Group company or branch office.

Other Notes

(77) Assets and liabilities in foreign currency

Foreign currency assets

	31 Dec 2022	31 Dec 2021
€ mn		
USD	12,546	12,059
GBP	4,984	5,080
CAD	1,402	1,412
SEK	1,019	938
CHF	338	324
DKK	331	102
Other	1,294	633
Total	21,914	20,548

Foreign currency liabilities

	31 Dec 2022	31 Dec 2021
€ mn		
USD	12,487	12,047
GBP	4,947	5,095
CAD	1,382	1,398
SEK	1,005	931
CHF	336	323
DKK	334	102
Other	1,284	627
Total	21,775	20,523

(78) Subordinated assets

In the event of insolvency or liquidation of the issuer, subordinated assets are those subordinate to the claims of all other creditors. Subordinated assets amounted to € 338 million in the financial year 2022 (2021: € 309 million).

(79) Leases

Leases where the Bank acts as the lessee

The following overview shows the movements in the right-of-use assets from leases where Aareal Bank Group acts as the lessee.

	2022			2021		
	Right-of-use assets in land and buildings	Right-of-use assets in office furniture and equipment	Total	Right-of-use assets in land and buildings	Right-of-use assets in office furniture and equipment	Total
€ mn						
Cost						
Balance as at 1 January	68	5	73	67	6	73
Additions	12	7	19	10	3	13
Transfers	-1	-	-1	-	-	-
Depreciation, amortisation and write-downs	11	4	15	6	1	7
Disposals	37	4	41	7	3	10
Changes in the basis of consolidation	0	0	0	2	0	2
Currency translation differences	1	0	1	2	0	2
Balance as at 31 December	32	4	36	68	5	73

Right-of-use assets are recognised under property and equipment.

Aareal Bank Group primarily rents properties which are, in some cases, subject to longer-term rental agreements with extension options of up to ten years where the exercise is reasonably certain. The leases are not subject to material residual value guarantees.

The entire cash outflows from leases where Aareal Bank Group is the lessee in the current period amount to € 15 million (2021: € 17 million) as at the reporting date.

Expenses and income from Aareal Bank Group include the following amounts from leases with Aareal Bank Group as the lessee:

	31 Dec 2022	31 Dec 2021
€ mn		
Interest expenses for lease liabilities	1	2
Expenses for short-term leases	2	2
Expenses for low-value leases	0	0
Income from the sublease of right-of-use assets	0	0

In the financial year 2022, no material variable lease payments were agreed upon (2021: € – million).

The future undiscounted cash flows from lease liabilities based on their maturities are disclosed in the Note “Maturities of financial liabilities”.

Leases where the Bank acts as the lessor

Aareal Bank Group acts as lessor as regards the lease of property. The material rental contracts are classified as operating leases. Properties leased by the Group are reported under the item “Other assets”. Not all properties reported under the item “Other assets” are currently let. The risks of these properties are included in property risk management.

Income from operating leases amounted to € 8 million (2021: € 12 million) in the year under review. It is recognised in the income statement on a straight-line basis over the lease term.

The following overview shows the future undiscounted payments under operating leases based on their maturities where Aareal Bank Group acts as the lessor.

	31 Dec 2022	31 Dec 2021
€ mn		
Up to 1 year	8	9
Longer than 1 year, and up to 5 years	27	19
Longer than 5 years	7	6
Total minimum lease payments	42	34

(80) Contingent liabilities and loan commitments

	31 Dec 2022	31 Dec 2021
€ mn		
Contingent liabilities	131	122
Loan commitments	1,230	1,063
of which: irrevocable	905	740

Contingent liabilities include irrevocable payment obligations regarding the bank levy and the liability to the deposit guarantee scheme of German banks. These and the values reported under loan commitments given represent the maximum default risk to which Aareal Bank Group is exposed at the end of the reporting period.

Furthermore, the Bank is involved in legal disputes. Based on a legal analysis, successful outcome of these disputes is more likely than not. Essentially, these are legal disputes with borrowers (or former borrowers) who claim damages against the Bank. These are included in the table above, with a probability-weighted amount of € 28 million (2021: € 27 million), but have not been recognised as liabilities. The maximum non-probability-weighted default risk – assuming the Bank were to lose all such legal disputes – is estimated in the high double-digit million range. The respective duration of proceedings depends on the complexity of each individual litigation and the legal remedies available in each case. Likewise, the final amount in the event of defeat may vary considerably, depending upon the duration of proceedings and the legal remedies. Refunds of litigation costs are possible.

Tax risks were also included in contingent liabilities in the year under review, at a probability-weighted amount of € 49 million (2021: € 37 million). They result from the diverging assessment of tax matters and potential legal changes. This is offset by opportunities, albeit to a lesser extent. We estimate the maximum tax risk to be in the low triple-digit million range.

Accordingly, the recognition of contingent liabilities is also subject to estimation uncertainties.

(81) Regulatory capital and capital management

As regards meeting minimum capital ratios, Aareal Bank Group has to comply with the capital adequacy requirements set out in the Capital Requirements Regulation (CRR), the Capital Requirements Directive IV (CRD IV), the German Banking Act (Kreditwesengesetz, KWG) and the German Solvency Regulation (Solvabilitätsverordnung, SolvV). This requires Aareal Bank to comply with a Total SREP Capital Requirement (TSCR) in 2023 of 11.00 % on a consolidated basis (2022: 10.75 %). This includes the requirement to maintain additional own funds (capital buffer) for risks other than the risk of excessive leverage (Pillar 2 requirements – P2R) of 3.00 %, which must be maintained in the form of at least 56.25 % Common Equity Tier 1 (CET1) capital and 75 % Tier 1 (T1) capital, respectively. The increase is in particular due to increased requirements referring to the economic environment as well as to increased

(geo)political uncertainties and their potential impact on Aareal Bank. The Overall Capital Requirement (OCR) of Aareal Bank in 2023 amounts to 13.66 % (2022: 13.26 - 13.41 %), resulting from the TSCR plus the capital conservation buffer of 2.5 % and the currently applicable countercyclical buffer of 0.16 % (2022: 0.01 - 0.16 %). Both of the buffers have to be maintained in the form of Common Equity Tier 1 capital. In addition, several countries have already announced a (re-)introduction of the countercyclical capital buffer previously suspended in almost all countries due to the Covid-19 pandemic. For example, the package of macroprudential measures as resolved by the German Federal Financial Supervisory Authority (BaFin) in January 2022 provides for a reinstatement of the countercyclical capital buffer for risk exposures located in Germany as well as the first-time introduction of a sector-specific systemic risk buffer for loans collateralised by residential properties in 2023. This will result in increasing capital buffer requirements for the Bank. Compliance with the capital requirements has to be reported to the competent supervisory authorities on a quarterly basis. The capital requirements were complied with at all times during the reporting period.

The objectives of capital management are optimising the capital base as well as an efficient capital allocation to the individual business areas in terms of risk and income. Aareal Bank has defined the CET1 ratio (Basel IV (phase-in)) as a key management indicator, subject to further regulatory changes. The capital ratios are managed through the generation of profits, an active dividend policy, optimisation of the capital structure, and an efficient management of risk assets.

Within the context of capital management, projections are made on a regular basis showing the changes of the individual capital components and risk-weighted assets, as well as the resulting capital ratios. This is reported regularly to the Management Board within the framework of management reporting. The strategic allocation of capital to the individual business segments is incorporated in the Group's annual overall planning process.

(82) Disclosures on remuneration

Management and Supervisory Board

In the financial year 2022, the Management Board's total remuneration, excluding benefits from pension commitments, amounted to € 8 million (2021: € 9 million), of which € 4 million (2021: € 4 million) referred to variable components.

Benefit payments to former Management Board members, including those retired from the Board during the year under review and their respective surviving dependants, totalled € 2 million in 2022 (2021: € 8 million).

The amount of pension obligations to active and former members of the Management Board was € 47 million as at 31 December 2022 (2021: € 65 million). Of that amount, € 5 million (2021: € 11 million) related to members of the Management Board active at the end of the financial year and € 42 million to former members of the Management Board, including those retired from the Board during the year under review, and their surviving dependants (2021: € 55 million).

The total remuneration of members of the Supervisory Board for the financial year 2022 amounted to € 2 million (2021: € 2 million). The remuneration for any financial year shall be due and payable one month after the end of the respective financial year.

Remuneration for key executives

The definition of executives in key positions within Aareal Bank Group includes members of management or supervisory bodies of Aareal Bank AG.

Total remuneration of executives in key positions is analysed below:

	31 Dec 2022	31 Dec 2021
€ 000's		
Short-term benefits	6,889	7,542
Post-employment benefits	2,701	4,176
Other long-term benefits	1,050	1,112
Termination benefits	–	–
Share-based remuneration	2,309	2,377
Total	12,949	15,207

Post-employment benefits reported comprise service cost resulting from pension provisions for Management Board members who were in active service during the financial year as well as past service cost.

Provisions for pension obligations concerning key executives totalled € 7 million as at 31 December 2022 (2021: € 32 million).

Disclosures on share-based remuneration

Share-based remuneration for risk takers

In the case of risk takers whose variable remuneration exceeds an exemption threshold, a portion of the variable remuneration is granted in form of a share-based payment, with the amount of such remuneration upon disbursement depending on the development of the price of Aareal Bank AG's shares. In this context, a distinction is made between a share bonus that is immediately due and subject to a holding period (20 % to 30 % of the variable remuneration) and a deferred share-based payment (also 20 % to 30 % of the variable remuneration). Effective from 2023, the deferral period of the deferred share-based payment is up to five years, with disbursement being made pro rata temporis, also after a holding period. The disbursement is normally made via cash settlement. Until the disbursement of the share-based remuneration components, these components are also subject to defined penalty conditions that enable a subsequent reduction up to a full elimination. In addition, share-based payment elements that were granted after 2017, may be reclaimed in certain situations ("clawback").

These rules also apply to the members of the Management Board, with the deferral period amounting to at least five years since the financial year 2018 and the deferred share-based payment amounting to at least 35 %. The deferral period is also increased for newly appointed Management Board members for the first year of service to seven years and for the second year of service to six years. The deferral period is five years from the third year of service.

Valuation model and valuation assumptions

The obligations resulting from share-based payment arrangements as at the balance sheet date correspond to the remuneration granted, discounted to the balance sheet date. The discount period corresponds to the period from the balance sheet date to the earliest exercise or payout date, per plan and per tranche. The discount is based on the Euribor swap rate applicable as at the relevant balance sheet date, depending on the term.

Amount of cash-settled share-based payment transactions

The total amount of outstanding virtual shares in relation to existing share-based payment arrangements changed as follows:

	2022	2021
Quantity (number)		
Balance (outstanding) as at 1 January	654,065	703,561
Granted during the reporting period	272,673	254,153
Expired during the reporting period	–	–
Exercised during the reporting period	267,955	303,649
Balance (outstanding) as at 31 December	658,783	654,065
of which: exercisable	–	–

As at the reporting date, the total amount of virtual shares granted during the reporting period amounted to € 7 million (2021: € 7 million).

The virtual shares exercised during the reporting period were converted at a weighted average price of the Aareal Bank AG share of € 27.23 (2021: € 22.28).

Impact on financial performance

The total amount expensed for share-based payment transactions was € 3 million during the financial year 2022 (2021: total expenses of € 6 million). The obligation from share-based payment transactions as at 31 December 2022 amounted to € 29 million (2021: € 26 million). It is reported in the statement of financial position in the line item “Provisions”.

Management Equity Programme

Together with Advent International, Aareal Bank set up a Management Equity Programme (MEP) for Aareon in 2021 and, in line with its shareholding, contributed Aareon shares with a market value of € 6 million into a management equity company, in which individual members of Aareon’s management as well as independent members of the Advisory Board may also acquire an interest at market value.

In the event of a divestment of Aareon, depending on Aareon’s performance, the MEP leads to either a gain or loss for the participants in form of Aareon shares (equity-settled). The entitlements generally vest on a quarterly basis over a period of five years. The break-even point is at an appreciation of approximately 60% and is increased by a minimum interest of 12% p. a. If the break-even point is exceeded, the management participates in potential disposal gains in a leveraged manner.

The MEP is measured based on an option pricing model with an assumed term of five years and an historic volatility of approximately 30%.

(83) Related party disclosures in accordance with IAS 24

The group of related parties of Aareal Bank Group comprises the members of management or supervisory bodies of Aareal Bank AG (see preceding note) and close members of these persons’ families. The group of companies related to Aareal Bank Group consists of the companies set out in Note (92) “List of Shareholdings”. Intra-group receivables and liabilities, as well as consolidated income and expenses, are not shown here.

The following list provides an overview of the balances of existing transactions with related parties:

€ mn	31 Dec 2022	31 Dec 2021
Management Board	–	–
Supervisory Board	–	–
Other related parties	0	16
Total	0	16

The other related parties item includes a receivable of € 0.1 million vis-à-vis the BauGrund/TREUREAL syndicate.

In addition, there were no further significant transactions within the meaning of IAS 24.

(84) Events after the reporting date

Aareon launched an early retirement programme in early February 2023; its financial effects are estimated at around € 17 million and count towards the total efficiency enhancement investment budget of around € 35 million.

There were no other material matters subsequent to the end of the reporting period that need to be disclosed at this point.

(85) Contingencies

By means of a Letter of Comfort in favour of the Monetary Authority of Singapore, Aareal Bank AG has undertaken to ensure that Aareal Bank Asia Ltd. is able to fulfil its obligations at any time.

(86) Disclosures pursuant to section 160 (1) no. 8 of the AktG

Pursuant to the German Securities Trading Act (WpHG), any investor whose shareholding in a listed company reaches, exceeds or falls short of certain threshold values in terms of voting rights (whether by purchase, sale or by any other means) must notify the Company and the German Federal Financial Supervisory Authority. The lowest threshold for this notification requirement is 3 %. 100 % of Aareal Bank AG shares are held in free float until the possible closing of the takeover offer by Atlantic BidCo GmbH.

As at 31 December 2022, we were aware of the following shareholders holding a share in the voting rights of at least 3 % pursuant to section 33 (1) and section 34 of the WpHG:

	Location	Voting rights from shares	Threshold reached on (according to notification)
Responsible entity			
Deka Investment GmbH	Frankfurt	9.60 %	22 May 2018
Daniel Křetínský (Vesa Equity Investment S.à r.l.)		7.80 %	10 November 2021
Atlantic Lux HoldCo S.à r.l.	Luxembourg	7.46 %	30 December 2022
VBL ¹⁾	Karlsruhe	6.50 %	3 February 2015
Igor Kuzniar (Teleios Capital Partners LLC; Teleios Global Opportunities Master Fund, Ltd.)		5.06 %	23 April 2020
JPMorgan Chase & Co.	Wilmington, Delaware	5.02 %	12 August 2022
Morgan Stanley	Wilmington, Delaware	5.01 %	19 December 2022
Dimensional Holdings Inc.	Austin, Texas	4.13 %	19 January 2022
Talomon Capital Limited	London	3.25 %	2 February 2022
Duke University	Durham, North Carolina	3.12 %	9 May 2022

¹⁾ Shares are managed by Deka and are therefore included in Deka's holding.

(87) Declaration of Compliance in accordance with Section 161 of the AktG

The Management Board and the Supervisory Board issued the Declaration of Compliance as stipulated in section 161 of the AktG, and made this Declaration available to shareholders. It is available to the public on the Company's website on www.aareal-bank.com/en/about-us/corporate-governance/declaration-of-compliance.

(88) Employees

The number of Aareal Bank Group employees is shown below:

	31 Dec 2022 ¹⁾	Average 1 Jan – 31 Dec 2022 ²⁾	31 Dec 2021 ¹⁾	Average 1 Jan – 31 Dec 2021 ²⁾
Salaried employees	3,143	3,067	2,998	2,905
Executives	173	169	172	172
Total	3,316	3,236	3,170	3,077
of which: part-time employees	609	597	590	586

¹⁾ This number does not include 28 employees of the hotel business (31 December 2021: 30 employees).

²⁾ This number does not include 154 employees of the hotel business (1 January to 31 December 2021: 88 employees).

(89) Nature and extent of interests in unconsolidated structured entities

In accordance with IFRS 12.24, the nature and extent of interests in unconsolidated structured entities as well as the nature of, and changes in, the risks associated with such interests have to be disclosed in the consolidated financial statements. An interest in a structured entity arises from a contractual and/or non-contractual involvement which entitles the Group to receive variable returns from the relevant activities of the structured entity. Examples for this are equity or debt instruments of structured entities or the provision of financing, collateral and guarantees to structured entities.

Structured entities are companies where voting rights or similar rights are not the dominant factor to assess control of the company. The relevant activities of structured entities are directed by means of contractual arrangements; any voting rights relate to administrative tasks only. Structured entities are characterised by features or attributes such as restricted activities, a narrow and well-defined objective and/or insufficient equity. In addition, structured entities may relate to financings in the form of multiple contractually linked instruments to investors that create concentrations of credit or other risks. Examples of structured entities are securitisation vehicles, asset-backed financings and some investment funds.

Aareal Bank Group mainly interacts with structured entities such as open-ended property funds and leased property companies. In this context, the Group provides financing to structured entities in the form of loans or guarantees. In the following table, strategic investments made by the Group are shown under “Other”. The leased property companies were established by third parties for the financing of particular transactions and have the legal form of a German private limited company with a limited liability company as general partner (GmbH & Co KG). In the year under review and the previous year, Aareal Bank Group did not provide any non-contractual support for unconsolidated structured entities.

To the extent that this is relevant, the following table shows the carrying amounts of assets and liabilities recognised by Aareal Bank Group as at the reporting date as well as the existing off-balance sheet risk exposures that relate to unconsolidated structured entities. The carrying amounts of the assets and off-balance sheet items correspond to the Group’s maximum loss exposure from interests in unconsolidated structured entities (without taking into account collateral). The size of the structured entities was determined on the basis of the net fund assets for open-ended property funds and other vehicles and on the basis of total assets for leased property companies.

31 December 2022

	Open-ended property funds	Leased property companies	Other	Total
€ mn				
Assets				
Loan receivables	10	15	5	30
Off-balance sheet exposures				
Loan commitments and guarantees (nominal value)	–	–	1	1
Size range of structured units	€ 1,285 million	€ 47 million	€ 1 million - € 41 million	

31 December 2021

	Open-ended property funds	Leased property companies	Other	Total
€ mn				
Assets				
Loan receivables	30	16	8	54
Off-balance sheet exposures				
Loan commitments and guarantees (nominal value)	–	–	2	2
Size range of structured units	€ 242 million - € 1,247 million	€ 3 million - € 47 million	€ 1 million - € 36 million	

(90) Disclosures on material non-controlling interests

Advent International holds around 30% of the shares in Aareon AG. Voting rights are attached to the shares. Consolidated net income attributable to the non-controlling interest amounted to € -2 million (2021: € 3 million). Aareon's segment assets (before consolidation) amount to € 694 million (2021: € 549 million), comprising € 523 million (2021: € 361 million) in intangible assets, € 79 million (2021: € 73 million) in financial assets, and € 40 million (2021: € 71 million) in property and equipment. Assets are backed by equity of € 195 million (2021: € 209 million). In addition, there are lease liabilities of € 28 million (2021: € 62 million) and € 48 million (2021: € 54 million) in provisions. For further details, please refer to the explanations in relation to the Aareon segment.

(91) Country-by-Country Reporting

The disclosure requirements refer to information on registered office, revenue, profit or loss, taxes on profit or loss, received government assistance as well as wage and salary earners of Aareal Bank AG, together with its foreign branches and domestic and foreign subsidiaries included in the reporting entity-structure, prior to consolidation.

For this purpose, the Bank's entities – subsidiaries as well as Aareal Bank AG's foreign branches – are allocated to our three business segments, Structured Property Financing, Banking & Digital Solutions and Aareon.

Aareal Bank defines the branch offices' operating profit, which is used as a proxy for revenue, as the sum of the following consolidated income statement items (in accordance with IFRSs):

- Net interest income before loss allowance
- Net commission income
- Net derecognition gain or loss

- Net gain or loss from financial instruments (fvpl)
- Net gain or loss from hedge accounting
- Net gain or loss from investments accounted for using the equity method;
- Net other operating income/expenses

Taxes disclosed are tax expenses in accordance with IFRSs.

The number of wage and salary earners relates to average full-time equivalent staff employed during the financial year.

The following overview shows all countries where Aareal Bank AG has offices, including foreign branches and subsidiaries. Please refer to the list of shareholdings as regards the allocation of individual subsidiaries to the relevant country of domicile. Aareal Bank AG's foreign branches are located in France, Ireland, Italy, Poland, Sweden and the UK.

2022

	Revenues	Profit/loss before taxes	Taxes on profit or loss	Number of wage and salary earners
	€ mn	€ mn	€ mn	Full-time equivalents
Structured Property Financing segment	650	200	70	777
Belgium	–	–	–	–
Germany	480	68	48	682
France	14	10	3	9
United Kingdom	8	5	1	7
Ireland	1	2	0	1
Italy	19	-2	-5	27
Poland	6	4	1	6
Sweden	1	0	0	3
Singapore	12	10	1	7
US	111	103	21	35
Consolidation	-2	–	–	–
Banking & Digital Solutions segment	111	42	14	294
Germany	121	42	14	294
Consolidation	-10	–	–	–
Aareon segment	241	-3	2	1,901
Germany	138	-1	-2	1,007
Finland	0	0	–	–
France	30	7	3	226
United Kingdom	20	-3	0	246
Netherlands	41	6	1	310
Norway	0	0	–	2
Sweden	12	-12	0	110
Consolidation	–	–	–	–
Total	1,002	239	86	2,972

Government assistance was not received in the financial year 2022 (2021: –).

Aareal Bank Group's return on assets, calculated as the ratio of net profit to total assets, was 0.26% as at the record date.

2021

	Revenues	Profit/loss before taxes	Taxes on profit or loss	Number of wage and salary earners
	€ mn	€ mn	€ mn	Full-time equivalents
Structured Property Financing segment	541	154	82	752
Belgium	3	3	–	–
Germany	376	107	63	662
France	8	4	1	8
United Kingdom	10	6	1	5
Ireland	1	0	0	1
Italy	16	-60	-10	27
Poland	8	4	1	5
Sweden	4	6	1	3
Singapore	6	4	0	7
US	112	80	25	34
Consolidation	-3	–	–	–
Banking & Digital Solutions segment	59	-4	-1	271
Germany	69	-4	-1	271
Consolidation	-10	–	–	–
Aareon segment	216	5	6	1,794
Germany	126	1	1	973
Finland	–	-2	–	3
France	31	8	2	220
United Kingdom	16	-1	1	205
Netherlands	35	6	2	291
Norway	1	0	0	4
Sweden	7	-7	0	98
Consolidation	–	–	–	–
Total	816	155	87	2,817

(92) List of shareholding

The list of shareholdings is prepared pursuant to section 313 (2) of the HGB. The disclosures in relation to the companies' equity and earnings are retrieved from the financial statements based on the respective local financial reporting principles.

31 December 2022

No.	Company name	Registered office	Shareholding	Equity	Results
			%	€ mn	€ mn
1	Aareal Bank AG	Wiesbaden			
I. Fully-consolidated subsidiaries					
2	Aareal Bank Asia Ltd.	Singapore	100.0	SGD 47.2 mn	SGD 13.8 mn ¹⁾
3	Aareal Beteiligungen AG	Frankfurt	100.0	167.0	0.0 ³⁾
4	Aareal Capital Corporation	Wilmington	100.0	USD 672.4 mn	USD 29.9 mn ⁴⁾
5	Aareal Estate AG	Wiesbaden	100.0	2.9	0.0 ³⁾
6	Aareal First Financial Solutions AG	Mainz	100.0	7.2	0.2 ³⁾
7	Aareal Gesellschaft für Beteiligungen und Grundbesitz Erste mbH & Co. KG	Wiesbaden	94.9	3.0	0.1 ¹⁾
8	Aareal Holding Realty LP	Wilmington	100.0	USD 243.4 mn	USD -3.1 mn ⁴⁾
9	Aareal Immobilien Beteiligungen GmbH	Wiesbaden	100.0	416.7	0.0 ³⁾
10	Aareon AG	Mainz	58.7	138.7	-3.2 ¹⁾
11	Aareon Deutschland GmbH	Mainz	100.0	35.9	0.0 ³⁾
12	Aareon Finland Oy	Helsinki	100.0	0.0	-0.1 ¹⁾
13	Aareon France S.A.S.	Meudon-la Forêt	100.0	14.5	4.1 ¹⁾
14	Aareon GAP Beteiligungsgesellschaft mbH	Mainz	100.0	-1.6	-1.2 ¹⁾
15	Aareon Holding France SAS	Meudon-la Forêt	100.0	0.0	0.0 ¹⁾
16	Aareon Nederland B.V.	Emmen	100.0	30.1	4.8 ¹⁾
17	Aareon Norge AS	Oslo	100.0	NOK 4.9 mn	NOK -2.2 mn ¹⁾
18	Aareon Österreich GmbH	Vienna	100.0	0.4	-0.1 ¹⁾
19	Aareon SMB HUB UK Limited	Kenilworth	100.0	GBP 39.3 mn	GBP -0.2 mn ¹⁾
20	Aareon Sverige AB	Mölnådal	100.0	SEK 28 mn	SEK -66.7 mn ¹⁾
21	Aareon UK Ltd.	Coventry	100.0	GBP 9.6 mn	GBP -0.9 mn ¹⁾
22	Alexander Quien Nova GmbH	Bremen	100.0	0.1	0.0 ¹⁾
23	Arthur Online Ltd.	London	100.0	GBP 4.2 mn	GBP -1.4 mn ¹⁾
24	Arthur Southeast Asia Co., Ltd.	Bangkok	100.0	THB 6.8 mn	THB 2.7 mn ¹⁾
25	AV Management GmbH	Mainz	100.0	0.4	0.0 ³⁾
26	BauContact Immobilien GmbH	Wiesbaden	100.0	15.6	0.7 ¹⁾
27	BauGrund Immobilien-Management GmbH	Bonn	100.0	0.5	0.0 ³⁾
28	BauSecura Versicherungsmakler GmbH	Hamburg	51.0	4.4	4.3 ¹⁾
29	BVG – Grundstücks- und Verwertungsgesellschaft mit beschränkter Haftung	Frankfurt	100.0	5.3	0.0 ³⁾
30	CalCon Deutschland GmbH	Munich	100.0	6.5	0.8 ¹⁾
31	CalCrom S.R.L.	Iasi	83.3	0.2	0.1 ¹⁾
32	Cave Nuove S.p.A.	Rome	100.0	-37.5	-2.0 ¹⁾
33	collect Artificial Intelligence GmbH	Hamburg	100.0	2.7	0.0 ³⁾
34	CubicEyes B.V.	Maarsse	100.0	-0.1	-0.1 ¹⁾
35	Curo Software Ltd.	Warrenpoint	100.0	0.0	-0.1 ¹⁾

¹⁾ Preliminary figures as at 31 December 2022; ²⁾ Equity and results as at 31 December 2021;

³⁾ Profit and loss transfer agreement/control and profit transfer agreement; ⁴⁾ Disclosures in accordance with IFRSs; ⁵⁾ Joint operation

No.	Company name	Registered office	Shareholding	Equity	Results
			%	€ mn	€ mn
36	DBB Inka	Dusseldorf	100.0	97.8	0.0
37	Deutsche Bau- und Grundstücks-Aktiengesellschaft	Berlin	100.0	0.9	-2.9 ¹⁾
38	Deutsche Structured Finance GmbH	Wiesbaden	100.0	1.5	-0.5 ¹⁾
39	DHB Verwaltungs AG	Wiesbaden	100.0	5.1	0.0 ³⁾
40	FIRE B.V.	Utrecht	60.0	0.2	0.1 ¹⁾
41	Galleria City Holding Company LLC	Wilmington	95.0	USD 150.3 mn	USD -5.9 mn ⁴⁾
42	Galleria City Holding Company Member 2 LLC	Wilmington	95.0	USD 0.0	USD 0.0 ⁴⁾
43	Galleria City Partners LP	Wilmington	95.0	USD 147.5 mn	USD 0.0 ⁴⁾
44	Galleria Manager Realty LLC	Wilmington	100.0	USD 0.0	USD 0.0 ⁴⁾
45	GAP Gesellschaft für Anwenderprogramme und Organisationsberatung mbH	Bremen	100.0	4.0	2.3 ¹⁾
46	GEV Besitzgesellschaft mbH	Wiesbaden	100.0	3.0	0.0 ³⁾
47	GEV Beteiligungsgesellschaft mbH	Wiesbaden	100.0	0.1	0.0 ¹⁾
48	Houses2021 MEP Beteiligungs GmbH	Frankfurt	65.6	137.9	0.0 ¹⁾
49	Houses2021 MEP Verwaltungs GmbH	Frankfurt	70.0	0.2	0.0 ¹⁾
50	IV Beteiligungsgesellschaft für Immobilieninvestitionen mbH	Wiesbaden	100.0	2.5	0.0 ¹⁾
51	Izalco Spain S.L.	Madrid	100.0	10.4	0.2 ¹⁾
52	La Sessola Holding GmbH	Wiesbaden	100.0	94.9	0.0 ¹⁾
53	La Sessola S.r.l.	Rome	100.0	69.4	-6.3 ¹⁾
54	La Sessola Service S.r.l.	Rome	100.0	1.0	2.0 ¹⁾
55	Locoia GmbH	Hamburg	100.0	-0.1	0.0 ¹⁾
56	Manager Realty LLC	Wilmington	100.0	USD 0.0 mn	USD 0.0 ⁴⁾
57	Mary BidCo AB	Stockholm	100.0	SEK 41.4 mn	SEK -70.5 mn ¹⁾
58	Mercadea S.r.l.	Rome	100.0	15.1	0.1 ¹⁾
59	Mirante S.r.l.	Rome	100.0	0.1	0.0 ¹⁾
60	Momentum Software AB	Stockholm	100.0	SEK 41.4 mn	SEK 7.3 mn ¹⁾
61	Momentum Software Group AB	Stockholm	96.3	SEK 163.9 mn	SEK -0.3 mn ¹⁾
62	Northpark Realty LP	Wilmington	100.0	USD 92.1 mn	USD -0.2 mn ⁴⁾
63	OSRE B.V.	Amsterdam	51.2	1.9	0.9 ¹⁾
64	Participation Achte Beteiligungs GmbH	Wiesbaden	100.0	3.8	0.0 ³⁾
65	Participation Elfte Beteiligungs GmbH	Wiesbaden	100.0	0.0	0.0 ³⁾
66	Participation Zehnte Beteiligungs GmbH	Wiesbaden	100.0	10.6	0.0 ³⁾
67	Participation Zwölfte Beteiligungs GmbH	Wiesbaden	100.0	0.0	0.0 ³⁾
68	phi-Consulting GmbH	Bochum	100.0	0.2	0.0 ³⁾
69	plusForta GmbH	Dusseldorf	100.0	0.2	0.0 ³⁾
70	RentPro Ltd.	Warrenpoint	100.0	0.0	0.0 ¹⁾
71	Rumpf IT-Service GmbH	Ingolstadt	100.0	0.2	0.0 ¹⁾
72	Scale Layer GmbH	Wiesbaden	100.0	0.8	0.0 ¹⁾
73	Sole Sopra Cinquina S.r.l.	Rome	100.0	7.9	0.0 ¹⁾
74	Tactile Limited	London	100.0	GBP 1.3 mn	GBP 0.5 mn ¹⁾
75	Terrain-Aktiengesellschaft Herzogpark	Wiesbaden	100.0	4.7	0.0 ³⁾
76	Terrain Beteiligungen GmbH	Wiesbaden	94.0	62.7	2.2 ¹⁾
77	Tintoretto Rome S.r.l.	Rome	100.0	40.2	-1.0 ¹⁾
78	Westdeutsche Immobilien Servicing AG	Mainz	100.0	50.0	0.0 ³⁾
79	wohnungshelden GmbH	Munich	100.0	0.4	0.0 ¹⁾
80	WP Galleria Realty LP	Wilmington	100.0	USD 0.0 mn	USD 0.0 mn ⁴⁾

¹⁾ Preliminary figures as at 31 December 2022; ²⁾ Equity and results as at 31 December 2021;

³⁾ Profit and loss transfer agreement/control and profit transfer agreement; ⁴⁾ Disclosures in accordance with IFRSs; ⁵⁾ Joint operation

No.	Company name	Registered office	Shareholding	Equity	Results
			%	€ mn	€ mn
II. Joint arrangements					
81	ImmoProConsult GmbH ⁵⁾	Leverkusen	50.0	0.0	0.0 ¹⁾
82	Konsortium BauGrund/TREUREAL ⁵⁾	Bonn	50.0	0.0	0.0 ¹⁾
III. Associates					
83	DSF PP Justizzentrum Thüringen GmbH & Co. KG	Bremen	48.4	0.2	0.0 ²⁾
84	Ecaria GmbH	Berlin	35.9	0.2	-0.3 ¹⁾
85	Houses2021 Management Beteiligungs GmbH & Co. KG	Wiesbaden	7.4	8.6	0.0 ¹⁾
86	Mount Street Group Limited	London	20.0	GBP -5.8 mn	GBP -2.6 mn ¹⁾
87	MS Investment Management Limited	London	20.0	GBP 1.49 mn	GBP -0.8 mn ¹⁾
88	objego GmbH	Essen	40.0	3.4	-4.6 ¹⁾
89	Westhafen Haus GmbH & Co. Projektentwicklungs KG	Frankfurt	25.0	0.0	0.2 ²⁾
IV. Other enterprises					
90	blackprint Booster Fonds International GmbH & Co. KG	Frankfurt	49.9	0.7	0.0 ¹⁾
91	Houses Nominee Ltd.	London	70.0	0.0	0.0 ¹⁾
92	PropTech1 Fund I GmbH & Co. KG	Berlin	9.6	50.2	-1.8 ¹⁾

¹⁾ Preliminary figures as at 31 December 2022; ²⁾ Equity and results as at 31 December 2021;

³⁾ Profit and loss transfer agreement/control and profit transfer agreement; ⁴⁾ Disclosures in accordance with IFRSs; ⁵⁾ Joint operation

(93) Executive Bodies of Aareal Bank AG

The members of the Management Board and the Supervisory Board disclose their offices held, in accordance with the requirements set out in section 285 No. 10 of the HGB in conjunction with section 125 (1) sentence 5 of the AktG.

Composition of Supervisory Board's committees

Executive and Nomination Committee		Remuneration Control Committee		Audit Committee	
Prof. Dr Hermann Wagner	Chairman	Prof. Dr Hermann Wagner	Chairman	Prof. Dr Hermann Wagner	Chairman
Barbara Knoflach	Deputy Chairwoman	Hans-Hermann Lotter	Deputy Chairman	José Sevilla Álvarez	Deputy Chairman
Hans-Hermann Lotter		Henning Giesecke		Henning Giesecke	
Marika Lulay		Denis Hall		Petra Heinemann-Specht	
Klaus Novatius		Petra Heinemann-Specht		Hans-Hermann Lotter	
José Sevilla Álvarez		Klaus Novatius		Sylvia Seignette	
Technology and Innovation Committee		Risk Committee			
Marika Lulay	Chairwoman	Sylvia Seignette	Chairman		
Barbara Knoflach	Deputy Chairwoman	Denis Hall	Deputy Chairman		
Denis Hall		Henning Giesecke			
Thomas Hawel		Petra Heinemann-Specht			
Jan Lehmann		Barbara Knoflach			
José Sevilla Álvarez		Prof. Dr Hermann Wagner			

Supervisory Board

Prof. Dr Hermann Wagner, Chairman of the Supervisory Board German Chartered Accountant, tax consultant

(Membership in other statutory supervisory boards)

capsensixx AG (subsidiary of PEH Wertpapier AG)	Member of the Supervisory Board
PEH Wertpapier AG	Member of the Supervisory Board
Squadra Immobilien GmbH & Co. KGaA	Chairman of the Supervisory Board

Henning Giesecke Former Chief Risk Officer of UniCredit S.p.A. and UniCredit Bank AG

since 31 August 2022

(Membership in other statutory supervisory boards)

Linde+Wiemann Holding SE	Deputy Chairman of the Supervisory Board
The Social Chain AG	Deputy Chairman of the Supervisory Board
The Social Chain Group AG (subsidiary of The Social Chain AG)	Deputy Chairman of the Supervisory Board until 31 December 2022

(Membership on comparable German and foreign supervisory bodies)

Erste Abwicklungsanstalt AÖR	Member of the Board of Directors
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Dennis Hall

Former Chief Risk Officer Global Consumer Banking of GE Capital EMEA

(Membership on comparable German and foreign supervisory bodies)

Auxmoney Europe Holding Ltd.	Member of the Board of Directors
Moneta Money Bank A.S.	Member of the Supervisory Board
Skipton Building Society	Member of the Board of Directors

Thomas Hawel*

Aareon Deutschland GmbH

(Membership in other statutory supervisory boards)

Aareon Deutschland GmbH (Aareal Bank Group)	Deputy Chairman of the Supervisory Board
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Petra Heinemann-Specht*

Aareal Bank AG

Barbara Knoflach, Deputy Chairwoman of the Supervisory Board Former Global Head der BNP Paribas Real Estate Investment Management and Deputy Chief Executive Officer of BNP Paribas Real Estate S.A.

since 31 August 2022

(Membership in other statutory supervisory boards)

Landmarken AG	Member of the Supervisory Board
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(Membership on comparable German and foreign supervisory bodies)

CTP N.V.	Chairman of the Board of Directors
Swiss Prime Site AG	Member of the Board of Directors

* Employee representative member of the Supervisory Board of Aareal Bank AG

Jan Lehmann*

Aareon Deutschland GmbH

(Membership in other statutory supervisory boards)

Aareon Deutschland GmbH (Aareal Bank Group) Member of the Supervisory Board

Hans-Hermann LotterSelf-employed consultant for private equity investments, mergers, takeovers and restructurings,
and Managing Director of Atlantic BidCo GmbH

since 31 August 2022

(Membership in other statutory supervisory boards)

Hermes Germany GmbH Member of the Supervisory Board

TK Elevator GmbH Chairman of the Supervisory Board

(Membership on comparable German and foreign supervisory bodies)

Vertical Topco S.à. r.l. (subsidiary of TK Elevator GmbH) Member of the Board of Directors

Marika Lulay, Chairwoman of the Technology and Innovation Committee

Chief Executive Officer and Managing Director of GFT Technologies SE

since 31 August 2022

(Membership in other statutory supervisory boards)

EnBW AG Member of the Supervisory Board

(Membership on comparable German and foreign supervisory bodies)

GFT Technologies SE Member of the Board of Directors

Klaus Novatius*, Deputy Chairman of the Supervisory Board

Aareal Bank AG

Sylvia Seignette, Chairman of the Risk Committee

Former CEO for Germany and Austria, Crédit Agricole CIB (formerly Calyon)

José Sevilla Álvarez

Former Chief Executive Officer of Bankia S.A.

since 31 August 2022

(Membership on comparable German and foreign supervisory bodies)

Renta 4 Banco S.A. Member of the Board of Directors

Teide Ltd. Member of the Board of Directors

Retired members**Richard Peters, Deputy Chairman of the Supervisory Board**

President and Chairman of the Management Board of Versorgungsanstalt des Bundes und der Länder

until 31 August 2022

Jana Brendel

Chief Information Officer Group Services of ING Groep N.V.

until 31 August 2022

(Membership in other statutory supervisory boards)

IQ-optimize Software AG (subsidiary of 1&1 Drillisch AG) Chairman of the Supervisory Board

* Employee representative member of the Supervisory Board of Aareal Bank AG

Holger Giese 14 January 2022
Lawyer, former General Counsel Private Bank Germany at Deutsche Bank AG to 31 August 2022

(Membership in other statutory supervisory boards)

Bitcoin Group SE	Member of the Supervisory Board	since 1 July 2022
Futurum Bank AG (subsidiary of Bitcoin Group SE)	Member of the Supervisory Board	since 1 July 2022

Friedrich Munsberg 14 January 2022
Former Managing Director of KOFIBA Kommunalfinanzierungsbank GmbH (formerly Dexia Kommunalbank Deutschland AG) to 31 August 2022

Elisabeth Stheeman until 31 August 2022
External Member of the Financial Policy Committee and of the Financial Market Infrastructure Board, Bank of England

(Membership in other statutory supervisory boards)

alstria office REIT-AG	Member of the Supervisory Board
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(Membership on comparable German and foreign supervisory bodies)

Edinburgh Investment Trust Plc	Member of the Board of Directors
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Dr Ulrich Theileis 14 January 2022
Partner and Chief Operating Officer, Audit & Assurance, Deloitte GmbH Wirtschaftsprüfungsgesellschaft to 31 August 2022

(Membership on comparable German and foreign supervisory bodies)

Sächsische Aufbaubank	Member of the Board of Directors
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* Employee representative member of the Supervisory Board of Aareal Bank AG

Management Board

Jochen Klösges, Chairman of the Management Board (CEO)
Banking & Digital Solutions, Corporate Affairs, Group Audit, Group Communications & Governmental Affairs, Group Human Resources & Infrastructure, Group Strategy, Group Technology

(Membership in other statutory supervisory boards)

Aareon AG (Aareal Bank Group)	Chairman of the Supervisory Board
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(Membership on comparable German and foreign supervisory bodies)

Oest-Stiftung (Oest Group)	Member of the foundation and administrative board
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Nina Babic, Member of the Management Board (CRO) since 1 July 2022
Credit Risk, Credit & Transaction Management, Information Security & Data Protection, Non-Financial Risks including Compliance, Regulatory Affairs, Risk Controlling, USA-Credit Management, Valuation & Research, Workout / Non Core Assets

(Membership in other statutory supervisory boards)

Aareal Estate AG (Aareal Bank Group)	Deputy Chair of the Supervisory Board
HypZert GmbH	Deputy Chair of the Supervisory Board
Terrain-AG Herzogenpark (Aareal Bank Group)	Chairman of the Supervisory Board

(Membership on comparable German and foreign supervisory bodies)

Aareal Capital Corporation (Aareal Bank Group)	Member of the Board of Directors
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Marc Hess, Member of the Management Board (CFO)

Finance & Controlling, Investor Relations, Treasury

(Membership in other statutory supervisory boards)

Aareal Beteiligungen AG (Aareal Bank Group)	Chairman of the Supervisory Board	since 23 March 2022
	Member of the Supervisory Board	until 23 March 2022
Aareon AG (Aareal Bank Group)	Member of the Supervisory Board	

Christof Winkelmann, Member of the Management Board (CMO)

Aareal Asia/Pacific, Business Management & Economic Analysis, Euro Hub, Loan Markets & Syndication, Non-Euro Hub, Special Property Finance I and II, Strategy & Business Development, USA Origination

(Membership in other statutory supervisory boards)

Aareal Estate AG (Aareal Bank Group)	Chairman of the Supervisory Board
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(Membership on comparable German and foreign supervisory bodies)

Aareal Bank Asia Ltd. (Aareal Bank Group)	Chairman of the Board of Directors
Aareal Capital Corporation (Aareal Bank Group)	Chairman of the Board of Directors

Retired members**Christiane Kunisch-Wolff, Member of the Management Board (CRO)**

until 30 June 2022

Wiesbaden, 6 March 2023

The Management Board


Jochen Klösges



Nina Babic



Marc Hess



Christof Winkelmann