

Consolidated annual accounts and Independent auditor's report



BANCO DE SABADELL, S.A. AND COMPANIES FORMING BANCO SABADELL GROUP

Consolidated annual financial statements and
Consolidated Directors' Report for the year
ended 31 December 2022

Translation of the Consolidated Annual Financial Statements originally issued in Spanish and prepared in accordance with EU-IFRS, as adopted by the European Union. In the event of any discrepancy, the Spanish-language version will prevail.

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Consolidated annual financial statements
for the year ended
31 December 2022

Consolidated balance sheets of Banco Sabadell Group

As at 31 December 2022 and 2021

Thousand euro			
Assets	Note	2022	2021 (*)
Cash, cash balances at central banks and other demand deposits (**)	7	41,260,395	49,213,196
Financial assets held for trading		4,017,253	1,971,629
Derivatives	10	3,600,122	1,378,998
Equity instruments	9	—	2,258
Debt securities	8	417,131	590,373
Loans and advances		—	—
Central banks		—	—
Credit institutions		—	—
Customers		—	—
<i>Memorandum item: loaned or pledged as security with sale or pledging rights</i>		93,000	106,791
Non-trading financial assets mandatorily at fair value through profit or loss		77,421	79,559
Equity instruments	9	23,145	14,582
Debt securities	8	54,276	64,977
Loans and advances		—	—
Central banks		—	—
Credit institutions		—	—
Customers		—	—
<i>Memorandum item: loaned or pledged as security with sale or pledging rights</i>		—	—
Financial assets designated at fair value through profit or loss		—	—
Debt securities		—	—
Loans and advances		—	—
Central banks		—	—
Credit institutions		—	—
Customers		—	—
<i>Memorandum item: loaned or pledged as security with sale or pledging rights</i>		—	—
Financial assets at fair value through other comprehensive income		5,802,264	6,869,637
Equity instruments	9	179,572	184,546
Debt securities	8	5,622,692	6,685,091
Loans and advances		—	—
Central banks		—	—
Credit institutions		—	—
Customers		—	—
<i>Memorandum item: loaned or pledged as security with sale or pledging rights</i>		1,977,469	1,530,351
Financial assets at amortised cost		185,045,452	178,869,317
Debt securities	8	21,452,820	15,190,212
Loans and advances	11	163,592,632	163,679,105
Central banks		162,664	170,881
Credit institutions		4,700,287	6,141,939
Customers		158,729,681	157,366,285
<i>Memorandum item: loaned or pledged as security with sale or pledging rights</i>		6,542,504	3,554,788
Derivatives – Hedge accounting	12	3,072,091	525,382
Fair value changes of the hedged items in portfolio hedge of interest rate risk		(1,545,607)	(3,963)
Investments in joint ventures and associates	14	515,245	638,782
Joint ventures		—	—
Associates		515,245	638,782
Assets under insurance or reinsurance contracts		—	—
Tangible assets	15	2,581,791	2,776,758
Property, plant and equipment		2,282,049	2,397,490
For own use		2,272,705	2,394,698
Leased out under operating leases		9,344	2,792
Investment properties		299,742	379,268
Of which: leased out under operating leases		281,707	379,268
<i>Memorandum item: acquired through finance leases</i>		897,903	1,017,016
Intangible assets	16	2,484,162	2,581,421
Goodwill		1,026,810	1,026,457
Other intangible assets		1,457,352	1,554,964
Tax assets		6,851,068	7,027,123
Current tax assets		206,561	319,596
Deferred tax assets	39	6,644,507	6,707,527
Other assets	17	479,680	619,715
Insurance contracts linked to pensions		89,729	116,453
Inventories		93,835	142,713
Rest of other assets		296,116	360,549
Non-current assets and disposal groups classified as held for sale	13	738,313	778,035
TOTAL ASSETS		251,379,528	251,946,591

(*) Shown for comparative purposes only.

(**) See details in the consolidated cash flow statement of the Group.

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated balance sheet as at 31 December 2022.

Consolidated balance sheets of Banco Sabadell Group

As at 31 December 2022 and 2021

Thousand euro

Liabilities	Note	2022	2021 (*)
Financial liabilities held for trading		3,598,483	1,379,898
Derivatives	10	3,374,036	1,323,236
Short positions		224,447	56,662
Deposits		—	—
Central banks		—	—
Credit institutions		—	—
Customers		—	—
Debt securities issued		—	—
Other financial liabilities		—	—
Financial liabilities designated at fair value through profit or loss		—	—
Deposits		—	—
Central banks		—	—
Credit institutions		—	—
Customers		—	—
Debt securities issued		—	—
Other financial liabilities		—	—
<i>Memorandum item: subordinated liabilities</i>		—	—
Financial liabilities at amortised cost		232,529,932	235,179,222
Deposits		203,293,522	209,306,598
Central banks	18	27,843,687	38,250,031
Credit institutions	18	11,373,390	8,817,114
Customers	19	164,076,445	162,239,453
Debt securities issued	20	22,577,549	21,050,955
Other financial liabilities	21	6,658,861	4,821,669
<i>Memorandum item: subordinated liabilities</i>		3,477,976	4,243,712
Derivatives – Hedge accounting	12	1,242,470	512,442
Fair value changes of the hedged items in portfolio hedge of interest rate risk		(959,106)	19,472
Liabilities under insurance or reinsurance contracts		—	—
Provisions	22	644,509	886,138
Pensions and other post employment defined benefit obligations		63,384	86,020
Other long term employee benefits		170	650
Pending legal issues and tax litigation		89,850	76,848
Commitments and guarantees given		176,823	190,591
Other provisions		314,282	532,029
Tax liabilities		226,711	204,924
Current tax liabilities		112,994	81,159
Deferred tax liabilities	39	113,717	123,765
Share capital repayable on demand		—	—
Other liabilities	17	872,108	768,214
Liabilities included in disposal groups classified as held for sale		—	—
TOTAL LIABILITIES		238,155,107	238,950,310

(*) Shown for comparative purposes only.

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated balance sheet as at 31 December 2022.

Consolidated balance sheets of Banco Sabadell Group

As at 31 December 2022 and 2021

Thousand euro			
Equity	Note	2022	2021 (*)
Shareholders' equity	23	13,840,724	13,356,905
Capital		703,371	703,371
Paid up capital		703,371	703,371
Unpaid capital which has been called up		—	—
<i>Memorandum item: capital not called up</i>		—	—
Share premium		7,899,227	7,899,227
Equity instruments issued other than capital		—	—
Equity component of compound financial instruments		—	—
Other equity instruments issued		—	—
Other equity		21,548	19,108
Retained earnings		5,859,520	5,441,185
Revaluation reserves		—	—
Other reserves		(1,365,777)	(1,201,701)
Reserves or accumulated losses of investments in joint ventures and associates		163,853	235,453
Other		(1,529,630)	(1,437,154)
(-) Treasury shares		(23,767)	(34,523)
<i>Profit or loss attributable to owners of the parent</i>		858,642	530,238
(-) Interim dividends		(112,040)	—
Accumulated other comprehensive income	24	(650,647)	(385,604)
Items that will not be reclassified to profit or loss		(29,125)	(41,758)
Actuarial gains or (-) losses on defined benefit pension plans		(1,969)	917
Non-current assets and disposal groups classified as held for sale		—	—
Share of other recognised income and expense of investments in joint ventures and associates		—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income		(27,156)	(42,675)
Hedge ineffectiveness of fair value hedges for equity instruments measured at fair value through other comprehensive income		—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income [hedged item]		—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income [hedging instrument]		—	—
Fair value changes of financial liabilities at fair value through profit or loss attributable to changes in their credit risk		—	—
Items that may be reclassified to profit or loss		(621,522)	(343,846)
Hedge of net investments in foreign operations [effective portion]		119,348	157,741
Foreign currency translation		(476,030)	(481,266)
Hedging derivatives. Cash flow hedges reserve [effective portion]		(64,224)	(30,163)
Fair value changes of debt instruments measured at fair value through other comprehensive income		(180,199)	(11,724)
Hedging instruments [not designated elements]		—	—
Non-current assets and disposal groups classified as held for sale		—	—
Share of other recognised income and expense of investments in joint ventures and associates		(20,417)	21,566
Minority interests [Non-controlling interests]	25	34,344	24,980
Accumulated other comprehensive income		—	—
Other items		34,344	24,980
TOTAL EQUITY		13,224,421	12,996,281
TOTAL EQUITY AND TOTAL LIABILITIES		251,379,528	251,946,591
Memorandum item: off-balance sheet exposures			
Loan commitments given	26	27,460,615	28,403,146
Financial guarantees given	26	2,086,993	2,034,143
Other commitments given	26	9,674,382	7,384,863

(*) Shown for comparative purposes only.

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated balance sheet as at 31 December 2022.

Consolidated income statements of Banco Sabadell Group

For the years ended 31 December 2022 and 2021

Thousand euro	Note	2022	2021 (*)
Interest income	28	4,988,603	4,147,549
Financial assets at fair value through other comprehensive income		68,608	49,034
Financial assets at amortised cost		4,499,843	3,734,977
Other interest income		420,152	363,538
(Interest expenses)	28	(1,189,877)	(722,093)
(Expenses on share capital repayable on demand)		—	—
Net interest income		3,798,726	3,425,456
Dividend income		2,609	1,262
Profit or loss of entities accounted for using the equity method	14	122,167	100,280
Fee and commission income	29	1,742,311	1,661,610
(Fee and commission expenses)	29	(252,103)	(194,069)
Gains or (-) losses on financial assets and liabilities, net	30	231,612	157,045
Gains or (-) losses on derecognition of financial assets and liabilities not measured at fair value through profit or loss, net		13,227	340,985
Financial assets at amortised cost		(9,190)	323,840
Other financial assets and liabilities		22,417	17,145
Gains or (-) losses on financial assets and liabilities held for trading, net		204,691	(183,555)
Reclassification of financial assets from fair value through other comprehensive income		—	—
Reclassification of financial assets from amortised cost		—	—
Other gains or (-) losses		204,691	(183,555)
Gains or (-) losses on non-trading financial assets mandatorily at fair value through profit or loss, net		(4,157)	4,466
Reclassification of financial assets from fair value through other comprehensive income		—	—
Reclassification of financial assets from amortised cost		—	—
Other gains or (-) losses		(4,157)	4,466
Gains or (-) losses on financial assets and liabilities designated at fair value through profit or loss, net		—	—
Gains or (-) losses from hedge accounting, net		17,851	(4,851)
Exchange differences [gain or (-) loss], net	30	(127,971)	187,174
Other operating income	31	121,554	154,732
(Other operating expenses)	32	(458,867)	(467,362)
Income from assets under insurance or reinsurance contracts		—	—
(Expenses on liabilities under insurance or reinsurance contracts)		—	—
Gross income		5,180,038	5,026,128

(*) Shown for comparative purposes only.

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated income statement for 2022.

Consolidated income statements of Banco Sabadell Group

For the years ended 31 December 2022 and 2021

Thousand euro	Note	2022	2021 (*)
(Administrative expenses)		(2,337,415)	(2,780,890)
(Staff expenses)	33	(1,391,608)	(1,776,797)
(Other administrative expenses)	33	(945,807)	(1,004,093)
(Depreciation and amortisation)	15, 16	(545,091)	(526,514)
(Provisions or (-) reversal of provisions)	22	(96,821)	(87,566)
(Impairment or (-) reversal of impairment on financial assets not measured at fair value through profit or loss and net modification losses or (-) gains)	34	(839,579)	(959,507)
(Financial assets at fair value through other comprehensive income)		(182)	697
(Financial assets at amortised cost)		(839,397)	(960,204)
Profit/(loss) on operating activities		1,361,132	671,651
(Impairment or (-) reversal of impairment of investments in joint ventures and associates)		(12,200)	(9,428)
(Impairment or (-) reversal of impairment on non-financial assets)	35	(61,116)	(105,967)
(Tangible assets)		(37,098)	(65,483)
(Intangible assets)		—	(1,570)
(Other)		(24,018)	(38,914)
Gains or (-) losses on derecognition of non-financial assets, net	36	(17,369)	71,121
Negative goodwill recognised in profit or loss		—	—
Profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations	37	(27,801)	(7,388)
Profit or (-) loss before tax from continuing operations		1,242,646	619,989
(Tax expense or (-) income related to profit or loss from continuing operations)	39	(373,256)	(81,282)
Profit or (-) loss after tax from continuing operations		869,390	538,707
Profit or (-) loss after tax from discontinued operations		—	—
PROFIT OR (-) LOSS FOR THE YEAR		869,390	538,707
Attributable to minority interest [non-controlling interests]	25	10,748	8,469
Attributable to owners of the parent		858,642	530,238
Earnings (or loss) per share (euros)	3	0.13	0.08
Basic (euros)		0.13	0.08
Diluted (euros)		0.13	0.08

(*) Shown for comparative purposes only.

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated income statement for 2022.

Consolidated statements of recognised income and expenses of Banco Sabadell Group

For the years ended 31 December 2022 and 2021

Thousand euro

	Note	2022	2021 (*)
Profit or loss for the year		869,390	538,707
Other comprehensive income	24	(265,043)	137,445
Items that will not be reclassified to profit or loss		12,633	22,661
Actuarial gains or (-) losses on defined benefit pension plans		(4,123)	2,299
Non-current assets and disposal groups held for sale		—	—
Share of other recognised income and expense of investments in joint ventures and associates		—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income		17,114	18,312
Gains or (-) losses from hedge accounting of equity instruments at fair value through other comprehensive income, net		—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income [hedged item]		—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income [hedging instrument]		—	—
Fair value changes of financial liabilities at fair value through profit or loss attributable to changes in their credit risk		—	—
Income tax relating to items that will not be reclassified		(358)	2,050
Items that may be reclassified to profit or loss		(277,676)	114,784
Hedge of net investments in foreign operations [effective portion]		(38,393)	(54,100)
Valuation gains or (-) losses taken to equity		(38,393)	(54,100)
Transferred to profit or loss		—	—
Other reclassifications		—	—
Foreign currency translation		5,238	255,804
Translation gains or (-) losses taken to equity		5,238	255,804
Transferred to profit or loss		—	—
Other reclassifications		—	—
Cash flow hedges [effective portion]		(52,125)	(103,229)
Valuation gains or (-) losses taken to equity		(26,671)	(244,346)
Transferred to profit or loss		(25,493)	141,119
Transferred to initial carrying amount of hedged items		39	(2)
Other reclassifications		—	—
Hedging instruments [not designated elements]		—	—
Valuation gains or (-) losses taken to equity		—	—
Transferred to profit or loss		—	—
Other reclassifications		—	—
Debt instruments at fair value through other comprehensive income		(230,451)	(14,112)
Valuation gains or (-) losses taken to equity		(207,699)	1,300
Transferred to profit or loss		(22,752)	(15,412)
Other reclassifications		—	—
Non-current assets and disposal groups held for sale		—	—
Valuation gains or (-) losses taken to equity		—	—
Transferred to profit or loss		—	—
Other reclassifications		—	—
Share of other recognised income and expense of investments in joint ventures and associates		(41,985)	(5,567)
Income tax relating to items that may be reclassified to profit or (-) loss		80,040	35,988
Total comprehensive income for the year		604,347	676,152
Attributable to minority interest [non-controlling interests]		10,748	7,928
Attributable to owners of the parent		593,599	668,224

(*) Shown for comparative purposes only.

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated statement of recognised income and expenses for 2022.

Consolidated statements of total changes in equity of Banco Sabadell Group

For the years ended 31 December 2022 and 2021

Thousand euro

	Capital	Share premium	Equity instruments issued other than capital	Other equity	Retained earnings	Revaluation reserves	Other reserves	(-) Treasury shares	Profit or loss attributable to owners of the parent	(-) Interim dividends	Accumulated other comprehensive income	Minority interests: Other items	Total
Closing balance 31/12/2021	703,371	7,899,227	—	19,108	5,441,185	—	(1,201,701)	(34,523)	530,238	—	(385,604)	24,980	12,996,281
Effects of corrections of errors	—	—	—	—	—	—	—	—	—	—	—	—	—
Effects of changes in accounting policies	—	—	—	—	—	—	—	—	—	—	—	—	—
Opening balance 01/01/2022	703,371	7,899,227	—	19,108	5,441,185	—	(1,201,701)	(34,523)	530,238	—	(385,604)	24,980	12,996,281
Total comprehensive income for the period	—	—	—	—	—	—	—	—	858,642	—	(265,043)	10,748	604,347
Other equity changes	—	—	—	2,440	418,335	—	(164,076)	10,756	(530,238)	(112,040)	—	(1,384)	(376,207)
Issuance of ordinary shares	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of preference shares	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of other equity instruments	—	—	—	—	—	—	—	—	—	—	—	—	—
Exercise or expiration of other equity instruments issued	—	—	—	—	—	—	—	—	—	—	—	—	—
Conversion of debt to equity	—	—	—	—	—	—	—	—	—	—	—	—	—
Capital reduction	—	—	—	—	—	—	—	—	—	—	—	—	—
Dividends (or shareholder remuneration)	—	—	—	—	(168,809)	—	—	—	—	(112,040)	—	—	(280,849)
Purchase of treasury shares	—	—	—	—	—	—	—	(86,457)	—	—	—	—	(86,457)
Sale or cancellation of treasury shares	—	—	—	—	—	—	—	97,213	—	—	—	—	101,750
Reclassification of financial instruments from equity to liability	—	—	—	—	—	—	4,537	—	—	—	—	—	—
Reclassification of financial instruments from liability to equity	—	—	—	—	—	—	—	—	—	—	—	—	—
Transfers among components of equity	—	—	—	—	—	—	—	—	(530,238)	—	—	—	—
Equity increase or (-) decrease resulting from business combinations	—	—	—	—	530,238	—	—	—	—	—	—	—	—
Share based payments	—	—	—	2,440	—	—	—	—	—	—	—	—	2,440
Other increase or (-) decrease in equity	—	—	—	—	56,906	—	(168,613)	—	—	—	—	(1,384)	(113,091)
Closing balance 31/12/2022	703,371	7,899,227	—	21,548	5,859,520	—	(1,365,777)	(23,767)	858,642	(112,040)	(650,647)	34,344	13,224,421

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated statement of total changes in equity for 2022.

Consolidated statements of total changes in equity of Banco Sabadell Group

For the years ended 31 December 2022 and 2021

Thousand euro

	Capital	Share premium	Equity instruments issued other than capital	Other equity	Retained earnings	Revaluation reserves	Other reserves	(-) Treasury shares	Profit or loss attributable to owners of the parent	(-) Interim dividends	Accumulated other comprehensive income	Minority interests: Other items	Total
Sources of equity changes													
Closing balance 31/12/2020	703.371	7.899.227	—	20.273	5.444.622	—	(1.086.384)	(37.517)	2.002	—	(523.590)	71.093	12.491.638
Effects of corrections of errors	—	—	—	—	—	—	—	—	—	—	—	—	—
Effects of changes in accounting policies	—	—	—	—	—	—	—	—	—	—	—	—	—
Opening balance 01/01/2021	703.371	7.899.227	—	20.273	5.444.622	—	(1.086.384)	(37.517)	2.002	—	(523.590)	71.093	12.491.638
Total comprehensive income for the period	—	—	—	—	—	—	—	—	530.238	—	(541)	8.469	676.152
Other equity changes	—	—	—	(1.165)	(3.437)	—	(113.317)	2.994	(2.002)	—	—	(54.582)	(171.509)
Issuance of ordinary shares	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of preference shares	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of other equity instruments	—	—	—	—	—	—	—	—	—	—	—	—	—
Exercise or expiration of other equity instruments issued	—	—	—	—	—	—	—	—	—	—	—	—	—
Conversion of debt to equity	—	—	—	—	—	—	—	—	—	—	—	—	—
Capital reduction	—	—	—	—	—	—	—	—	—	—	—	—	—
Dividends (or shareholder remuneration)	—	—	—	—	—	—	—	—	—	—	—	—	—
Purchase of treasury shares	—	—	—	—	—	—	—	(64.378)	—	—	—	—	(64.378)
Sale or cancellation of treasury shares	—	—	—	—	—	—	—	67.372	—	—	—	—	68.308
Reclassification of financial instruments from equity to liability	—	—	—	—	—	—	—	—	—	—	—	—	—
Reclassification of financial instruments from liability to equity	—	—	—	—	—	—	—	—	—	—	—	—	—
Transfers among components of equity	—	—	—	—	2.002	—	—	—	(2.002)	—	—	—	—
Equity increase or (-) decrease resulting from business combinations	—	—	—	—	—	—	—	—	—	—	—	—	—
Share based payments	—	—	—	540	—	—	—	—	—	—	—	—	540
Other increase or (-) decrease in equity	—	—	—	(1.705)	(5.439)	—	(114.253)	—	—	—	—	(54.582)	(175.979)
Closing balance 31/12/2021	703.371	7.899.227	—	19.108	5.441.185	—	(1.201.701)	(34.523)	530.238	—	(385.604)	24.980	12.996.281

Shown for comparative purposes only.

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated statement of total changes in equity for 2022.

Consolidated cash flow statements of Banco Sabadell Group

For the years ended 31 December 2022 and 2021

Thousand euro

	Note	2022	2021 (*)
Cash flows from operating activities		(6,627,920)	12,338,823
Profit or loss for the year		869,390	538,707
Adjustments to obtain cash flows from operating activities		1,854,121	1,700,666
Depreciation and amortisation		545,091	526,514
Other adjustments		1,309,030	1,174,152
Net increase/decrease in operating assets		(8,795,849)	(3,826,355)
Financial assets held for trading		(2,045,624)	707,207
Non-trading financial assets mandatorily at fair value through profit or loss		2,137	34,638
Financial assets designated at fair value through profit or loss		—	—
Financial assets at fair value through other comprehensive income		914,235	(181,941)
Financial assets at amortised cost		(7,063,285)	(5,416,431)
Other operating assets		(603,312)	1,030,172
Net increase/decrease in operating liabilities		(488,059)	13,851,502
Financial liabilities held for trading		2,218,585	(1,273,950)
Financial liabilities designated at fair value through profit or loss		—	—
Financial liabilities at amortised cost		(1,899,289)	16,348,950
Other operating liabilities		(807,355)	(1,223,498)
Cash payments or refunds of income taxes		(67,523)	74,303
Cash flows from investing activities		(64,796)	419,591
Payments		(435,324)	(505,679)
Tangible assets	15	(238,939)	(225,626)
Intangible assets	16	(194,638)	(276,141)
Investments in joint ventures and associates	14	(1,747)	(3,912)
Subsidiaries and other business units		—	—
Non-current assets and liabilities classified as held for sale		—	—
Other payments related to investing activities		—	—
Collections		370,528	925,270
Tangible assets		96,547	444,505
Intangible assets		—	—
Investments in joint ventures and associates	14	210,300	63,086
Subsidiaries and other business units		—	—
Non-current assets and liabilities classified as held for sale		63,681	417,679
Other collections related to investing activities		—	—

(*) Shown for comparative purposes only.

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated cash flow statement for 2022.

Consolidated cash flow statements of Banco Sabadell Group

For the years ended 31 December 2022 and 2021

Thousand euro

	Note	2022	2021 (*)
Cash flows from financing activities		(1,236,880)	1,095,286
Payments		(1,338,630)	(723,022)
Dividends		(280,849)	—
Subordinated liabilities	4	(750,000)	(443,497)
Redemption of own equity instruments		—	—
Acquisition of own equity instruments		(86,457)	(64,378)
Other payments related to financing activities		(221,324)	(215,147)
Collections		101,750	1,818,308
Subordinated liabilities		—	1,750,000
Issuance of own equity instruments		—	—
Disposal of own equity instruments		101,750	68,308
Other collections related to financing activities		—	—
Effect of changes in foreign exchange rates		-23,205	174,594
Net increase (decrease) in cash and cash equivalents		(7,952,801)	14,028,294
Cash and cash equivalents at the beginning of the year	7	49,213,196	35,184,902
Cash and cash equivalents at the end of the year	7	41,260,395	49,213,196
Memorandum item			
CASH FLOWS CORRESPONDING TO:			
Interest received		4,869,638	4,144,382
Interest paid		1,029,597	1,209,006
Dividends received		2,609	1,262
COMPONENTS OF CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR			
Cash on hand	7	686,258	704,105
Cash equivalents in central banks	7	39,236,780	47,741,021
Other demand deposits	7	1,337,357	768,070
Other financial assets		—	—
Less: bank overdrafts repayable on demand		—	—
TOTAL CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR		41,260,395	49,213,196
<i>Of which: held by Group entities but not available for the Group</i>		—	—

(*) Shown for comparative purposes only.

Notes 1 to 43 and accompanying Schedules I to VI form an integral part of the consolidated cash flow statement for 2022.

Consolidated annual report of Banco Sabadell Group for the year ended 31 December 2022

Note 1 – Activity, accounting policies and practices

1.1 Activity

Banco de Sabadell, S.A. (hereinafter, also referred to as Banco Sabadell, the Bank, the Institution, or the Company), with registered office in Alicante, Avenida Óscar Esplá, 37, engages in banking business and is subject to the standards and regulations governing banking institutions operating in Spain. The supervision of Banco Sabadell on a consolidated basis is performed by the European Central Bank (ECB).

The Articles of Association and other public information can be viewed both at the Bank's registered offices and on its website (<https://www.grupbancsabadell.com/corp/en/home.html>).

The Bank is the parent company of a corporate group of entities (see Note 2 and Schedule I) whose activity it controls directly or indirectly and which comprise, together with the Bank, Banco Sabadell Group (hereinafter, the Group).

1.2 Basis of presentation and changes in accounting regulations

The Group's consolidated annual financial statements for 2022 have been prepared in accordance with the International Financial Reporting Standards adopted by the European Union (EU-IFRS) applicable at the end of 2022, taking into account Bank of Spain Circular 4/2017 of 27 November as well as other provisions of the financial reporting regulations applicable to the Group and considering the formatting and mark-up requirements established in Commission Delegated Regulation EU 2019/815, in order to fairly present the Group's equity and consolidated financial situation as at 31 December 2022 and the results of its operations, recognised income and expenses, changes in equity and cash flows (all consolidated) in 2022.

The consolidated annual financial statements have been prepared based on the accounting records kept by the Bank and each of the other entities in the Group, and include adjustments and reclassifications necessary to ensure the harmonisation of the accounting principles and policies and the measurement criteria applied by the Group, which are described in this note.

The information included in these consolidated annual financial statements is the responsibility of the directors of the Group's parent company. The Group's consolidated annual financial statements for 2022 were signed off by the directors of Banco Sabadell at a meeting of the Board of Directors on 16 February 2023 and will be submitted to shareholders at the Annual General Meeting for approval. It is expected that the shareholders will approve the accounts without significant changes.

Except as otherwise indicated, these consolidated annual financial statements are expressed in thousands of euros. In order to show the amounts in thousands of euros, the accounting balances have been subject to rounding; for this reason, some of the amounts appearing in certain tables may not be the exact arithmetic sum of the preceding figures.

Standards and interpretations issued by the International Accounting Standards Board (IASB) that entered into force in 2022

In 2022, the standards indicated hereafter, which have entered into force and been adopted by the European Union, have been applied by the Group for the first time:

Standards	Titles
Amendments to IAS 16, IAS 37 and IFRS 3 and annual improvements to IFRS 2018-2020	Narrow-scope amendments

Narrow-scope amendments to IAS 16, IAS 37 and IFRS 3 and annual improvements to IFRS 2018-20

On one hand, these are amendments made in relation to proceeds received before the intended use of an asset governed by IAS 16 "Property, plant and equipment", the cost of fulfilling an onerous contract pursuant to IAS 37 "Provisions" and references made in IFRS 3 "Business combinations" to the Conceptual Framework for Financial Reporting. The annual improvements to IFRS 2018-20 have also entailed making minor amendments to IFRS 1 "First-time adoption of IFRS", IFRS 9 "Financial instruments", IFRS 16 "Leases" and IAS 41 "Agriculture". The entry into force of these changes has had no significant impact for the Group.

Standards and interpretations issued by the IASB not yet in force

At 31 December 2022, the most significant standards and interpretations that have been published by the IASB but which have not been applied when preparing these consolidated annual financial statements, either because their effective date is subsequent to the date thereof or because they have not yet been endorsed by the European Union, are as follows:

Standards and Interpretations	Title	Mandatory for years beginning:
<i>Approved for application in the EU</i>		
IFRS 17	Insurance contracts	1 January 2023
Amendments to IFRS 17	Initial application of IFRS 17 and IFRS 9: Comparative Information	1 January 2023
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of accounting policies	1 January 2023
Amendments to IAS 8	Definition of accounting estimates	1 January 2023
Amendments to IAS 12	Deferred tax related to assets and liabilities arising from a single transaction	1 January 2023
<i>Not approved for application in the EU</i>		
Amendments to IAS 1	Presentation of financial statements: - Classification of liabilities as current or non-current - Non-current liabilities with covenants	1 January 2024
Amendments to IFRS 16	Lease liabilities in sale and leaseback transactions	1 January 2024

The Group has carried out an assessment of the impacts resulting from these standards and decided not to exercise its option to adopt early, where possible. Unless otherwise indicated, management estimates that their adoption would not have a material impact on the Group.

Approved for implementation in the EU

IFRS 17 “Insurance contracts”

IFRS 17 establishes principles for the recognition, measurement, presentation and disclosure of insurance contracts. The objective of IFRS 17 is to ensure that entities provide relevant information in a way that faithfully represents those contracts.

In accordance with this standard, insurance contracts combine components of financial instruments and service contracts. Furthermore, many insurance contracts generate cash flows that vary substantially and have a long duration. In order to provide useful information on these aspects, IFRS 17:

- combines the current measurement of future cash flows with the revenue recognised throughout the period during which the services established in the contracts are provided.
- presents results for services provided separately from the financial expenses and income relating to these contracts.
- requires entities to decide whether to recognise the entirety of their financial income and expenses relating to insurance contracts in profit and loss, or whether to recognise part of these results in equity.

Furthermore, in 2020 some amendments to IFRS 17 were incorporated, designed to reduce implementation costs by simplifying some requirements of this Standard, make financial performance easier to explain and ease transition by deferring the effective date of the Standard to 1 January 2023 and by reducing the requirements to apply the Standard for the first time.

The initial application of this standard basically affects, at consolidated level, the amount at which insurance undertakings associated with the Group that are controlled by Zürich Seguros (i.e., BanSabadell Vida, S.A. de Seguros y Reaseguros, BanSabadell Seguros Generales, S.A. de Seguros y Reaseguros, y BanSabadell Pensiones, E.G.F.P., S.A.) are recognised.

The impact at the date of entry into force of this regulation (1 January 2023) entails, in approximate terms, a reduction of between 0.9% and 1.2% of the Group's consolidated equity and of between 12 and 16 basis points in the Group's fully-loaded Common Equity Tier 1 (CET1) ratio.

Amendment to IFRS 17 "Initial application of IFRS 17 and IFRS 9: Comparative Information"

This narrow-scope amendment aims to provide insurance undertakings with an option relating to the presentation of comparative information about financial assets in order to avoid accounting mismatches between financial assets and insurance contract liabilities in the aforesaid comparative information upon initial application of IFRS 9 and IFRS 17.

In the event this option is used, the application of this amendment will be simultaneous with the application of IFRS 17.

Amendments to IAS 1 and IFRS Practice Statement 2 "Disclosure of accounting policies"

These amendments aim to help institutions to improve accounting policy disclosures so that they provide more useful information in their annual financial statements.

On one hand, the amendments to IAS 1 require institutions to disclose their material accounting policy information rather than their significant accounting policies, clarifying that accounting policy information that relates to immaterial transactions, other events or conditions is immaterial and need not be disclosed. On the other hand, the amendments to Practice Statement 2, on making materiality judgements, provide guidance on how to apply the concept of materiality to accounting policy disclosures.

The amendments to IAS 1 will be applied prospectively, with early application permitted.

Amendments to IAS 8 "Definition of accounting estimates"

These amendments define "accounting estimates" as monetary amounts in financial statements that are subject to measurement uncertainty; they also provide guidance on how to distinguish between changes in accounting estimates and changes in accounting policies. That distinction is important because changes in accounting estimates are applied prospectively, whereas changes in accounting policies are generally applied retrospectively. In particular, the amendments clarify that a change in accounting estimates that results from new information or new developments is not the correction of a prior period error. The early application of these amendments is permitted.

Amendments to IAS 12 "Deferred tax related to assets and liabilities arising from a single transaction"

These amendments introduce an exception to the initial recognition exemption provided in IAS 12 for situations in which a single transaction gives rise to equal deductible and taxable timing differences. These amendments apply to transactions that occur on or after the beginning of the earliest comparative period presented. The early application of these amendments is permitted.

Not approved for application in the EU

Amendments to IAS 1 "Presentation of financial statements"

Classification of liabilities as current or non-current

These amendments are designed to make clear how institutions should classify debts and other liabilities as current and non-current, in particular liabilities with no fixed maturity and those that may be converted to equity. The early application of these amendments is permitted.

Non-current liabilities with covenants

The purpose of these amendments is to clarify how the conditions agreed in a loan (the "covenants") affect the classification of that loan as either a current or a non-current liability according to whether those conditions must be complied with before or after the date of the financial statements. These amendments change the "Classification of liabilities as current or non-current" and defer their entry into force until 1 January 2024. The early application of these amendments is permitted.

Amendments to IFRS 16 “Lease liabilities in sale and leaseback transactions”

These amendments specify the requirements that a seller-lessee must use to measure the lease liability arising from a sale and leaseback transaction to ensure that the seller-lessee does not recognise any gain or loss related to the right of use that it retains.

The amendments to IFRS 16 will be applied retrospectively, with early application permitted.

Judgements and estimates

The preparation of the consolidated annual financial statements requires certain accounting estimates to be made. It also requires management to use its best judgement in the process of applying the Group’s accounting policies. Such judgements and estimates may affect the value of the assets and liabilities and the disclosure of contingent assets and contingent liabilities as at the date of the consolidated annual financial statements, as well as income and expenses in the year.

The main judgements and estimates relate to the following:

- The determination of the business models under which financial assets are managed (see Notes 1.3.3, 8 and 11).
- The accounting classification of financial assets according to their credit risk (see Notes 1.3.4, 8 and 11).
- Losses due to the impairment of certain financial assets (see Notes 1.3.4, 8, 11 and 26).
- The assumptions used in actuarial calculations of liabilities and post-employment obligations (see Notes 1.3.17 and 22).
- The measurement of consolidated goodwill (see Notes 1.3.12 and 16).
- The useful life and impairment losses of tangible assets and other intangible assets (see Notes 1.3.10, 1.3.11, 1.3.12, 15 and 16).
- The provisions and consideration of contingent liabilities (see Notes 1.3.16 and 22).
- The fair value of certain unquoted financial assets (see Notes 1.3.3 and 6).
- The fair value of real estate assets held on the balance sheet (see Notes 1.3.9, 1.3.10, 1.3.13 and 6).
- The recoverability of non-monetisable deferred tax assets and tax credits (see Notes 1.3.20 and 39).

The conflict between Russia and Ukraine and the European energy crisis have shaped the economic environment and the performance of financial markets in 2022, injecting uncertainty into companies’ activity, which has reinforced the need to use professional judgement when assessing the impact of the existing macroeconomic situation on the aforesaid estimates, fundamentally in relation to the calculation of impairment losses on financial assets.

Although the estimates are based on the information available regarding current and foreseeable circumstances, final results could differ from these estimates.

1.3 Accounting principles and policies and measurement criteria

The accounting principles and policies, as well as the most significant measurement criteria applied in preparing these consolidated annual financial statements, are described below. There have been no cases in which accounting principles or measurement criteria have not been applied because of a material effect on the Group’s consolidated annual financial statements for 2022.

1.3.1 Consolidation principles

In the consolidation process, a distinction is drawn between subsidiaries, joint ventures, associates and structured entities.

Subsidiaries

Subsidiaries are entities over which the Group has control. This occurs when the Group is exposed, or is entitled, to variable returns as a result of its involvement in the investee and when it has the ability to influence those returns through its power over the investee.

For control to exist, the following criteria must be met:

- Power: an investor has power over an investee when that investor holds rights which provide them with the ability to lead significant activities, i.e. those that significantly affect the investee's returns.
- Returns: an investor is exposed, or is entitled, to variable returns due to their involvement in the investee when the returns obtained from such involvement may vary depending on the investee's economic performance. The investor's returns may be only positive, only negative, or both positive and negative.
- Relationship between power and returns: an investor controls an investee if the investor not only has power over the investee and is exposed, or is entitled, to variable returns due to their involvement with the investee, but also has the ability to use that power to influence the returns obtained due to their involvement with the investee.

When the Group takes control of a subsidiary, it applies the acquisition method provided for in the regulations governing business combinations (see Note 1.3.2) except in the case of acquisitions of an asset or a group of assets.

The financial statements of subsidiaries are consolidated with the Bank's financial statements using the full consolidation method.

The third-party ownership of the Group's consolidated equity is shown in the heading "Non-controlling interests" of the consolidated balance sheet and the part of the profit or loss for the year attributable to these interests is presented under the heading "Profit or loss for the year - Attributable to minority interest [non-controlling interests]" in the consolidated income statement.

Joint ventures

These are entities subject to joint control agreements whereby decisions on significant activities are made unanimously by the entities which share control.

Investments in joint ventures are accounted for by the equity method i.e. they are accounted for in terms of the fraction of equity represented by the share held in their capital stock, after taking account of any dividends received from them and any other equity disposals.

The Group has not held investments in joint ventures in 2022 and 2021.

Associates

Associates are entities over which the Group exerts significant influence which generally, although not exclusively, takes the form of a direct or indirect interest representing 20% or more of the investee's voting rights.

In the consolidated annual financial statements, associates are accounted for using the equity method.

The above notwithstanding, when the Group's investment in an associate is held directly by, or is held indirectly through, a venture capital organisation or similar entity, it may elect to measure that investment at fair value through profit or loss in accordance with IFRS 9. This election is made separately for each associate on the date of its initial recognition. Similarly, when the Group has an interest in an associate that is an investment entity, it may, when applying the equity method, elect to retain the fair value measurement applied by that investment entity associate to its subsidiaries. This election is made separately for each associate that is an investment entity, on the later of the following dates: (a) when the associate is first recognised; (b) when the associate becomes an investment entity; and (c) when the associate becomes the parent company of a group of entities.

Structured entities

A structured entity is an entity that has been designed so that voting or other similar rights are not the dominant factor in deciding who controls the entity.

Where the Group holds an interest in an entity, or where it incorporates an entity, in order to transfer risks or for any other purposes, or to allow customers access to certain investments, it determines whether there is control over the entity based on that provided in regulations, as described above, in order to consequently determine whether it should be subject to consolidation. Specifically, the following factors, among others, are considered:

- Analysis of the influence of the Group over the significant activities of the entity that could have an influence on the amount of its returns.
- Implicit or explicit commitments of the Group to provide financial support to the entity.
- Identification of the entity's manager and analysis of the remuneration scheme.
- Existence of removal rights (possibility of dismissing managers).
- Significant exposure of the Group to the variable returns on the entity's assets.

These entities include those known as 'asset securitisation funds', which are consolidated in cases where, based on the above analysis, it is determined that the Group has maintained control. For these operations, financial support agreements commonly used in securitisation markets are generally in place, and there are no commitments to provide any financial support that goes significantly beyond what has been contractually agreed. By reason of the foregoing, it is considered that, for the majority of the Group's securitisations, the securitised assets cannot be derecognised and the securities issued by securitisation funds are recognised as liabilities on the consolidated balance sheet.

Schedule II provides details of the structured entities of the Group.

In all cases, the results generated by companies forming part of the Group during a given year are consolidated considering only those relating to the period spanning from the acquisition date to year-end. Similarly, the results generated by companies disposed of during the year are consolidated considering only those relating to the period spanning from the start of the year to the disposal date.

In the consolidation process, all material balances and transactions between the companies forming part of the Group have been eliminated, in the proportion corresponding to them based on the method of consolidation applied.

Financial and insurance institutions, both subsidiaries and associates, regardless of the country in which they are located, are subject to supervision and regulation by various bodies. The laws in effect in the various jurisdictions, along with the need to meet certain minimum capital requirements and the performance of supervisory activities, are circumstances that could affect the ability of these institutions to transfer funds in the form of cash, dividends, loans or advances.

Note 2 includes information on the most significant acquisitions and disposals that have taken place during the year. Significant disclosures regarding the Group's companies are provided in Schedule I.

1.3.2 Business combinations

A business combination is a transaction, or any other event, through which the Group obtains control of one or more businesses. Business combinations are accounted for using the acquisition method.

Under this method, the acquiring entity (acquirer) recognises the assets acquired and liabilities assumed in its financial statements, also considering contingent liabilities, measured at their fair value, including those that the acquired entity (acquiree) had not recognised in its accounts. This method also requires the cost of the business combination to be estimated, which will normally correspond to the consideration paid, defined as the fair value, on the acquisition date, of the assets delivered, the liabilities incurred against the former owners of the acquired business and the equity instruments issued, if any, by the acquirer.

The Group then recognises goodwill in the consolidated annual financial statements if on the acquisition date there is a positive difference between:

- the sum of the consideration paid plus the amount of all minority interests and the fair value of prior interests held in the acquired business; and
- the fair value of recognised assets and liabilities.

If the difference is negative, it is recorded under the heading “Negative goodwill recognised in profit or loss” in the consolidated income statement.

In cases where the consideration amount depends on future events, any contingent consideration is recognised as part of the consideration paid and measured at fair value on the acquisition date. The costs associated with the transaction do not form part of the cost of the business combination for these purposes.

If the cost of the business combination or the fair value assigned to the acquiree’s assets, liabilities or contingent liabilities cannot be conclusively determined, the initial accounting of the business combination will be considered provisional. In any event, the process should be completed within a maximum of one year from the acquisition date and effective as of that date.

Minority interests in the acquiree are measured on the basis of the proportional percentage of its identified net assets. All purchases and disposals of these minority interests are accounted for as capital transactions when they do not result in a change of control. No profit or loss is recognised in the consolidated income statement and the initially recognised goodwill is not re-measured. Any difference between the consideration paid or received and the decrease or increase in minority interests, respectively, is recognised in reserves.

With regard to non-monetary contributions of businesses to associates or joint ventures in which there is a loss of control over these businesses, the Group’s accounting policy is to record the full profit or loss in the consolidated income statement, recognising any remaining interest held at its fair value.

1.3.3 Measurement of financial instruments and recognition of changes arising in their subsequent measurement

In general, all financial instruments are initially recognised at fair value (see definition in Note 6) which, unless evidence to the contrary is available, coincides with the transaction price. For financial instruments not recognised at fair value through profit or loss, the fair value is adjusted either by adding or deducting the transaction costs directly attributable to their acquisition or issuance. In the case of financial instruments at fair value through profit or loss, the directly attributable transaction costs are recognised immediately in the consolidated income statement. As a general rule, conventional purchases and sales of financial assets are recognised at the settlement date.

Changes in the value of financial instruments originating from the accrual of interest and similar items are recorded in the consolidated income statement, under the headings “Interest income” or “Interest expenses”, as applicable. Dividends received from other companies are recognised in the consolidated income statement for the year in which the right to receive them is originated.

Instruments which form part of a hedging relationship are treated in accordance with regulations applicable to hedge accounting.

Changes in measurements occurring subsequent to initial recognition for reasons other than those mentioned above are treated based on the classification of financial assets and financial liabilities for the purposes of their measurement. In the case of financial assets, classification is generally based on the following aspects:

- The business model under which they are managed, and
- The characteristics of their contractual cash flows.

Business model

A business model refers to the way in which financial assets are managed in order to generate cash flows. The business model is determined by considering the way in which groups of financial assets are managed together to achieve a particular objective. Therefore, the business model does not depend on the Group’s intentions for an individual instrument, rather, it is determined for a group of instruments.

The business models used by the Group are indicated here below:

- Business model whose objective is to hold financial assets in order to collect contractual cash flows: under this model, financial assets are managed in order to collect their particular contractual cash flows, rather than to obtain an overall return by both holding and selling assets. The above notwithstanding, assets can be disposed of prior to maturity in certain circumstances. Sales that may be consistent with a business model whose objective is to hold assets in order to collect contractual cash flows include sales that are infrequent or insignificant in value, sales of assets close to maturity, sales triggered by an increase in credit risk and sales carried out to manage credit concentration risk.
- Business model whose objective is to sell financial assets.
- Business model that combines the two objectives above (hold financial assets in order to collect contractual cash flows and sell financial assets): this business model typically involves greater frequency and value of sales because such sales are integral to achieving the business model's objective.

Contractual cash flows of financial assets

Financial assets should initially be classified in one of the following two categories:

- Those whose contractual terms give rise, on specified dates, to cash flows that are solely payments of principal and interest on the principal amount outstanding.
- All other financial assets.

For the purposes of this classification, the principal of a financial asset is its fair value at initial recognition, which could change over the life of the financial asset; for example, if there are repayments of principal. Interest is understood as the sum of consideration for the time value of money, for lending and structural costs, and for the credit risk associated with the principal amount outstanding during a particular period of time, plus a profit margin.

If a financial asset contains contractual terms that could change the timing or amount of cash flows, the Group will estimate the cash flows that could arise before and after the change and determine whether these are solely payments of principal and interest (SPPI) on the principal amount outstanding.

The most significant judgements used in this evaluation are indicated here below:

- Modified time value of money: in order to determine whether the interest rate of a transaction incorporates any consideration other than that linked to the passage of time, transactions that present a difference between the tenor of the benchmark interest rate and the reset frequency of that interest rate are analysed, considering a tolerance threshold, in order to determine whether the instrument's contractual (undiscounted) cash flows could be significantly different from the contractual (undiscounted) benchmark cash flows of a financial instrument whose time value of money element was not modified. At present, tolerance thresholds of 10% and 5%, respectively, are used for the differences in each tenor and for the analysis of cumulative cash flows over the life of the financial asset.
- Contractual terms that change the timing or amount of cash flows: an analysis is carried out to determine whether any contractual terms exist that could change the timing or amount of contractual cash flows from the financial asset:
 - Clauses for conversion to equity shares: clauses that include a conversion-to-equity option and the loss of the right to claim contractual cash flows in the event the principal amount is reduced due to insufficient funds. Contracts that include this option will automatically fail the SPPI test.
 - Existence of the option to prepay or extend the financial instrument, or extend the contractual term, and possible residual compensation: a financial asset will fulfil the SPPI test requirements if it includes a contractual option that permits the issuer (or debtor) to prepay a debt instrument or to put back a debt instrument before maturity and the prepayment amount substantially represents unpaid amounts of principal and interest outstanding, which may include reasonable additional compensation for the early termination of the contract.

- Other clauses that could change the timing or amount of cash flows: clauses that could alter contractual cash flows as a result of changes in credit risk are considered to pass the SPPI test.
- Leverage: financial assets with leverage (i.e. those in which the contractual cash flow variability increases, such that they do not have the same economic characteristics as the interest rate on the principal amount of the transaction) fail the SPPI test.
- Contractually linked financial instruments: the cash flows arising from these types of financial instruments are considered to consist solely of payments of principal and interest on the principal amount outstanding provided that:
 - the contractual terms of the tranche being assessed for classification (without looking through to the underlying pool of financial instruments) give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding;
 - the underlying pool of financial instruments comprises instruments whose contractual cash flows are solely payments of principal and interest on the principal amount outstanding; and
 - the exposure to credit risk corresponding to the tranche being assessed is equal to or lower than the exposure to credit risk of the underlying pool of financial instruments.
- Non-recourse financial assets: in the case of debt instruments that are primarily repaid with cash flows from specified assets or projects and for which there is no personal liability for the holder, an assessment is made of the underlying assets or cash flows to determine whether the contractual cash flows of the instrument are payments of principal and interest on the principal amount outstanding.

For cases in which a financial asset characteristic is inconsistent with a basic lending arrangement (i.e. if one of the asset's characteristics gives rise to contractual cash flows other than payments of principal and interest on the principal amount outstanding), the significance and probability of occurrence is assessed to determine whether that characteristic should be taken into account in the SPPI test:

- To determine the significance of a financial asset characteristic, the impact that it could have on contractual cash flows is estimated. The impact is not considered significant (de minimis effect) if it is estimated that the change in expected cash flows will be below the tolerance thresholds indicated previously.
- If an instrument's characteristic could have a significant effect on the contractual cash flows but would only affect the instrument's contractual cash flows upon occurrence of an event that is very unlikely to occur, that characteristic will not be taken into account to determine whether the contractual cash flows of the instrument are solely payments of principal and interest on the capital amount outstanding.

Portfolios of financial instruments classified for the purpose of their measurement

Financial assets and financial liabilities are classified, for the purposes of their measurement, into the following portfolios, based on the aspects described above:

Financial assets at amortised cost

This category includes financial assets that meet the following two conditions:

- They are managed with a business model whose objective is to hold financial assets in order to collect contractual cash flows, and
- Their contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

This category comprises investments associated with typical lending activities, such as amounts loaned to customers withdrawn in cash and not yet repaid, deposits placed with other institutions, regardless of the legal arrangements under which the funds were provided, debt securities which meet the two conditions indicated above, as well as debts incurred by purchasers of goods or users of services forming part of the Group's business.

Following their initial recognition, financial assets classified in this category are measured at amortised cost, which should be understood as the acquisition cost adjusted to account for repayments of principal and the portion recognised in the consolidated income statement, using the effective interest rate method, of the difference between the initial cost and the corresponding repayment value at maturity. In addition, the amortised cost is decreased by any reduction in value due to impairment recognised directly as a decrease in the value of the asset or through an allowance or compensatory item of the same value.

The effective interest rate is the discount rate that exactly equals the value of a financial instrument to the estimated cash flows over the instrument's expected life, on the basis of its contractual terms, such as early repayment options, but without taking into account expected credit losses. For fixed rate financial instruments, the effective interest rate coincides with the contractual interest rate set at the time of their acquisition, considering, where appropriate, the fees, transaction costs, premiums or discounts which, because of their nature, may be likened to an interest rate. In the case of floating-rate financial instruments, the effective interest rate is the same as the rate of return in respect of all applicable concepts until the first scheduled benchmark revision date.

Financial assets at fair value through other comprehensive income

This category includes financial assets that meet the following two conditions:

- They are managed with a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and
- The contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These financial assets primarily correspond to debt securities.

Furthermore, the Group may opt, at initial recognition and irrevocably, to include in the portfolio of financial assets at fair value through other comprehensive income investments in equity instruments that should not be classed as held for trading and which would otherwise be classified as financial assets mandatorily at fair value through profit or loss. This option is exercised on an instrument-by-instrument basis.

Income and expenses from financial assets at fair value through other comprehensive income are recognised in accordance with the following criteria:

- Interest accrued or, where applicable, dividends accrued are recognised in the consolidated income statement.
- Exchange differences are recognised in the consolidated income statement when they relate to monetary financial assets, or through other comprehensive income when they relate to non-monetary financial assets.
- Losses due to impairment of debt instruments, or gains due to their subsequent recovery, are recognised in the consolidated income statement.
- Other changes in value are recognised through other comprehensive income.

When a debt instrument measured at fair value through other comprehensive income is derecognised from the balance sheet, the fair value change recognised under the heading "Accumulated other comprehensive income" of the consolidated statement of equity is reclassified into the consolidated income statement. However, when an equity instrument measured at fair value through other comprehensive income is derecognised from the balance sheet, this amount is not reclassified into the consolidated income statement, but rather to reserves.

Financial assets at fair value through profit or loss

A financial asset is classified in the portfolio of financial assets at fair value through profit or loss whenever the business model used by the Group for its management or the characteristics of its contractual cash flows make it inadvisable to classify it into any of the other portfolios described above.

This portfolio is in turn subdivided into:

– *Financial assets held for trading*

Financial assets held for trading are those which have been acquired for the purpose of realising them in the near term, or which form part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking. Financial assets held for trading also include derivative instruments that do not meet the definition of a financial guarantee contract and which have not been designated as hedging instruments.

– *Non-trading financial assets mandatorily at fair value through profit or loss*

All other financial assets mandatorily at fair value through profit or loss are classified in this portfolio.

Fair value changes are directly recognised in the consolidated income statement, making a distinction, in the case of non-derivative instruments, between the portion attributable to returns accrued on the instrument, which are recognised either as “Interest income”, applying the effective interest rate method, or as dividends, depending on their nature, and the remaining portion, which is recognised as gains or (-) losses on financial assets and liabilities under the corresponding heading.

In 2022 and 2021, no significant reclassifications took place between the portfolios in which financial assets are recognised for the purpose of their measurement.

Financial liabilities held for trading

Financial liabilities held for trading include financial liabilities that have been issued for the purpose of repurchasing them in the near term, or which form part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking. They also include short positions arising from the outright sale of assets acquired in reverse repurchase agreements, borrowed in securities lending or received as collateral with sale rights, as well as derivative instruments that do not meet the definition of a financial guarantee contract and which have not been designated as hedging instruments.

Fair value changes are directly recognised in the consolidated income statement, making a distinction, in the case of non-derivative instruments, between the portion attributable to returns accrued on the instrument, which are recognised as interest applying the effective interest rate method, and the remaining portion, which is recognised as gains or (-) losses on financial assets and liabilities under the corresponding heading.

Financial liabilities at amortised cost

Financial liabilities measured at amortised cost are financial liabilities that cannot be classified into any of the above categories and which relate to the typical deposit-taking activity of a financial institution, irrespective of their structure and maturity.

In particular, this category includes capital qualifying as a financial liability, specifically, financial instruments issued by the Group which, given their legal classification as share capital, do not meet the requirements to be classified as consolidated equity for accounting purposes. These are essentially issued shares that do not carry voting rights and whose return is calculated based on a fixed or variable rate of interest.

Following initial recognition they are measured at amortised cost applying the same criteria as those applicable to financial assets at amortised cost, recognising the interest accrued, calculated using the effective interest rate method, in the consolidated income statement. However, if the Group has discretionary powers with regard to the payment of coupons associated with the financial instruments issued and classified as financial liabilities, the Group’s accounting policy is to recognise them in consolidated reserves.

Hybrid financial instruments

Hybrid financial instruments are those that combine a non-derivative host contract and a financial derivative, known as an ‘embedded derivative’, which cannot be transferred separately, nor does it have a different counterparty, and which results in some of the cash flows of the hybrid instrument varying in a similar way to the cash flows that would exist if the derivative were considered separately.

Generally, when the host contract of a hybrid financial instrument is a financial asset, the embedded derivative is not separated and the measurement rules are applied to the hybrid financial instrument as a

When the host contract of a hybrid financial instrument is a financial liability, the embedded derivatives of that contract are separated and treated independently for accounting purposes if the characteristics and economic risks of the embedded derivative are not closely related to those of the host contract. A different financial instrument with the same conditions as those of the embedded derivative would qualify as a derivative instrument, therefore the entire hybrid contract would not be designated at its fair value through profit or loss.

Most of the hybrid financial instruments issued by the Group are instruments whose payments of principal and/or interest are indexed to specific equity instruments (generally, shares of listed companies), to a basket of shares, to stock market indices (such as IBEX and NYSE), or to a basket of stock market indices.

The fair value of the Group's financial instruments as at 31 December 2022 and 2021 is indicated in Note 6.

1.3.4 Impairment of financial assets

A financial asset or a credit exposure is considered to be impaired when there is objective evidence that one or more events have occurred whose direct or combined effect gives rise to:

- In the case of debt instruments, including loans and debt securities, a negative impact on future cash flows estimated at the time the transaction was executed, due to the materialisation of credit risk.
- In the case of off-balance sheet exposures that carry credit risk, inflows that are expected to be lower than the contractual cash flows that are due if the holder of a loan commitment draws down the loan or, in the case of financial guarantees given, inflows that are expected to be lower than the payments that are scheduled to be made.
- In the case of investments in joint ventures and associates, a situation in which their carrying amount cannot be recovered.

1.3.4.1 Debt instruments and off-balance sheet exposures

Impairment losses on debt instruments and other off-balance sheet credit exposures are recognised as an expense in the consolidated income statement for the year in which the impairment is estimated. The recoveries of any previously recognised losses are also recognised in the consolidated income statement for the year in which the impairment is eliminated or reduced.

The impairment of financial assets is calculated based on the type of instrument and other circumstances that could affect it, after taking into account any effective guarantees received. For debt instruments measured at amortised cost, the Group recognises both allowances, when loan loss provisions are allocated to absorb impairment losses, as well as direct write-offs, when the probability of recovery is considered to be remote. For debt instruments at fair value through other comprehensive income, impairment losses are recognised in the consolidated income statement, with a balancing entry under the heading "Accumulated other comprehensive income" on the consolidated statement of equity. Impairment allowances for off-balance sheet exposures are recognised on the liabilities side of the consolidated balance sheet as a provision.

For risks classified as stage 3 (see the section "Definition of classification categories" in this note), accrued interest is recognised in the consolidated income statement by applying the effective interest rate to its amortised cost adjusted to account for any impairment allowances.

To determine impairment losses, the Group monitors borrowers individually, at least those who are significant borrowers, and collectively, for groups of financial assets with similar credit risk characteristics that reflect borrowers' ability to satisfy their outstanding payments.

The Group has policies, methods and procedures in place to estimate the losses that it may incur as a result of its credit risks, due to both counterparty insolvency and country risk. These policies, methods and procedures are applied when granting, assessing and arranging debt instruments and off-balance sheet exposures, when identifying their possible impairment and, where applicable, when calculating the amounts necessary to cover these expected losses.

1.3.4.1.1 Accounting classification on the basis of credit risk attributable to insolvency

The Group has established criteria that allow borrowers showing a significant increase in credit risk, vulnerabilities or objective evidence of impairment to be identified and classified on the basis of their credit risk.

The following sections describe the classification principles and methodology used by the Group.

Definition of classification categories

Credit exposures and off-balance sheet exposures are both classified, on the basis of their credit risk, into the following stages:

- Stage 1: standard exposures, i.e. transactions whose risk profile has not changed since they were granted and for which there are no doubts as to the fulfilment of repayment commitments in accordance with the contractually agreed terms.
- Stage 2: standard exposures under special monitoring, i.e. transactions which, although they do not meet the criteria to be classified individually as stage 3 or write-offs, show significant increases in credit risk (SICR) since initial recognition. This category includes, among other transactions, those in which there are amounts more than 30 days past due, with the exception of non-recourse factoring, for which a threshold of more than 60 days is applied (the amount of non-recourse factoring transactions with arrears of between 30 and 60 days represented 55 million euros at year-end 2022 and 32 million euros at year-end 2021), as well as refinanced and restructured transactions not classified as stage 3 until they are classified into a lower risk category once they meet the established requirements for modifying their classification.
- Stage 3: doubtful or non-performing exposures are transactions for which there are reasonable doubts as to their repayment in full in accordance with the contractually agreed terms. This category comprises debt instruments, matured or otherwise, which do not meet the conditions for classification into the write-offs category but for which there are reasonable doubts as to their repayment in full (principal and interest) by the borrower, as well as off-balance sheet exposures whose payment by the Group is likely but whose recovery is doubtful.
 - As a result of borrower arrears: all transactions, without exception, with any amount of principal, interest or contractually agreed expenses more than 90 days past due, unless they should be classified as write-offs. This category also includes debt transactions and guarantees given classified as non-performing due to the pulling effect (more than 20% of the exposures of one obligor are more than 90 days past due).
 - For reasons other than borrower arrears: transactions which do not meet the conditions for classification as write-offs or stage 3 as a result of borrower arrears, but for which there are reasonable doubts as to the likelihood of obtaining the estimated cash flows of the transaction, as well off-balance sheet exposures not classified as stage 3 as a result of borrower arrears whose payment by the Group is likely but whose recovery is doubtful. This category includes transactions that were classified as stage 3 as a result of borrower arrears, but as they do not present amounts more than 90 days past due they remain in this category for a probation period before reclassification as standard exposures under special monitoring (stage 2).

The accounting definition of stage 3 is in line with the definition used in the Group's credit risk management activities.

- Write-off:

The Group derecognises from the consolidated balance sheet transactions for which the possibility of full or partial recovery is concluded to be remote following an individual assessment. This also includes transactions which, despite not being in any of the previous situations, are undergoing a manifest and irreversible deterioration of their solvency.

The remaining amounts of transactions with portions that have been derecognised ('partial derecognition'), either because of the termination of the Group's debt collection rights ('definitive loss') – for reasons such as debt remissions or debt reductions – or because they are considered irrecoverable even though debt collection rights have not been terminated ('write-downs'), will be fully classified in the corresponding category on the basis of their credit risk.

In the situations described above, the Group derecognises from the consolidated balance sheet any amount recorded as a write-off, together with its provision, notwithstanding any actions that may be taken to collect payment until no more rights to collect payment exist, whether due to a credit risk transfer, a debt remission, or for any other reasons.

Purchased or originated credit-impaired transactions

The expected credit loss on purchased or originated credit-impaired assets will not form part of the loss allowance or the gross carrying amount on initial recognition. When a transaction is purchased or originated with credit impairment, the loss allowance will be equal to the cumulative changes in lifetime expected credit losses since initial recognition. Interest income on these assets will be calculated by applying the credit-adjusted effective interest rate to the amortised cost of the financial asset.

Extent of alignment between the stage 3 accounting category and the prudential definition of default

The prudential definition of default adopted by the Group bases materiality thresholds and the counting of days past due on regulatory technical standard EBA/RTS/2016/06 and all other conditions on guidelines EBA/GL/2016/07.

In general, contracts that are considered impaired from an accounting standpoint are also considered impaired for prudential purposes. The exception to this are contracts that are impaired by reason of the accounting definition of default but whose past-due amounts are equal to or below a materiality threshold (exposures of 100 euros for the retail segment and of 500 euros for the non-retail segment, and where 1% of the total exposures are past-due for both cases).

Notwithstanding the foregoing, the prudential definition is generally more conservative than the accounting definition. The key differing aspects are set out hereafter:

- Under the prudential definition, the number of days in default are counted from the moment the first past-due amount goes above the materiality threshold. The counting cannot be restarted or reduced until the borrower has paid all past-due amounts or until the past-due amounts fall back below the materiality thresholds. Under the accounting definition, a FIFO criterion can be applied to past-due amounts when there have been partial repayments, enabling the number of days past due to be reduced for that reason.
- Under the prudential definition, a 3-month probation period exists for all amounts in default, while a 12-month probation period is used for amounts in default classified as refinancing. Under the accounting definition, the 3-month period applies only to amounts classified as stage 3 as a result of borrower arrears, while the 12-month period applies only to amounts classified as stage 3 that correspond to refinancing.
- In terms of unlikely-to-pay amounts in default (for reasons other than borrower arrears), there are explicit criteria defined at the prudential level, which are additional to those applied at the accounting level.

Transaction classification criteria

The Group applies various criteria to classify borrowers and transactions into different categories based on their credit risk. These categories include:

- Automatic criteria;
- Criteria based on indicators (triggers); and
- Specific criteria for refinancing transactions.

The automatic factors and specific classification criteria for refinancing make up what the Institution refers to as the classification and cure algorithm and are applied to the entire portfolio.

Furthermore, to enable an early identification of any significant increase in credit risk or vulnerabilities, or any transaction impairment, the Group establishes different triggers for significant and non-significant borrowers. The details for each borrower group are described in the sections on Individual assessment and Collective assessment, respectively. In particular, non-significant borrowers are assessed by means of a process which aims to identify any significant increase in credit risk since the transaction was first approved and which could result in losses greater than those incurred on other similar transactions classified as stage 1. For significant borrowers, on the other hand, there is an automated system of triggers in place that generates a series of alerts, which serve to indicate, during a borrower's assessment, that a decision needs to be made with regard to their classification.

As a result of the application of these criteria, the Group either classifies its borrowers as stage 2 or 3 or keeps them in stage 1.

Individual assessment

The Group has established a significance threshold in terms of exposure, which is used to classify certain borrowers as significant, meaning that their risks need to be assessed individually.

The thresholds at the customer level used to classify borrowers as significant have been set at 10 million euros for customers classified in stage 1 and at 3 million euros for customers classified in stages 2 or 3. These thresholds comprise amounts drawn, amounts available and guarantees.

Exposures of more than 1 million euros of borrowers within the Top 10 main risk groups classified in stage 3, identified on an annual basis, are also considered individually. Exceptionally, and with the sole purpose of classifying and more precisely impairing transactions, borrowers whose exposures are not above the significance threshold but who nevertheless belong to a group in which the individual assessment of its components is based on consolidated data may also be assessed individually.

To assess significant borrowers' transactions, a system of triggers is established. These triggers identify any significant increase in credit risk, as well as any signs of impairment.

A team of expert risk analysts carries out the individual assessment of borrowers, reviewing each transaction and assigning it the corresponding accounting classification.

The system of triggers and automatic criteria for significant borrowers is automated and takes into account the particular characteristics of segments that perform differently within the loan portfolio, with specific triggers in place for certain segments. In any event, the system of triggers does not automatically or individually classify borrowers. Instead, it brings forward the due date for assessment of the borrower by an analyst and prompts decision-making with regard to their classification. The main aspects identified by the system of triggers and automatic criteria are listed here below:

- A significant increase in credit risk or an impairment event, considering variables that are indicative of a deteriorating or poor economic and financial situation as well as variables that could potentially give rise to impairment or which allow impairment to be anticipated. Examples of stage 2 and stage 3 triggers:

Stage 2 triggers:

- Adverse changes in the financial situation, such as a significant increase in levels of leverage or a sharp drop in turnover or equity.
- Adverse changes in the economy or market indicators, such as a significant fall in share prices or a reduction in the price of debt issues.
- Significant fall in the internal credit rating of the borrower.
- Significant increase in credit risk of other transactions of the same borrower, or in entities associated with the borrower's risk group.
- For transactions secured with collateral, significant decline in the value of the collateral received.

Stage 3 triggers:

- Negative EBITDA, significant decrease in EBITDA, in turnover, or in general, in the borrower's recurrent cash flows.
- Increase in the borrower's leverage ratios.

- Negative equity or equity reduction as a result of the borrower suffering equity losses of 50% or more in the past year.
 - Existence of an internal or external credit rating showing that the borrower is in arrears.
- Existence of debt remissions or debt reductions to the same borrower or to companies associated with the latter's risk group in the last 2 years.
 - Existence of a borrower's past-due commitments of significant value with public bodies.
 - Breach of contract, defaults or delayed payments of principal or interest: in addition to amounts more than 90 days past due, which form part of the automatic classification algorithm, amounts less than 90 days past due are also identified, as these can be a sign of impairment or of a significant increase in credit risk. Non-payments declared in other credit institutions in the financial system are also considered in the assessment.
 - Borrowers experiencing financial difficulties are granted concessions or advantages that would not otherwise be considered: refinancing the debt of an obligor experiencing financial difficulties could prevent or delay their failure to honour their payment obligations, whilst at the same time preventing or delaying the recognition of the impairment associated with the financial asset linked to that obligor.
 - Probability of the borrower becoming insolvent: in cases in which there is a high probability that a borrower will enter bankruptcy or other financial reorganisation, the solvency of the issuers or obligors is ostensibly affected, which could give rise to a loss event depending on the impact on future cash flows pending collection.

The Group carries out an annual review of the reasonableness of its thresholds and of the credit risk captured in the individual assessments carried out using these thresholds.

Collective assessment

For borrowers who have been classed below the significant borrower threshold and who, in addition, have not been classified as stages 2 or 3 by the automatic classification algorithm, the Group has defined a process to identify transactions that show a significant increase in credit risk compared to when the transaction was approved, and which could give rise to greater losses than those incurred on other similar transactions classified as stage 1.

For transactions of borrowers that are assessed collectively, the Group has a statistical model that allows it to determine the Probability of Default (PD) term structure and, therefore, the residual lifetime PD of a contract (or the PD from a given moment in time up to the maturity of the transaction), based on different characteristics:

- Systemic: macroeconomic characteristics shared by all exposures.
- Cross-cutting: aspects that remain stable over time and which are shared by a group of transactions, such as the shared effect of lending policies in effect at the time the transaction was approved, or the transaction's approval channel.
- Idiosyncratic: aspects specific to each transaction or borrower.

With this specification, the Group is able to measure the annualised residual lifetime PD of a transaction under the conditions that existed at the time the transaction was approved (or originated), or under the conditions existing at the time the provision is calculated. Therefore, the current annualised residual lifetime PD may fluctuate in relation to the PD at the time the transaction was approved, due to changes in the economic environment or in the idiosyncratic characteristics of the transaction or of the borrower.

In March 2022, the Group introduced a new statistical model that estimates significant increase in credit risk for borrowers and transactions subject to collective assessment models. The model generates an estimate using a logistic regression taking the annualised lifetime PD under the economic and idiosyncratic circumstances at the time the provision is calculated, and comparing it against the annualised residual lifetime PD under the circumstances that existed at the time the transaction was approved, considering the difference between PDs in both relative and absolute terms. For this model, thresholds for the increase in annualised lifetime PD, indicating stage 2 classification, have been calibrated using historical data with the aim of maximising efficient and early detection of arrears at 30 days, refinancings and defaults, thereby maximising risk discrimination among borrowers and/or transactions classified as stage 1 and 2.

The thresholds for significant risk increase vary according to the portfolio, business size, loan product and level of PD upon approval, requiring relatively higher increases if the PD at approval is low.

Exceptionally, these thresholds are not applicable at certain low levels of current PD where there is practically no indication of significant risk increase over a 6-month horizon (Low Credit Risk Exemption); these levels will vary according to the portfolio/segment and have been calibrated using historical data. The current PD thresholds to identify the population exempt from significant risk increases have been calibrated differently for each of the portfolios under the collective model perimeter, i.e. companies differentiated by size, mortgages and consumer loans.

In any case, as a general criterion and in addition to those described previously, borrowers included in the watchlist identified according to risk and all transactions that have a 12-month PD above a given threshold, also calibrated with a sample of historical data and varying according to portfolio/segment, are reclassified to stage 2. Similarly, all transactions with a very high current 12-month PD, that surpass a threshold also calibrated with a sample of historical data and varying according to portfolio/segment, are reclassified to stage 3.

In the case of TSB, the multiplier of lifetime PD upon approval relative to current lifetime PD is also used, complemented with an absolute increase in PD calculated specifically for each portfolio. Both of these thresholds must be reached in order for an exposure to be reclassified as stage 2. In 2022 and 2021, the threshold for the multiplier of current PD relative to PD upon approval applied to all portfolios has been set at 2, while absolute thresholds have ranged from 10 to 770 basis points in both years, with the exception of overdrafts, which only use an absolute threshold of 400 basis points.

Refinancing and restructuring transactions

Credit risk management policies and procedures applied by the Group ensure that borrowers are carefully monitored, identifying cases where provisions need to be allocated as there is evidence that their solvency is declining (see Note 4). To this end, the Group allocates loan loss provisions for the transactions that require them given the borrower's circumstances, before formally executing any refinancing/restructuring transactions, which should be understood as follows:

- Refinancing transaction: transaction which, irrespective of the borrower or guarantees involved, is approved or used for economic or legal reasons related to current or foreseeable financial difficulties on the part of the borrower (or borrowers) affecting their ability to repay one or more transactions approved by the Group and granted to the borrower (or borrowers) or to another company or companies belonging to their group, or to bring outstanding payments fully or partially up to date, with a view to making it easier for holders of refinanced transactions to repay their debt (principal and interest) when they are unable, or will predictably soon be unable, to honour their payment obligations in good time and in the manner agreed.
- Restructured transaction: transaction in which, for economic or legal reasons related to current or foreseeable financial difficulties on the part of the borrower (or borrowers), the financial terms and conditions are amended to make it easier for them to repay their debt (principal and interest) when they are unable, or will predictably soon be unable, to honour their payment obligations in good time and in the manner agreed, even when such an amendment is already provided for in the contract. In any case, transactions in which the debt is written down or assets are received to reduce the debt, or those transactions whose terms are amended to extend the term to maturity, or to amend the repayment schedule so as to reduce repayment instalment amounts in the short term or reduce their payment frequency, or to establish or extend the grace period for the repayment of principal, interest, or both, are all considered restructured transactions, except when it can be proven that the terms are being amended for reasons other than borrowers' financial difficulties and that the amended terms are analogous to those that would be applied in the market, on the date of such amendment, to transactions with a similar risk profile.

If a transaction is classified into a particular risk category, refinancing does not mean that its risk classification will automatically improve. The algorithm establishes the initial classification of refinanced transactions based on their characteristics: they may be based on an inadequate business plan, they may have specific clauses such as long grace periods, or they may have amounts written off as they are considered to be non-recoverable. The algorithm then changes the initial classification depending on the established cure periods. Reclassification into a lower risk category will only be considered if evidence exists of a continuous and significant improvement in the recovery of the debt over time; therefore, the act of refinancing does not in itself produce any immediate improvements.

Refinancing, refinanced and restructured transactions remain identified as such during a probation period until all of the following requirements are met:

- It is concluded, having reviewed the borrower's assets and financial position, that the borrower is unlikely to experience financial difficulties.
- A minimum of two years have passed since the date of the restructuring or refinancing or, if later, since the date of reclassification to the stage 3 category.
- The borrower has paid the instalments of principal and interest accumulated since the date of the refinancing or restructuring or, if later, since the date of reclassification to the stage 3 category.
- The borrower has no other transactions with amounts more than 30 days past due at the end of the probation period.

Refinancing, refinanced and restructured transactions remain in the stage 3 category until it can be verified that they meet the general criteria for reclassification from stage 3 into a different category, particularly the following requirements:

- It is concluded, having reviewed the borrower's assets and financial position, that the borrower is unlikely to experience financial difficulties.
- One year has passed since the date of the refinancing or restructuring.
- The borrower has paid the accumulated instalments of principal and interest.
- The borrower has no other transactions with amounts more than 90 days past due on the date on which the refinancing, refinanced or restructured transaction is reclassified as stage 2.

In the case of refinanced/restructured loans classified as stage 2, in addition to the general classification criteria, certain specific criteria are applicable which, if met, lead to reclassification into one of the higher risk categories described previously (i.e. into stage 3, as a result of borrower arrears, when payments are, in general, over 90 days past due, or for reasons other than borrower arrears, when there are reasonable doubts as to their recoverability).

The methodology used to estimate losses on these portfolios is generally similar to that used for other financial assets at amortised cost, but it is considered that, in principle, the estimated loss on a transaction that has had to be restructured to enable payment obligations to be satisfied should be greater than the estimated loss on a transaction with no history of non-payment, unless sufficient additional effective guarantees are provided to justify otherwise.

1.3.4.1.2 Credit loss allowances

The Group applies the following parameters to determine its credit loss allowances:

- EAD (Exposure at Default): the Institution defines exposure at default as the value to which it expects to be exposed to when a loan defaults.

The exposure metrics considered by the Group in order to cover this value are the currently drawn balances and the estimated amounts that it expects to disburse in the event its off-balance sheet exposures enter into default, by applying a Credit Conversion Factor (CCF).

- PD (Probability of Default): estimation of the probability that a borrower will default within a given period of time.

The Group has tools in place to help in its credit risk management that predict the probability of default of each borrower and which cover practically all lending activity.

In this context, the Group reviews the quality and stability of the rating tools that are currently in use on an annual basis. The review process includes the definition of the sample used and the methodology to be applied when monitoring rating models.

The tools used to assess debtors' probability of default are behavioural credit scores that monitor credit risk in the case of individuals, and early warning indicators and credit ratings in the case of companies:

- Credit ratings (for companies): in general, credit risks undertaken with companies are rated using a rating system based on the internal estimate of their probability of default (PD). The rating model estimates the risk rating in the medium term, based on qualitative information provided by risk analysts, financial statements and other relevant information. The rating system is based on factors that predict the probability of default over a one-year period. It has been designed for different segments. The rating model is reviewed annually based on the analysis of performance patterns of actual defaulted loans. A predicted default rate is assigned to each credit rating level, which also allows a uniform comparison to be made against other segments and against credit ratings issued by external credit rating agencies using a master ratings scale.

Credit ratings have a variety of uses in risk management. Most notably, they form part of the transaction approval process (system of discretions), risk monitoring and pricing policies.

- Early warnings tool, known as HAT (for companies): HAT gives a score that estimates the risk of a company defaulting in the near term, determined based on a variety of information (balances, non-payments, information from CIRBE (Spain's central credit register), external credit bureaux, etc.). HAT aims to capture the short-term risk of a company. The scores that it gives are very sensitive to changes in a company's status or behaviour and are therefore updated on a daily basis.
- Credit scores: in general, credit risks undertaken with individuals are rated using credit scoring systems, which are in turn based on a quantitative model of historical statistical data, where the relevant predictive factors are identified. In regions where credit scoring takes place, credit scores are divided into two types:
 - Reactive credit scores: these are used to assess applications for consumer loans, mortgage loans and credit cards. Once all of the data relating to the transaction has been entered, the system calculates a result based on the estimated borrowing power, financial profile and, if applicable, the profile of assets pledged as collateral. The resulting credit score is integrated in risk management processes using the system of discretions.
 - Behavioural credit scores: the system automatically classifies all customers using information regarding their activity based on their financial situation (balances, activity, non-payments), their personal characteristics and the features of each of the products that they have acquired. These credit scores are mainly used to authorise transactions, establish (authorised) overdraft limits, design advertising campaigns and adjust the initial stages of the debt recovery management process.

If no credit scoring system exists, individual assessments supplemented with policies are used instead.

- LGD (Loss Given Default): expected loss on transactions which are in default. This loss also takes into account outstanding debt, late payment interest and expenses relating to the recovery process. Additionally, for each cash flow (amounts outstanding and amounts recovered) an adjustment is applied to consider the time value of money.
- Effective Interest Rate (EIR): discount rate that exactly equals the estimated cash flows receivable or payable throughout the expected life of a financial asset or a financial liability to the gross carrying amount of the financial asset or to the amortised cost of the financial liability.

- Multiple scenarios: in order to estimate expected losses, the Group applies different scenarios to identify the effect of the non-linearity of losses. To this end, the provisions required are estimated in the different scenarios for which a probability of occurrence has been defined. Specifically, the Group has considered three macroeconomic scenarios: one baseline scenario, the most likely of all (61%), an alternative scenario 1, the most optimistic of the three, which envisages zero supply chain disruption and productivity gains (9%), and an alternative scenario 2, the most adverse, which envisages a synchronised global recession (30%). In each of these scenarios, a 5-year time horizon has been used to carry out the projections. The main variables considered are changes in GDP, the unemployment rate and house prices. In 2021, the Group considered three macroeconomic scenarios with weights of 60%, 15% and 25%, respectively, and the same macroeconomic variables as in 2022.

Baseline scenario

- Relations between Western countries and Russia remain strained. The conflict between Russia and Ukraine drags on without resolution and sanctions remain in place. The cut-off of Russian gas to Europe continues indefinitely, hampering energy supplies during the winter months. Nevertheless, European governments intervene effectively in the energy markets to cushion the economic impact, avoid major energy rationing and find viable alternatives to Russian gas.
- Inflation remains at high levels for much of 2023 due to the energy crisis in Europe and specific domestic factors in the United Kingdom and United States, such as the situation concerning labour markets and salaries. Thereafter, inflation gradually eases, but remains somewhat above the central banks' targets for quite some time. In any event, inflation expectations remain firmly anchored thanks to the monetary policy response.
- In terms of economic policy, fiscal policy continues to be expansionary and interventionist, based on cushioning the impacts of the energy crisis and high inflation. In the Eurozone, the region begins to harvest the positive effects of rollout of the Next Generation EU (NGEU) funds.
- The central banks maintain an orthodox stance and, given the high level of inflation, set and keep interest rates at somewhat restrictive levels and move ahead with their balance sheet reduction policies. As long as inflation shows no clear sign of returning to its target level, the central banks will leave considerations about the performance of financial markets and concerns about economic activity on the back burner.
- All things considered, there is greater concern about economic growth, as the boost to demand seen in 2021 weakens and the impact of recent events is felt (war in Ukraine, energy crisis and Russian gas cut-off, inflation and increased costs, and monetary policy tightening). All this produces an environment of global economic stagnation and the Eurozone and even the United States experience a mild economic recession.
- In Spain, the economic situation is more secure than in the rest of Europe. Economic activity is supported by the robust balance sheets of economic agents, the return to a normal growth dynamic for the sectors worst affected by the pandemic, use of the Next Generation EU funds and government measures to counteract the energy price increase. The labour market develops positively, with the unemployment rate falling in the coming years.
- In Spain, private sector lending continues to grow at a slower rate than nominal GDP, constrained by the subdued economic growth, the uncertainty stemming from the conflict in Ukraine and the rising interest rate environment.
- With regard to the financial markets, yields on long-term government debt become more stable, following the significant repricing observed in 2022. The greater focus on economic growth is another factor limiting further market upturns. Sovereign debt risk premiums in the European periphery remain at contained levels.
- The US dollar encounters depreciatory pressures against the euro from spring 2023 onwards, in a context of slowing inflation, the improving international economic environment, and the continued resumption of capital inflows to the Eurozone as the ECB's interest rate policy returns to normal.

- As regards Brexit, the scenario envisages a situation in which the United Kingdom and the European Union continue to implement pragmatic solutions to the agreements.

Alternative scenario 1: Zero supply chain disruption and productivity gains

- The geopolitical environment improves and the conflict in Ukraine is resolved with an agreement that is valid for all parties.
- The disruptions to supply chains are quickly resolved and the energy crisis is straightened out, producing a general fall in energy prices, thanks to the improved global geopolitical environment and the absence of any further shocks.
- Global economic growth is vigorous and synchronised, on the strength of an improved business climate and reduced uncertainty related to the geopolitical environment and the energy crisis. In addition, productivity gains stemming from an increasingly digitised and sustainable economy follow in the medium term.
- Inflation rates slide back rapidly and remain close to the levels targeted in the monetary policy of the respective central banks.
- The central banks are less hawkish and set interest rates at levels in line with monetary neutrality.
- Global financing conditions remain lax, with no significant episodes of risk aversion.
- The macroeconomic and financial environment allows risk premiums on both peripheral debt and corporate bonds to remain contained.
- In Spain, the economy maintains a significant growth dynamic thanks to the resolution of the Ukraine conflict, prevalence of lax funding conditions and the use of the NGEU funds which are received without problem and used efficiently.

Alternative scenario 2: Synchronised global recession

- The global economy is faced with new shocks which bring on a recession in the first half of 2023. Specifically, in Europe, all commercial relations with Russia are severed. In addition, global government policies are taken in an uncoordinated fashion and are ineffective at limiting the impacts of the Russian gas cut-off and other disruptions stemming from the worsened relations with Russia. All this ends up causing a severe economic recession.
- Inflation remains high, initially due to the high starting point reached in 2022 and the additional energy price shock, but eventually falls to the levels targeted by monetary policy due to weak demand.
- The central banks halt the process to normalise monetary policy in view of the weak demand. The ECB and the Fed implement some interest rate cuts, but these are limited due to the inflation rate which, initially, remains persistently high.
- Global funding conditions are tightened against a backdrop of increased uncertainty and a global recession. The yields on government debt partially reverse the upward trend of recent months, but they remain at high levels compared with those of recent years.
- Peripheral risk premiums face some upside pressure, alongside an expansionary fiscal policy and worsening public accounts.
- Spain is relatively less adversely affected than the Eurozone as a whole due to its lower dependency on Russian gas. However, the economy goes into recession in the first half of 2023 and, subsequently, it enters a prolonged period of stagnation.

At 31 December 2022 and 2021, the main forecast variables considered for Spain and the United Kingdom are those shown below:

	%									
	31/12/2022									
	Spain					United Kingdom				
	2023	2024	2025	2026	2027	2023	2024	2025	2026	2027
GDP growth										
Baseline scenario	1.3	2.0	2.0	1.8	1.7	-1.3	-0.2	1.0	1.3	1.4
Alternative scenario 1	4.4	4.4	2.5	2.0	2.0	-0.4	0.8	1.3	1.3	1.4
Alternative scenario 2	-1.1	0.1	1.6	1.8	1.7	-2.5	-1.4	1.0	1.3	1.4
Unemployment rate										
Baseline scenario	12.7	12.4	12.1	11.9	11.7	4.4	5.2	5.0	4.6	4.2
Alternative scenario 1	11.6	10.2	9.0	8.6	8.4	3.8	3.8	3.8	3.8	3.8
Alternative scenario 2	15.6	16.7	15.8	14.9	14.2	5.4	6.3	5.7	5.0	4.5
House price growth (*)										
Baseline scenario	1.0	1.6	2.0	2.0	2.0	-3.3	-5.1	0.7	1.9	2.5
Alternative scenario 1	3.0	3.6	3.8	3.6	3.6	-0.9	-2.3	0.7	2.9	3.7
Alternative scenario 2	-2.6	-1.6	2.0	2.0	2.0	-3.4	-11.1	-0.5	4.3	4.3

(*) For Spain, the price variation at year-end is calculated and, for the UK, the average price variation over the year is calculated.

	%									
	31/12/2021									
	Spain					United Kingdom				
	2022	2023	2024	2025	2026	2022	2023	2024	2025	2026
GDP growth										
Baseline scenario	6.3	3.3	2.7	2.2	2.0	5.3	1.5	1.4	1.4	1.4
Alternative scenario 1	7.8	4.5	3.6	2.7	2.4	6.7	2.8	1.6	1.6	1.6
Alternative scenario 2	3.4	1.9	1.8	1.5	1.4	1.7	2.4	1.2	1.2	1.2
Unemployment rate										
Baseline scenario	14.1	12.9	12.0	11.6	11.4	5.4	4.4	4.0	4.0	4.0
Alternative scenario 1	12.5	10.6	9.5	8.7	8.0	4.3	3.5	3.5	3.5	3.5
Alternative scenario 2	16.9	16.5	15.5	14.6	14.0	6.7	6.1	5.0	4.5	4.5
House price growth (*)										
Baseline scenario	3.8	3.8	3.5	3.2	3.2	-1.0	1.6	2.5	2.5	2.5
Alternative scenario 1	5.7	4.8	4.0	3.8	3.6	3.5	4.3	3.3	2.5	2.5
Alternative scenario 2	-0.5	0.6	1.8	2.0	2.4	-7.3	-7.2	9.6	7.4	4.2

(*) For Spain, the price variation at year-end is calculated and, for the UK, the average price variation over the year is calculated.

When applying the macroeconomic scenarios, the recommendations issued by accounting supervisors and regulators have been taken into account in order to prevent excessive pro-cyclicality as a result of the short-term volatility in the environment, attaching greater importance to longer-term economic outlooks.

In the Group, macroeconomic scenarios have been incorporated into the impairment calculation model.

The Group makes a series of additional adjustments to the results of its credit risk models, referred to as post model adjustments (PMAs) or overlays, in order to address situations in which the results of the models are not sufficiently sensitive to the uncertainty in the macroeconomic environment. These adjustments are temporary and remain in place until the reasons for which they were originally applied cease to exist. The application of these adjustments is subject to the governance principles established by the Group. Specifically, in 2022 a series of additional allowances have been recognised over and above the expected losses and incorporating specific sectoral features related to the current macroeconomic situation and the new inflationary environment, amounting to 170 million euros.

The Group applies the criteria described below to calculate credit loss allowances.

The amount of impairment allowances is calculated based on whether or not there has been a significant increase in credit risk since initial recognition, and on whether or not there a default event has occurred. This way, the impairment allowance for transactions is equal to:

- 12-month expected credit losses, when the risk of a default event materialising has not significantly increased since initial recognition (assets classified as stage 1).
- Lifetime expected credit losses, if the risk of a default event materialising has increased significantly since initial recognition (assets classified as stage 2).
- Expected credit losses, when a default event has materialised (assets classified as stage 3).

12-month expected credit losses are defined as:

$$PE_{12M} = EAD_{12M} \cdot PD_{12M} \cdot LGD_{12M}$$

Where:

EAD_{12M} is the exposure at default at 12 months, PD_{12M} is the probability of a default occurring within 12 months and LGD_{12M} is the expected loss given default.

Lifetime expected credit losses are defined as:

$$PE_{LT} = \sum_{i=1}^m \frac{EAD_i \cdot PD_i \cdot LGD_i}{(1 + EIR)^{i-1}}$$

Where:

EAD_i is the exposure at default for each year, taking into account both the entry into default and the (agreed) amortisation, PD_i is the probability of a default occurring within the next twelve months for each year, LGD_i is the expected loss given default for each year, and EIR is the effective interest rate of each transaction.

During this estimation process, a calculation is made of the allowance necessary to cover, on one hand, the credit risk attributable to borrowers and, on the other hand, country risk.

The Group includes forward-looking information when calculating expected credit losses and determining whether there has been a significant increase in credit risk, using scenario forecasting models to this end.

The agreed amortisation schedule for each transaction is used. Subsequently, these expected credit losses are updated by applying the effective interest rate of the instrument (if its contractual interest rate is fixed) or the contractual effective interest rate ruling on the date of the update (if the interest rate is variable). The amount of effective guarantees received is also taken into account.

The following sections describe the different methodologies applied by the Group to determine impairment loss allowances.

Individual allowance estimates

The Group monitors credit risk on an individual basis for all risks deemed to be significant. To estimate the individual allowance for credit risk, an individual estimate is made for all individually significant borrowers classified as stage 3 and for certain borrowers classified as stage 2. Individual estimates are also made for transactions identified as having negligible risk classified as stage 3.

The Group has developed a methodology to estimate these allowances, calculating the difference between the gross carrying amount of the transaction and the present value of the estimated cash flows it expects to receive, discounted using the effective interest rate. To this end, effective guarantees received are taken into account (see the section entitled “Guarantees” of this note).

Three methods are established to calculate the recoverable amount of assets assessed individually:

- Discounted cash flow method (going concern): debtors who are estimated to be able to generate future cash flows through their own business activity, thereby allowing them to fully or partially repay the debt owed through the economic and financial activities and structure of the company. This involves estimating the cash flows obtained by the borrower during the course of their business activity.
- Collateral recovery method (gone concern): debtors who are not able to generate cash flows during the course of their own business activities and who are forced to liquidate assets in order to fulfil their payment obligations. This involves estimating cash flows based on the enforcement of guarantees.
- Combined method: debtors who are estimated to be able to generate future cash flows and also have non-core assets. These cash flows can be supplemented with the potential sale of non-core assets, insofar as they are not required for the performance of their activity and, consequently, for the generation of the aforesaid future cash flows.

Collective allowance estimates

Exposures that are not assessed using individual allowance estimates are subject to collective allowance estimates.

When calculating collective impairment losses, the Group, in accordance with IFRS 9, mainly takes the following aspects into account:

- The impairment estimation process takes all credit exposures into account. The Group recognises an impairment loss equal to the best estimate available from internal models, taking into account all of the relevant information which it holds on the existing conditions at the end of the reported period. For some types of risk, including sovereign risk and exposures with credit institutions and general governments of countries in the European Union and other advanced economies, the Group does not use internal models. These exposures are considered to have negligible risk given that, based on the information available as at the date of signing off the consolidated annual financial statements, and considering past experience with these risks, the impairment allowance that these exposures are estimated to require is not significant as long as they are not reclassified into stage 3.
- In order to collectively assess impairment, internal models estimate a different PD and LGD for each contract. To this end, various types of historical information are used that allow the risk to be individually classified for each exposure (ratings, non-payments, vintage, exposure, collateral, characteristics of the borrower or contract). Available historical information representative of the Institution and past losses (defaults) is therefore taken into account. It is worth highlighting that the estimation obtained from the models is adjusted to account for the existing economic climate and the forecasts in the scenarios considered, the latter being representative of expected credit losses. The estimates of impairment loss allowance models are directly integrated in some activities related to risk management and the input data that they use (e.g. credit ratings and credit scores) are those used for approving risks, monitoring risks, for pricing purposes and in capital calculations. In addition, recurring back-testing exercises are carried out at least once a year, and the models are adjusted in the event any significant deviations are detected. The models are also reviewed regularly in order to incorporate the most recent information available and to ensure that they perform adequately and that they are suitably representative when applied to the current portfolio for the calculation of impairment loss allowances.

Segmentation of models

Specific models exist depending on the segment or product of the customer (portfolio) and each one uses explanatory variables that uniformly catalogue all of the portfolio's exposures. The purpose of the segmentation of models is to optimise the capture of customers' default risk profile based on a set of common risk drivers. Therefore, the exposures of these segments can be considered to reflect a uniform collective treatment.

The models for companies calculate PD at the borrower level and are fundamentally segmented according to the size of the company (annual turnover) and its activity (real estate development, holding, or other).

The PD models for natural persons, including the self-employed, follow a segmentation that centres primarily on the lending product. Different models exist for different products: mortgage loans, consumer loans, credit cards and lines of credit, considering the recipient of the transaction (individual or company). PDs are estimated at the contract level, meaning that a single borrower can have different PDs depending on the lending product being quantified.

The models for significant increase in credit risk (SICR) carry out calculations at the contract level, in order to consider the characteristics specific to each transaction (such as origination date and maturity date).

Where LGD is concerned, contracts with similar risk characteristics are grouped together for collective assessment, using the following segmentation hierarchy:

- By type of borrower: companies, developers and natural persons.
- By type of guarantee: mortgage, unsecured, monetary/financial, and guarantors.
- By type of product: credit cards, overdrafts, leases, credits and loans.

Different LGDs are estimated for each segment, which are representative of the borrowers, of the recovery processes and of the recoverability assigned to each one based on the Institution's past experience.

Risk drivers

The risk drivers or explanatory variables of models are the shared credit risk characteristics. In other words, they are common elements that can be used to rate borrowers in a homogeneous way within a portfolio and which explain the credit risk rating assigned to each exposure. Risk drivers are identified by means of a rigorous process that combines historical data analysis, explanatory power and expert judgement, as well as knowledge about the risk/business.

The main risk drivers are presented hereafter, grouped together by type of model (PD, SICR and LGD).

PD models use credit ratings or credit scores as input data (internal ratings-based (IRB) models used for both risk management and capital calculations). They incorporate additional information to give a more faithful reflection of the risk at a given moment in time (point-in-time). For companies, the early warnings tool known as HAT and the credit rating are used. For individuals, the credit score is used. A description of these tools can be found earlier in this same note.


In both cases, other recent risk events (refinancing, exit from default status, non-payments, lending restrictions) also explain the probability of default.

The explanatory factors mainly used by SICR models are the PD upon approval and the current residual lifetime PD (i.e. for the residual life of the transaction).

LGD models use additional risk drivers that enable a more in-depth segmentation to take place. More specifically, for mortgage guarantees, the LTV (Loan to Value) is used, or the order of priority in the event the mortgage guarantee is enforced. Similarly, the amount of the debt and the type of product are also factors taken into account.

Summary of criteria for classification and allowances

The classification of credit risk and the measurement of allowances are determined based on whether or not there has been a significant increase in credit risk since origination, or on whether or not any default events have occurred:

Credit risk category	Observed credit impairment since initial recognition 			
	Stage 1	Stage 2	Stage 3	Write-off
Criteria for classification into stages	Transactions in which there has been no significant increase in credit risk since initial recognition and which do not meet the requirements for classification into other categories	Transactions which show a significant increase in credit risk since initial recognition	Transactions whose full recovery is considered doubtful, even if no amounts are more than ninety days past due Transactions with amounts more than 90 days past due	Transactions whose possibility of recovery is considered remote due to a manifest and irreversible deterioration of the solvency of the transaction or the borrower
Calculation of allowance	12-month expected credit loss	Lifetime expected credit loss		Write-off from balance sheet and recognition of the loss in the income statement, at the carrying amount of the transaction
Accrual of interest	Calculated by applying the effective interest rate to the gross carrying amount of the transaction		Calculated by applying the effective interest rate to the amortised cost (adjusted to account for any impairment allowances)	Not recognised in the income statement
Transactions included, by stage	Initial recognition	Transactions which show a significant increase in credit risk since initial recognition	Transactions classified as Stage 3 as a result of borrower arrears: Amount of debt instruments with one or more amounts more than 90 days past due	Transactions whose possibility of recovery is considered remote
		Forborne, refinanced and restructured transactions that do not meet the conditions for classification as Stage 3 Transactions with amounts more than 30 days past due	Transactions classified as Stage 3 for reasons other than borrower arrears: • Transactions with no amounts more than 90 days past due but whose full recovery is considered doubtful • Forborne, refinanced and restructured transactions that do not meet the conditions for classification as Stage 2 • Purchased or originated credit-impaired (POCI) transactions	Transactions partially deemed to be irrecoverable even though debt collection rights have not yet been terminated (write-downs)

Guarantees

Effective guarantees are collateral and personal guarantees proven by the Group to be a valid means of mitigating credit risk.

Under no circumstances will guarantees whose effectiveness significantly depends on the credit quality of the debtor or, where applicable, the economic group of which the debtor forms part, be accepted as effective guarantees.

Based on the foregoing, the following types of guarantees can be considered to be effective guarantees:

- Real estate guarantees applied as first mortgage liens:
 - Completed buildings and completed component parts:
 - Housing units.
 - Offices, commercial premises and multi-purpose industrial buildings.
 - Other buildings, such as non-multi-purpose industrial buildings and hotels
 - Urban land and regulated building land.
 - Other real estate.
- Collateral in the form of pledged financial instruments:
 - Cash deposits.
 - Equity instruments in listed entities and debt securities issued by creditworthy issuers.

- Other collateral:
 - Personal property received as collateral.
 - Subsequent mortgages on properties.
- Personal guarantees such that direct and joint liability to the customer falls to the new guarantors, who are persons or entities whose solvency is sufficiently verified to ensure the full redemption of the transaction under the terms set forth.

The Group has collateral valuation criteria for assets located in Spain that are in line with prevailing legislation. In particular, the Group applies criteria for the selection and hiring of appraisers that are geared towards assuring their independence and the quality of the appraisals. All of the appraisers used are appraisal companies that have been entered in the Bank of Spain Special Register of Appraisal Firms, and the appraisals are carried out in accordance with the criteria established in Order ECO/805/2003 on rules for the appraisal of real estate and particular rights for specific financial purposes.

Real estate guarantees for loan transactions are valued on the date they are granted, while real estate assets are valued on the date on which they are recognised, whether as a result of a purchase, foreclosure or a payment in kind, and also whenever there is a significant reduction in value. In addition, minimum updating criteria are applied, which ensure that updates take place at least once a year in the case of impaired assets (assets classified as stages 2 or 3 and real estate assets foreclosed or received in lieu of debt), or at least once every three years for large debts classified as stage 1 with no signs of latent credit risk. Similarly, statistical methodologies may be used to update appraisals but only for properties that have a certain level of homogeneity among them, in other words, those with low exposure and low risk whose characteristics are likely to be shared by other properties and which are located in an active market with frequent transactions, although a full appraisal is carried out in accordance with the aforesaid ECO Order (an “ECO appraisal”) at least once every three years.

For assets located in other EU countries, the appraisal is carried out in accordance with that set forth in Royal Decree 716/2009 of 24 April, and in the rest of the world, by companies and/or experts with recognised expertise in the country. Real estate assets located in a foreign country will be appraised using the method approved by the RICS (Royal Institution of Chartered Surveyors), through prudent and independent appraisals carried out by authorised experts in the country where the property is located or, where appropriate, by appraisal firms or services accredited in Spain, and in accordance with the appraisal rules applicable in that country insofar as these are compatible with generally accepted appraisal practices.

The Group has developed internal methodologies to estimate credit loss allowances. These methodologies use the appraisal value as a starting point to determine the amount that can be recovered with the enforcement of real estate guarantees. This appraisal value is adjusted to account for the time required to enforce such guarantees, price trends and the Group’s ability and experience in realising the value of properties with similar prices and time lines, as well as the costs of enforcement, maintenance and sale.

The calculation of credit losses on state-guaranteed loans granted as part of a government support scheme designed to address the impact of COVID-19, irrespective of the credit risk category or categories into which the transaction is classified throughout its life, is based on their expected credit loss less the positive impact of cash flows expected to be recovered with the state guarantee.

Overall comparison between financial asset and real estate asset impairment allowances

The Group has established backtesting methodologies to compare estimated losses against actual losses.

Based on this backtesting exercise, the Group makes amendments to its internal methodologies when this regular backtesting exercise reveals significant differences between estimated losses and actual losses.

The backtests carried out show that the credit loss allowances are adequate given the portfolio’s credit risk profile.

1.3.4.2 Investments in joint ventures and associates

The Group recognises allowances for the impairment of investments in joint ventures and associates, always provided there is objective evidence that the carrying amount of an investment is not recoverable. Objective evidence that equity instruments have become impaired is considered to exist when, after initial recognition, one or more events occur whose direct or combined effect demonstrates that the carrying amount is not recoverable.

The Group considers the following indicators, among others, to determine whether there is evidence of impairment.

- Significant financial difficulties.
- Disappearance of an active market for the instrument in question due to financial difficulties.
- Significant changes in profit or loss, compared to the data included in budgets, business plans or targets.
- Significant changes in the market in the issuer's equity instruments, its existing products, or its potential products.
- Significant changes in the global economy or in the economy of the region in which the issuer operates.
- Significant changes in the technological or legal environment in which the issuer operates.

The value of the allowances for the impairment of interests held in associates included under the heading of "Investments in joint ventures and associates" is estimated by comparing their recoverable amount against their carrying amount. The carrying amount is the higher of the fair value less selling costs and the value in use.

The Group determines the value in use of each interest held based on its net asset value, or based on estimates of their profit/loss, pooling them into activity sectors (real estate, renewable energy, industrial, financial, etc.) and evaluating the macroeconomic factors specific to that sector that could affect the performance of such companies. In particular, interests held in insurance investees are valued by applying the market consistent embedded value methodology, those held in companies related to real estate are valued based on their net asset value, and those held in financial investees are valued using multiples of their carrying amount and/or the profit of other comparable listed companies.

Impairment losses are recognised in the consolidated income statement for the year in which they materialise and subsequent recoveries are recognised in the consolidated income statement for the year in which they are recovered.

1.3.5 Hedging transactions

The Group has elected to continue applying IAS 39 for its hedge accounting until the IFRS 9 macro hedge accounting project has been finalised, as permitted by IFRS 9.

The Group uses financial derivatives to (i) provide these instruments to customers that request them, (ii) manage risks associated with the Group's proprietary positions (hedging derivatives), and (iii) realise gains as a result of price fluctuations. To this end, it uses both financial derivatives traded in organised markets and those traded bilaterally with counterparties outside organised markets (over the counter, or OTC).

Financial derivatives that do not qualify for designation as hedging instruments are classified as derivatives held for trading. To be designated as a hedging instrument, a financial derivative must meet the following criteria:

- It must hedge against the exposure to changes in the value of assets and liabilities caused by interest rate and/or exchange rate fluctuations (fair value hedge), the exposure to variability in estimated cash flows that is attributable to a particular risk of financial assets and financial liabilities, firm commitments and highly probable forecast transactions (cash flow hedge), or the exposure associated with net investments in foreign operations (hedge of net investments in foreign operations).
- The financial derivative must effectively eliminate some portion of the risk that is inherent in the hedged item or position throughout the entire expected life of the hedge. This effectiveness should be measured both prospectively and retrospectively. To this end, the Group analyses whether, at the time of its inception, a hedge is expected to operate with a high level of effectiveness in business-as-usual conditions. It also runs effectiveness tests throughout the life of the hedge, in order to verify that the results of these tests show an effectiveness that falls within a range of between 80% and 125%.

- Suitable documentation must be available to show that the financial derivative was acquired specifically to hedge against certain balances or transactions and to show the intended method for achieving and measuring hedge effectiveness, provided that this method is consistent with the Group's own risk management processes.

Hedges are applied either to individual items and balances (micro-hedges) or to portfolios of financial assets and financial liabilities (macro-hedges). In the latter case, the set of financial assets and financial liabilities to be hedged must share the same type of risk, a condition that is met when the individual hedged items have a similar interest rate sensitivity.

Changes that take place after the designation of the hedge, changes in the measurement of financial instruments designated as hedged items and changes in financial instruments designated as hedging instruments are recognised in the following way:

- In fair value hedges, differences arising in the fair value of the derivative and the hedged item that are attributable to the hedged risk are recognised directly in the consolidated income statement, with a balancing entry under the headings of the consolidated balance sheet in which the hedged item is included, or under the heading "Derivatives – Hedge accounting", as appropriate.

In fair value hedges of interest rate risk of a portfolio of financial instruments, gains or losses arising when the hedging instrument is measured are recognised directly in the consolidated income statement. Losses and gains arising from fair value changes in the hedged item that can be attributed to the hedged risk are recognised in the consolidated income statement with a balancing entry under the heading "Fair value changes of the hedged items in portfolio hedge of interest rate risk" on either the asset side or the liability side of the consolidated balance sheet, as appropriate. In this case, hedge effectiveness is assessed by comparing the net position of assets and liabilities in each time period against the hedged amount designated for each of them, immediately recognising the ineffective portion under the heading "Gains or (-) losses on financial assets and liabilities, net" of the consolidated income statement.

- In cash flow hedges, differences in the value of the effective portion of hedging instruments are recognised under the heading "Accumulated other comprehensive income – Hedging derivatives. Cash flow hedges reserve [effective portion]" on the consolidated statement of equity. These differences are recognised in the consolidated income statement when the losses or gains on the hedged item are recognised through profit or loss, when the envisaged transactions are executed, or on the maturity date of the hedged item.
- In hedges of net investments in foreign operations, measurement differences in the effective portion of hedging instruments are recognised temporarily in the consolidated statement of equity under "Accumulated other comprehensive income – Hedge of net investments in foreign operations [effective portion]". These differences are recognised in the consolidated income statement when the investment in foreign operations is disposed of or derecognised from the consolidated balance sheet.
- Measurement differences in hedging instruments relating to the ineffective portion of cash flow hedges and net investments in foreign operations are recognised under the heading "Gains or (-) losses on financial assets and liabilities, net" of the consolidated income statement.

If a derivative assigned as a hedging derivative does not meet the above requirements due to its termination, discontinuance, ineffectiveness, or for any other reason, it will be treated as a derivative held for trading for accounting purposes. Therefore, changes in its measurement are recognised with a balancing entry in the income statement.

When a fair value hedge is discontinued, any previous adjustments made to the hedged item are recognised in the income statement using the effective interest rate method, recalculated as at the date on which the item ceased to be hedged, and must be fully amortised upon maturity.

Where a cash flow hedge is discontinued, the accumulated gains or losses on the hedging instrument that had been recognised under "Accumulated other comprehensive income" in the consolidated statement of equity while the hedge was still effective will continue to be recognised under that heading until the hedged transaction takes place, at which time the gain or loss will be recognised in the income statement, unless the hedged transaction is not expected to take place, in which case it will be recognised in the income statement immediately.

1.3.6 Financial guarantees

Contracts by which the issuer undertakes to make specific payments on behalf of a third party in the event of that third party failing to do so, irrespective of their legal form, are considered financial guarantees. These can be bonds, bank guarantees, insurance contracts or credit derivatives, among other items.

The Group recognises financial guarantee contracts under the heading “Financial liabilities at amortised cost – Other financial liabilities” at their fair value which, initially and unless there is evidence to the contrary, is the present value of the expected fees and income to be received. At the same time, fees and similar income received upon commencement of the operations, as well as the accounts receivable, measured at the present value of future cash flows pending collection, are recognised as a credit item on the asset side of the balance sheet.

In the particular case of long-term guarantees given in cash to third parties under service contracts, when the Group guarantees a particular level or volume in terms of the provision of such services, it initially recognises those guarantees at their fair value. The difference between their fair value and the disbursed amount is considered an advance payment made or received in exchange for the provision of the service, and this is recognised in the consolidated income statement for the period in which the service is provided. Subsequently, the Group applies analogous criteria to debt instruments measured at amortised cost.

Financial guarantees are classified according to the risk of incurring loan losses attributable to either customer arrears or the transaction and, where appropriate, an assessment is made of whether provisions need to be allocated for these guarantees by applying criteria similar to the criteria used for debt instruments measured at amortised cost.

Income from guarantee instruments is recognised under the heading “Fee and commission income” in the consolidated income statement and calculated applying the rate laid down in the related contract to the nominal amount of the guarantee. Interest from long-term guarantees given in cash to third parties is recognised by the Group under the heading “Interest income” in the consolidated income statement.

1.3.7 Transfers and derecognition of financial instruments from the balance sheet

Financial assets are only derecognised from the consolidated balance sheet when they no longer generate cash flows or when their inherent risks and rewards have been substantially transferred to third parties. Similarly, financial liabilities are only derecognised from the consolidated balance sheet when there are no further obligations associated with the liabilities or when they are acquired for the purpose of their termination or resale.

Note 4 provides details of asset transfers in effect at the end of 2022 and 2021, indicating those that did not involve the derecognition of the asset from the consolidated balance sheet.

1.3.8 Offsetting of financial instruments

Financial assets and financial liabilities are only offset for the purpose of their presentation in the consolidated balance sheet when the Group has a legally enforceable right to offset the amounts recognised in such instruments and intends to settle them at their net value or realise the asset and settle the liability simultaneously.

1.3.9 Non-current assets and assets and liabilities included in disposal groups classified as held for sale and discontinued operations

The “Non-current assets and disposal groups classified as held for sale” heading on the balance sheet includes the carrying amounts of assets – stated individually or combined in a disposal group, or as part of a business unit intended to be sold (discontinued operations) – which are very likely to be sold in their current condition within one year of the date of the consolidated annual financial statements.

It can therefore be assumed that the carrying amount of these assets, which may be of a financial or non-financial nature, will be recovered through the disposal of the item concerned rather than through its continued use.

Specifically, real estate or other non-current assets received by the Group for the full or partial settlement of debtors’ payment obligations are treated as non-current assets held for sale, unless the Group has decided to make continued use of these assets or to include them in its rental operations. Similarly, investments in joint ventures or associates that meet these criteria are also recognised as non-current assets held for sale. For all of these assets, the Group has specific units that focus on the management and sale of real estate assets.

The heading “Liabilities included in disposal groups classified as held for sale” includes credit balances associated with assets or disposal groups, or with the Group’s discontinued operations.

Non-current assets and disposal groups classified as held for sale are measured, both on the acquisition date and thereafter, at the lower of their carrying amount and their fair value less estimated selling costs. The carrying amount at the acquisition date of non-current assets and disposal groups classified as held for sale deriving from foreclosure or recovery is defined as the outstanding balance of the loans or credit that gave rise to these purchases (less any associated provisions). Tangible and intangible assets that would otherwise be subject to depreciation or amortisation are not depreciated or amortised while they remain classified as “Non-current assets and disposal groups classified as held for sale”.

In order to determine the net fair value of real estate assets, the Group uses its own internal methodology, which uses as a starting point the appraisal value, adjusting this based on its past experience of selling properties that are similar in terms of prices, the period during which each asset remains on the consolidated balance sheet and other explanatory factors. Similarly, agreements entered into with third parties for the disposal of these assets are also taken into account.

The appraisal value of real estate assets recognised in this heading is obtained following policies and criteria analogous to those described in the section entitled “Guarantees” in Note 1.3.4. The main appraisal firms and agencies used to obtain market values are listed in Note 6.

Gains and losses arising from the disposal of assets and liabilities classified non-current assets or liabilities held for sale, as well as impairment losses and their reversal, where applicable, are recognised under the heading “Profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations” in the consolidated income statement. The remaining income and expenses relating to these assets and liabilities are disclosed according to their nature.

Discontinued operations are components of the institution that have been disposed of or classified as held for sale and which (i) represent a business line or region that is significant and separate from the rest or is part of a single coordinated plan to dispose of that business or region, or (ii) are subsidiaries acquired solely in order to be resold. Income and expenses of any kind generated by discontinued operations, if any, during the year, including those generated before they were classified as discontinued operations, are presented net of the tax effect as a single amount under the heading “Profit or (-) loss after tax from discontinued operations” in the consolidated income statement, regardless of whether the business has been derecognised from or remains on the asset side of the balance sheet as at year-end. This heading also includes the profit or loss obtained from their sale or disposal.

1.3.10 Tangible assets

Tangible assets include (i) property, plant and equipment held by the Group for current or future use that is expected to be used for more than year, (ii) property, plant and equipment leased out to customers under operating leases, and (iii) investment properties, which include land, buildings and other structures held in order to be leased out or to obtain a capital gain on their sale. This heading also includes tangible assets received in payment of debts classified on the basis of their final use.

As a general rule, tangible assets are measured at their acquisition cost less accumulated depreciation and, if applicable, less any impairment losses identified by comparing the net carrying amount of each item against its recoverable amount.

Depreciation of tangible assets is systematically calculated on a straight-line basis, applying the estimated years of useful life of the various items to the acquisition cost of the assets less their residual value. The land on which buildings and other structures stand is considered to have an indefinite life and is therefore not depreciated.

The annual depreciation charge on tangible assets is recognised in the consolidated income statement and generally calculated based on the remaining years of the estimated useful life of the different groups of components:

	Useful life (years)
Land and buildings	17 to 75
Fixtures and fittings	5 to 20
Furniture, office equipment and other	3 to 15
Vehicles	3 to 6
Computers and computer equipment	4

The Group reviews the estimated useful life of the various components of tangible assets at the end of every year, if not more frequently, in order to detect any significant changes. Should any such changes arise, the useful life is adjusted, correcting the depreciation charge in the consolidated income statements for future years as required to reflect the new estimated useful life.

At each year-end closing, the Group analyses whether there are any internal or external signs that a tangible asset might be impaired. If there is evidence of impairment, the Group assesses whether this impairment actually exists by comparing the asset's net carrying amount against its recoverable amount (the higher of its fair value less selling costs, and its value in use). When the asset's carrying amount is higher than its recoverable amount, the Group reduces the carrying amount of the corresponding component to its recoverable amount and adjusts future depreciation charges in proportion to the adjusted carrying amount and new remaining useful life, in the event this needs to be re-estimated. Where there are signs that the value of a component has been recovered, the Group records the reversal of the impairment loss recognised in previous years and adjusts future depreciation charges accordingly. The reversal of an impairment loss on an asset component shall in no circumstances result in its carrying amount being increased to a value higher than the value that the asset component would have had if no impairment loss allowances had been recognised in previous years.

In particular, certain items of property, plant and equipment are assigned to cash-generating units in the banking business. Impairment tests are conducted on these units to verify whether sufficient cash flows are generated to support the assets' value. To this end, the Group (i) calculates the recurring net cash flow of each branch based on the cumulative contribution margin less the allocated recurring cost of risk, and (ii) this recurring net cash flow is regarded as a perpetual cash flow and a valuation is effected using the discounted cash flow method applying the cost of capital and growth rate to perpetuity determined by the Group (see Note 16).

For real estate investments, the Group uses appraisals carried out by third parties entered in the Bank of Spain's Special Register of Appraisal Firms, in accordance with criteria set forth in Order ECO/805/2003.

The costs of preserving and maintaining tangible assets are recognised in the consolidated income statement for the year in which they are incurred.

1.3.11 Leases

The Group evaluates the existence of a lease contract at its inception or when its terms are changed. A contract is deemed to be a lease contract when the asset is identified in that contract and the party receiving the asset has the right to control its use.

Leases in which the Group acts as lessee

The Group recognises, for leases in which it acts as lessee, which mostly correspond to lease contracts for real estate and office spaces linked to its operating activity, a right-of-use asset of the leased asset and a liability for payments outstanding at the date on which the leased asset was made available to the Group for use.

The lease term is the non-cancellable period established in the contract, plus the periods covered by an extension option (if the lessee is reasonably certain to exercise that option) and the periods covered by a termination option (if the lessee is reasonably certain not to exercise that option).

For lease contracts with a specified lease term that include, or not, a unilateral option for early termination that can be exercised by the Group and in which the cost associated with such termination is not significant, the term of the lease is generally equivalent to the duration initially stipulated in the contract. However, if there are any circumstances that could result in contracts being terminated early, these will be taken into account.

For lease contracts with a specified lease term that include a unilateral option for extension that can be exercised by the Group, the choice to exercise this option will be made on the basis of economic incentives and past experience.

The lease liability is initially recognised in the heading "Financial liabilities at amortised cost – Other financial liabilities" of the consolidated balance sheet (see Note 21), at a value equal to the present value of estimated payments outstanding, based on the envisaged maturity date. These payments comprise the following items:

- Fixed payments, less any lease incentives payable.
- Variable payments that depend on an index or rate.

- Amounts expected to be paid for residual value guarantees given to the lessor.
- The exercise price of a purchase option if the Group is reasonably certain to exercise that option.
- Payments of penalties for terminating the lease, if the lease term shows that an option to terminate the lease will be exercised.

Lease payments are discounted using the implicit interest rate, if this can be easily determined and, if not, the incremental borrowing rate, understood as the rate of interest that the Group would have to pay to borrow the funds necessary to purchase assets with a value similar to the rights of use acquired over the leased assets for a term equal to the estimated duration of the lease contracts.

The payments settled by the lessee in each period reduce the lease liability and accrue an interest expense that is recognised in the consolidated income statement over the lease term.

The right-of-use asset, which is classified as a fixed asset based on the type of leased property, is initially measured at cost, which comprises the following amounts:

- The amount of the initial measurement of the lease liability, as described above.
- Any lease payments made at or before the lease commencement date, less any incentives received.
- Any initial direct costs.
- An estimate of costs to be incurred in dismantling and removing the leased asset, restoring the site on which it is located or restoring the asset to the condition required by the terms and conditions of the lease.

The right-of-use asset is depreciated on a straight-line basis at the shorter of the useful life of the asset or the lease term.

The criteria for impairing these assets are similar to those used for tangible assets (see Note 1.3.10).

The Group exercises the option to recognise, as an expense during the year, the payments made on short-term leases (those that, at the commencement date, have a lease term of 12 months or less) and leases in which the leased asset has a low value.

Sale and leaseback

If the Group does not retain control over the asset, (i) the asset sold is derecognised from the balance sheet and the right-of-use asset arising from the leaseback is recognised at the proportion of the previous carrying amount that relates to the right of use retained, and (ii) a lease liability is recognised.

If the Group retains control over the asset, (i) the asset sold is not derecognised from the balance sheet and (ii) a financial liability is recognised for the amount of consideration received.

The profit or loss generated in the transaction is immediately recognised in the consolidated income statement, if a sale is determined to exist (only for the amount of the gain or loss relating to the rights over the transferred asset), as the buyer-lessor has acquired control over the asset.

Leases in which the Group acts as lessor

Finance leases

Where the Group is the lessor of an asset, the sum of the present values of payments receivable from the lessee is recorded as financing provided to a third party and is therefore included under the heading “Financial assets at amortised cost” on the consolidated balance sheet. This financing includes the exercise price of the purchase option payable to the lessee upon termination of the contract in cases where the exercise price is sufficiently lower than the fair value of the asset at the maturity date of the option, such that it is reasonably likely to be exercised.

Operating leases

In operating leases, ownership of the leased asset and a substantial proportion of all of the risks and rewards incidental to ownership of the asset remain with the lessor.

The acquisition cost of the leased asset is recognised under the heading “Tangible assets”. These assets are depreciated in accordance with the same policies followed for similar tangible assets for own use and the revenue from the lease contracts is recognised in the consolidated income statement on a straight-line basis.

1.3.12 Intangible assets

Intangible assets are identifiable, non-monetary assets without physical substance that arise as a result of an acquisition from third parties or which are generated internally by the Group. An intangible asset will be recognised when, in addition to meeting this definition, the Group considers it likely that economic benefits deriving from the asset and its cost can be reliably estimated.

Intangible assets are initially recognised at their acquisition or production cost and are subsequently measured at cost less, where applicable, any accumulated amortisation and any impairment loss that may have been sustained.

Goodwill

Positive differences between the cost of a business combination and the acquired portion of the net fair value of the assets, liabilities and contingent liabilities of the acquired entities are recognised as goodwill on the asset side of the consolidated balance sheet. These differences represent an advance payment made by the Group of the future economic benefits derived from the acquired entities that are not individually identified and separately recognised. Goodwill, which is not amortised, is only recognised when acquired for valuable consideration in a business combination.

Each goodwill item is assigned to one or more cash-generating units (CGUs) which are expected to benefit from the synergies arising from the business combinations. These CGUs are the smallest identifiable group of assets which, as a result of their continuous operation, generate cash flows for the Group, separately from other assets or groups of assets.

CGUs, or groups of CGUs, to which goodwill has been assigned are tested at least once a year for impairment, or whenever there is evidence that impairment might have occurred. To this end, the Group calculates their value in use using mainly the distributed profit discount method, in which the following parameters are taken into account:

- Key business assumptions: these assumptions are used as a basis for the cash flow projections used as part of the valuation. For businesses engaging in financial activities, projections are made for variables such as: changes in lending volumes, default rates, customer deposits, interest rates under a forecast macroeconomic scenario, and capital requirements.
- Estimates of macroeconomic variables and other financial parameters.
- Projection period: this is usually five years, after which a recurring level is attained in terms of both income and profitability. These projections take into account the existing economic situation at the time of the valuation.
- Discount rate (post-tax): the present value of future dividends, from which a value in use is obtained, is calculated using the Institution’s cost of capital (K_e), from the standpoint of a market participant, as a discount rate. To determine the cost of capital, the CAPM (Capital Asset Pricing Model) is used in accordance with the formula: “ $K_e = R_f + \beta (P_m) + \alpha$ ”, where: K_e = Required return or cost of capital, R_f = Risk-free rate, β = Company’s systemic risk coefficient, P_m = Market premium and α = Non-systemic risk premium.
- Growth rate used to extrapolate cash flow projections beyond the period covered by the most recent forecasts: this is based on long-term estimates for the main macroeconomic figures and key business variables, and bearing in mind the existing financial market circumstances and outlooks at all times.

If the carrying amount of a CGU (or group of CGUs to which goodwill has been assigned) is higher than its recoverable amount, the Group recognises an impairment loss that is allocated, firstly, by reducing the goodwill attributed to that CGU and, secondly, if any losses remain to be allocated, by reducing the carrying amount of the remaining allocated assets on a pro rata basis. Impairment losses recognised for goodwill cannot subsequently be reversed.

Other intangible assets

This heading mainly includes intangible assets acquired in business combinations, such as the value of brands and contractual rights arising from relationships with customers of the acquired businesses, as well as computer software.

These intangible assets have a finite useful life and are amortised based on their useful lives, applying similar criteria to those used for tangible assets. The useful life of brands and contractual rights arising from relationships with customers of the acquired businesses varies between 5 and 15 years, while for computer software the useful life ranges from 3 to 15 years. In particular, the applications corresponding to infrastructure, communications, architecture and corporate functions of the banking platforms used by Group entities to carry out their activity generally have a useful life of between 10 and 15 years, while the useful life of applications corresponding to channels and to data & analytics range from 7 to 10 years. The base platform implemented in 2018 that TSB uses to carry out its activity has a useful life of 15 years.

The criteria for recognising impairment losses on these assets and any reversals of impairment losses recognised in earlier financial years are similar to those applied to tangible assets. To this end, the Group determines whether there is evidence of impairment by comparing actual changes against the initial assumptions applied in the parameters used when they were first recognised. These include possible loss of customers, average customer balances, average ordinary income and the assigned cost-to-income ratio.

Changes in the estimated useful life of intangible assets are treated in a similar way to changes in the estimated useful life of tangible assets.

1.3.13 Inventories

Inventories are non-financial assets that are held by the Group for their use or sale in the ordinary course of its business, or which are in the process of production, construction or development for such sale or use, or which are to be consumed in the production process or in the rendering of services.

In general, inventories are measured at either cost value, including all costs of purchase, costs of conversion and other direct and indirect costs incurred in bringing the inventories to their present location and condition, and their net realisable value, whichever is the lower.

Net realisable value means the estimated selling price net of the estimated production and marketing costs to carry out the sale. This value is revised and recalculated on the basis of actual losses incurred on the sale of the assets.

Any value adjustments to inventories, whether caused by impairment due to damage, obsolescence or a fall in selling prices, to reflect their net realisable value, or arising from other losses, are recognised as expenses in the year in which the impairment or other loss occurred. Any subsequent recoveries in value are recognised in the consolidated income statement in the year in which they occur.

Inventories correspond to land and buildings and their net realisable value is calculated based on the appraisal carried out by an independent expert, entered in the Bank of Spain Special Register of Appraisal Firms and performed in accordance with the criteria established in Order ECO/805/2003 on rules for the appraisal of real estate and particular rights for specific financial purposes, which is then adjusted taking into account past experience in selling assets that are similar in terms of prices, the period during which each asset remains on the consolidated balance sheet and other explanatory factors. Nevertheless, statistical methodologies may be used to update appraisals for properties with a fair value or no more than 300,000 euros and which have a certain level of homogeneity among them, in other words, those with low exposure and low risk whose characteristics are likely to be shared by other properties and which are located in an active market with frequent transactions, although a full appraisal is carried out in accordance with the aforesaid ECO Order (an "ECO appraisal") at least once every three years.

The carrying amount of the inventories is derecognised from the consolidated balance sheet and recognised as an expense during the year in which the income from its sale is recognised.

1.3.14 Own equity instruments

Own equity instruments are defined as equity instruments that meet the following conditions:

- They do not involve any contractual obligation for the issuer that entails: delivering cash or another financial asset to a third party, or exchanging financial assets or financial liabilities with a third party under terms that are potentially unfavourable to the issuer.

- In the case of a contract that will or may be settled with the issuer's own equity instruments: if it is a non-derivative financial instrument, it does not entail an obligation to deliver a variable number of its own equity instruments; or, if it is a derivative instrument, it is settled by the exchange of a fixed amount of cash or another financial asset for a fixed number of the issuer's own equity instruments.

All transactions involving own equity instruments, including their issuance or redemption, are recognised directly with a balancing entry in consolidated equity.

Changes in the value of instruments classified as own equity instruments are not recognised in the financial statements. Any consideration received or paid in exchange for such instruments is directly added to or deducted from consolidated equity net of the associated transaction costs.

Equity instruments issued in full or partial settlement of a financial liability are recognised at fair value unless this cannot be reliably determined. In this case, the difference between the carrying amount of the financial liability (or any part thereof) that has been settled and the fair value of the equity instruments issued is recognised in the income statement for the year.

On the other hand, compound financial instruments, which are those contracts that have both a liability and an equity component from the issuer's perspective (e.g. convertible bonds that grant their holder the right to convert them into equity instruments of the issuing entity), are recognised at issuance, separating their component parts and presenting them according to their substance.

Assigning the initial carrying amount to the various component parts of the compound instrument shall not imply, under any circumstances, a recognition of earnings. An amount shall first be assigned to the component part that is a financial liability, including any embedded derivative with an underlying asset that is anything other than an own equity instrument. This amount will be obtained based on the fair value of the institution's financial liabilities that share similar characteristics with the compound instrument, but which are not associated with own equity instruments. The initial carrying amount assigned to the equity instrument will be the residual portion of the initial carrying amount of the compound instrument as a whole, after deducting the fair value assigned to the financial liability.

1.3.15 Remuneration in equity instruments

The delivery of own equity instruments to employees in payment for their services (where these instruments are determined at the start of, and delivered upon completion of, a specified period of service) is recognised as a service cost over the period during which the services are being provided, with a balancing entry under the heading "Other equity" in the consolidated statement of equity. On the date these instruments are awarded, the services received are measured at fair value unless this cannot be reliably estimated, in which case they are measured by reference to the fair value of the committed equity instruments, bearing in mind the tenor and other conditions envisaged in the commitments.

The amounts recognised in consolidated equity cannot subsequently be reversed, even when employees do not exercise their right to receive the equity instruments.

For transactions involving share-based remuneration paid in cash, the Group recognises a service cost over the period during which the services are provided by the employees, with a balancing entry on the liabilities side of the consolidated balance sheet. The Group measures this liability at fair value until it is settled. Changes in value are recognised in the income statement for the year.

1.3.16 Provisions, contingent assets and contingent liabilities

Provisions are present obligations of the Group resulting from past events and whose nature as at the date of the financial statements is clearly specified, but which are of uncertain timing and value. When such obligations mature or become due for settlement, the Group expects to settle them with an expenditure.

In general, the Group's consolidated annual financial statements include all significant provisions based on which it is estimated that it is more likely than not that the obligation will need to be settled. These provisions include, among other items, pension commitments undertaken with employees by Group entities (see Note 1.3.17), as well as provisions for tax litigation and other contingencies.

Contingent liabilities are any possible obligations in the Group that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more future events not wholly within the control of the Group. Contingent liabilities include present obligations of the Group whose payment is unlikely to originate any reduction in funds, or whose value, in extremely rare cases, cannot be reliably measured. Contingent liabilities are not recognised in the consolidated annual financial statements, rather, they are disclosed in the notes to the consolidated annual financial statements.

Contingent assets are possible assets that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of events not wholly within the control of the Group. These contingent assets are not recognised on the consolidated balance sheet or in the consolidated income statement, but they are disclosed in the corresponding report where an inflow of economic benefits is probable.

1.3.17 Provisions for pensions

The Group's pension commitments to its employees are as follows:

Defined contribution plans

These are plans under which fixed contributions are made to a separate entity in accordance with the agreements entered into with each particular group of employees, without any legal or constructive obligation to make further contributions if the separate entity is unable to pay all employee benefits relating to employee service in the current and prior periods.

These contributions are recognised each year in the consolidated income statement (see Note 33).

Defined benefit plans

Defined benefit plans cover all existing commitments arising from the application of the Collective Bargaining Agreement for Banks (Convenio Colectivo de Banca).

These commitments are financed through the following vehicles: the pension plan, insurance contracts, the voluntary social welfare agency (E.P.S.V.) and internal funds.

Pension plan

Banco Sabadell's employee pension plan covers benefits payable under the aforesaid collective bargaining agreement with employees belonging to regulated groups, with the following exceptions:

- Additional commitments due to early retirement, as set out in the Collective Bargaining Agreement for Banks.
- Disability or incapacity arising in certain circumstances.
- Widowhood and orphanhood benefits arising from the death of a retired member of staff who began their employment after 8 March 1980.

The Banco Sabadell employee pension plan is regarded to all intents and purposes as a plan asset for the obligations insured by entities outside of the Group. Obligations of the pension plan insured by the Group's associate entities are not considered plan assets.

A Control Board has been created for the pension plan, formed of representatives of the sponsor and representatives of the participants and beneficiaries. This Control Board is the body responsible for supervising its operation and execution.

Insurance contracts

Insurance contracts generally cover certain commitments arising from the Collective Bargaining Agreement for Banks, including:

- Commitments that are expressly excluded from the Banco Sabadell employee pension plan (listed in the previous section).
- Serving employees covered by a collective bargaining agreement of Banco Atlántico.
- Pension commitments in respect of some serving employees not provided for under the collective bargaining agreement.
- Commitments towards employees on extended leave of absence not covered with benefits accrued in the Banco Sabadell employee pension plan.
- Commitments towards early retirees. These may be partly financed with benefits accrued in the Banco Sabadell employee pension plan.

These insurance policies have been arranged with insurers outside the Group, whose insured commitments are mainly those towards former Banco Atlántico employees, and with BanSabadell Vida, S.A. de Seguros y Reaseguros.

Voluntary social welfare agency (Entidad de Previsión Social Voluntaria, or E.P.S.V.)

The acquisition and subsequent merger of Banco Guipuzcoano resulted in the takeover of Gertakizun, E.P.S.V., which covers defined benefit commitments in respect of serving and former employees, who are insured by policies. It was set up by the aforesaid bank in 1991 as an agency with a separate legal personality. All of the pension commitments to serving and former employees are insured by entities outside the Group.

Internal funds

Internal funds are used to settle obligations with early retirees up to their legal retirement age and relate to employees previously working for Banco Sabadell.

Accounting record of defined benefit obligations

The “Provisions – Pensions and other post employment defined benefit obligations” heading on the liabilities side of the consolidated balance sheet includes the actuarial present value of pension commitments, which is calculated individually using the projected unit credit method on the basis of the financial and actuarial assumptions set out below. This is the same method used for the sensitivity analysis described in Note 22.

From the obligations thus calculated, the fair value of the plan assets has been deducted. Plan assets are assets that will be used to settle obligations, including insurance policies, since they meet the following conditions:

- They are not owned by the Group but by a legally separate third party not qualifying as a related party.
- They are available only to pay or fund employee benefits and are not available to creditors of the Group, even in the event of insolvency.
- They cannot be returned to the Group unless the assets remaining in the plan are sufficient to settle all obligations, of the plan or of the Institution, relating to employee benefits, or unless assets are to be returned to the Bank to reimburse it for employee benefits previously paid.
- They are not non-transferable financial instruments issued by the Group.

The assets that back pension commitments shown in the standalone balance sheet of the insurance company BanSabadell Vida, S.A. de Seguros y Reaseguros are not plan assets, as the company is a related party of the Group.

Pension commitments are recognised in the following way:

- In the consolidated income statement, net interest on the defined benefit liability (asset) net of pension commitments as well as the cost of the services, which includes (i) the cost of services in the current period, (ii) the cost of past services arising from changes made to existing commitments or from the introduction of new benefits, and (iii) any gain or loss arising from a settlement of the plan.
- Under the heading “Accumulated other comprehensive income – Items that will not be reclassified to profit or loss - Actuarial gains or (-) losses on defined benefit pension plans” in the consolidated statement of equity, the remeasurement of the net defined benefit liability (asset) for pension commitments, which includes (i) actuarial gains and losses generated in the year arising from differences between the previous actuarial assumptions and the real situation and from changes in the actuarial assumptions made, (ii) the return on plan assets, and (iii) any change in the effect of the asset ceiling, excluding, for the last two items, the amounts included in net interest on the defined benefit liability (asset).

The heading “Provisions – Other long term employee benefits” on the liabilities side of the consolidated balance sheet mainly includes the value of commitments undertaken with early retirees. Changes occurring during the year in the value of liabilities are recognised in the consolidated income statement.

Actuarial assumptions

The most relevant financial/actuarial assumptions used in the measurement of pension commitments at 31 December 2022 and 2021 are as follows:

	2022	2021
Tables	PER2020_Col_1er.orden	PER2020_Col_1er.orden
Discount rate, pension plan	3.25% per annum	1.00% per annum
Discount rate, internal fund	3.25% per annum	1.00% per annum
Discount rate, related insurance	3.25% per annum	1.00% per annum
Discount rate, non-related insurance	3.25% per annum	1.00% per annum
Inflation	2.00% per annum	2.00% per annum
Rate of increase in salaries	3.00% per annum	3.00% per annum
Employee disability	SS90-Absolute	SS90-Absolute
Employee turnover	Not considered	Not considered
Early retirement	Considered	Considered
Normal retirement age	65 or 67 years	65 or 67 years

In 2022 and 2021, the discount rate on all commitments has been determined by reference to the return on AA-rated corporate bonds (iBoxx € Corporates AA 10+), with an average duration of 13 and 13.7 years, respectively.

The early retirement age considered is the earliest retirement date after which pension entitlements cannot be revoked by the employer for 100% of the employees.

The return on long-term assets corresponding to plan assets and insurance policies linked to pensions has been determined by applying the same discount rate used in actuarial assumptions (3.25% and 1.00% in 2022 and 2021, respectively).

1.3.18 Foreign currency transactions and exchange differences

The Group's functional and reporting currency is the euro. Consequently, all balances and transactions denominated in currencies other than the euro are treated as being denominated in a foreign currency.

On initial recognition, debit and credit balances denominated in foreign currencies are translated to the functional currency at the spot exchange rate, defined as the exchange rate for immediate delivery, on the recognition date. Subsequent to the initial recognition, the following rules are used to translate foreign currency balances to the functional currency of each investee:

- Monetary assets and liabilities are translated at the closing rate, defined as the average spot exchange rate as at the reporting date.
- Non-monetary items measured at historical cost are translated at the exchange rate ruling on the acquisition date.
- Non-monetary items measured at fair value are translated at the exchange rate ruling on the date on which the fair value was determined.
- Income and expenses are translated at the exchange rate ruling on the transaction date.

In general, exchange differences arising on the translation of debit and credit balances denominated in foreign currency are recognised in the consolidated income statement. However, for exchange differences arising in non-monetary items measured at fair value where the fair value adjustment is recognised under the heading "Accumulated other comprehensive income" in the consolidated statement of equity, a breakdown is given for the exchange rate component of the remeasurement of the non-monetary item.

The balances of the financial statements of consolidated entities with a functional currency other than the euro are translated into euros in the following manner:

- Assets and liabilities are translated at the exchange rate ruling at each year-end closing.
- Income and expenses are translated at the average exchange rate, weighted by the volume of transactions of the company whose income and expenses are being translated.
- Equity is translated at historical exchange rates.

Exchange differences arising in the translation of financial statements of consolidated entities with a functional currency other than the euro are recognised under the heading “Accumulated other comprehensive income” on the consolidated statement of equity.

The exchange rates applied to translate balances denominated in foreign currency into euros are those published by the European Central Bank on 31 December of each year.

1.3.19 Recognition of income and expenses

Interest income and expenses and other similar items

Interest income and expenses and other similar items are generally accounted for over the period in which they accrue using the effective interest rate method, under the headings “Interest income” or “Interest expenses” of the consolidated income statement, as applicable. Dividends received from other entities are recognised as income at the time the right to receive them originates.

Commissions, fees and similar items

Generally, income and expense in the form of commissions and similar fees are recognised in the consolidated income statement based on the following criteria:

- Those linked to financial assets and financial liabilities measured at fair value through profit or loss are recognised at the time of disbursement.
- Those related to transactions carried out or services rendered over a given period of time are recognised throughout that period.
- Those related to a transaction or service that is carried out or rendered in a single act are recognised when the originating act takes place.

Financial fees and commissions, which form an integral part of the effective cost or yield of a financial transaction, are accrued net of associated direct costs and recognised in the consolidated income statement over their expected average life.

Assets managed by the Group but owned by third parties are not included in the balance sheet. Fees generated by this activity are recognised under the heading “Fee and commission income” in the consolidated income statement.

Non-financial income and expenses

These items are recognised in the accounts upon delivery of the non-financial asset or upon provision of the non-financial service. To determine the carrying amount and when this item should be recognised, a model is used that consists of five steps: identification of the contract with the customer, identification of the separate obligations of the contract, calculation of the transaction price, distribution of the transaction price between the identified obligations and, lastly, recognition of the revenue when, or as, the obligations are settled.

Deferred payments and collections

Deferred payments and collections are accounted for at the carrying amount obtained by discounting expected cash flows at market rates.

Levies

For levies and tax obligations whose amount and date of payment are certain, the obligation is recognised when the event that leads to its payment takes place in line with the legislative terms and conditions. Therefore, the item to be paid is recognised when there is a present obligation to pay the levy.

Deposit guarantee schemes

The Bank is a member of the Deposit Guarantee Fund. In 2022, the Management Committee of the Deposit Guarantee Fund of Credit Institutions, in accordance with that established in Royal Decree Law 16/2011 and Royal Decree 2606/1996, set the contribution for all entities covered by the Fund’s deposit guarantee at 0.175% of the value of deposits guaranteed as at 31 December 2021. The contribution of each entity is calculated according to the amount of deposits guaranteed and their risk profile. Furthermore, the contribution to the securities guarantee offered by the Fund has been set at 0.2% of 5% of the value of the securities guaranteed as at 31 December 2022 (see Note 32).

Some of the consolidated entities are integrated into schemes which are similar to the Deposit Guarantee Fund and they make contributions to these schemes in accordance with domestic regulations (see Note 32). The most significant of these are listed below:

- TSB Bank plc makes contributions to the Financial Services Compensation Scheme.
- Banco Sabadell, S.A. Institución de Banca Múltiple makes contributions to the deposit guarantee scheme established by the Instituto para la Protección del Ahorro Bancario.

Single Resolution Fund

Law 11/2015 of 18 June, together with its implementing regulation through Royal Decree 1012/2015, entailed the transposition into Spanish law of Directive 2014/59/EU. This Directive established a new framework for the resolution of credit institutions and investment firms, and it is also one of the standards that have contributed to the establishment of the Single Resolution Mechanism, created through Regulation (EU) 806/2014. This regulation sets out standard rules and procedures for the resolution of credit institutions and investment firms within the framework of a Single Supervisory Mechanism and a Single Resolution Fund at European level.

As part of the implementation of this Regulation, on 1 January 2016 the Single Resolution Fund came into effect, to operate as a financing instrument which the Single Resolution Board can use. The Single Resolution Board is the European authority that makes decisions on the resolution of failing banks, in order to efficiently undertake the resolution measures that have been adopted. The Single Resolution Fund receives contributions from credit institutions and investment firms subject to the same.

The calculation of each entity's contribution to the Single Resolution Fund, governed by Commission Delegated Regulation (EU) 2015/63, is based on the proportion that each entity represents with respect to the aggregate total liabilities of the Fund's member entities, after deducting own funds and the guaranteed amount of the deposits. The latter is then adjusted to the Institution's risk profile (see Note 32).

1.3.20 Corporation tax

Corporation tax applicable to the Spanish companies of Banco Sabadell Group, as well as similar taxes applicable to foreign investees, is considered to be an expense and is recognised under the heading "Tax expense or (-) income related to profit or loss from continuing operations" in the consolidated income statement, except when it arises as a result of a transaction that has been directly recognised in the consolidated statement of equity, in which case it is recognised directly in the latter.

The total corporation tax expense is equivalent to the sum of current tax, calculated by applying the relevant levy to taxable income for the year (after applying fiscally admissible deductions and benefits), and the variation in deferred tax assets and deferred tax liabilities recognised in the consolidated income statement.

Taxable income for the year may be at variance with the income for the year as shown in the consolidated income statement, as it excludes items of income or expenditure that are taxable or deductible in other years as well as items that are non-taxable or non-deductible.

Deferred tax assets and deferred tax liabilities relate to taxes expected to be payable or recoverable arising from differences between the carrying amount of the assets and liabilities appearing in the financial statements and the related tax bases ("tax value"), as well as tax losses carried forward and unused tax credits that might be offset or applied in the future. They are calculated by applying to the relevant timing differences or tax credits the tax rate at which they are expected to be recovered or settled (see Note 39).

A deferred tax asset such as a tax prepayment or a credit in respect of a tax deduction or tax benefit, or a credit in respect of tax-loss carry-forwards, is always recognised provided that the Group is likely to obtain sufficient future taxable profits against which the tax asset can be realised, and that these are not derived from the initial recognition (except in a business combination) of other assets and liabilities in an operation that does not affect either the tax result or the accounting result.

Deferred tax assets arising due to deductible timing differences arising from investments in subsidiaries, branches and associates, or from equity interests in joint ventures, are only recognised insofar as the difference is expected to be reversed due to the dissolution of the investee.

Deferred tax liabilities arising from timing differences associated with investments in subsidiaries and associates are recognised in the accounts unless the Group is capable of determining when the timing difference will reverse and, in addition, such a reversal is unlikely.

The “Tax assets” and “Tax liabilities” on the consolidated balance sheet include all tax assets and tax liabilities, differentiating between current tax assets/liabilities (to be recovered/paid in the next twelve months, for example, a corporation tax payment made to the tax authority (Hacienda Pública)) and deferred tax assets/liabilities (to be recovered/paid in future years).

Income or expenses recognised directly in the consolidated statement of equity that do not affect profits for tax purposes, and income or expenses that are not recognised directly and do affect profits for tax purposes, are recorded as timing differences.

At each year-end closing, recognised deferred tax assets and liabilities are reviewed to ascertain whether they are still current and to ensure that there is sufficient evidence of the likelihood of generating future tax profits that will allow them to be realised, in the case of assets, adjusting them as required.

To conduct the aforesaid review, the following variables are taken into account:

- Forecasts of results of each entity or fiscal group, based on the financial budgets approved by the Group’s directors for a five-year period, subsequently applying constant growth rates similar to the mean long-term growth rates of the sector in which the various companies of the Group operate;
- Estimate of the reversal of timing differences on the basis of their nature; and
- The period or limit set forth by prevailing legislation in each country for the reversal of the different tax assets.

1.3.21 TLTRO III programme

Against the backdrop of Covid-19, the European Central Bank announced measures designed to mitigate the impact arising from this situation, including the TLTRO III programme, which offers favourable conditions for banks to borrow funds. More specifically, the TLTRO III programme ensured an interest rate that would be no higher than the average deposit facility rate, provided that the growth targets of eligible net lending established by the European Central Bank were met in certain special reference periods established for 2021 and 2020, which the Bank met. In addition, the interest rate was 50 basis points lower between 24 June 2020 and 23 June 2022, reaching -1% during that period.

Moreover, from 23 June 2022 to 22 November 2022 these transactions earned the average deposit facility rate over the lifetime of the TLTRO III operation. Finally, on 27 October 2022, the European Central Bank decided to recalibrate these funding operations and, since 23 November 2022, the applicable interest rate is index-linked to the average of the applicable official interest rates of the European Central Bank as from that date.

The Group has considered that the use of a more favourable interest rate, i.e. the deposit facility rate, rather than the interest rate on the main refinancing operations, subject to compliance with the lending performance thresholds established by the European Central Bank, does not place the conditions of these operations significantly below market interest rates; therefore, this refinancing has been recognised as a financial liability measured at amortised cost in accordance with IFRS 9.

The further interest rate reduction of 50 basis points for the period from 24 June 2020 to 23 June 2022 was not subject to compliance with any specific net lending target, since it was considered that this reduction could result in the cost of this financing having better conditions than those in the market during the aforesaid time period. Accordingly, this reduction has been considered a discount associated with the Covid-19 pandemic, aimed at reducing the Bank’s borrowing costs, and it has been systematically recognised under net interest margin in the income statement throughout the aforesaid period (see Note 4.4.3.1).

1.3.22 Consolidated statement of recognised income and expenses

This statement sets out the recognised income and expenses resulting from the Group’s activity during the year, distinguishing between items recognised as profit or loss in the consolidated income statement and those recognised directly in consolidated equity.

As such, this statement shows:

- Consolidated profit or loss for the year
- Changes in “Accumulated other comprehensive income” in consolidated equity, which includes:
 - Gross recognised income and expenses, distinguishing between those that will not be reclassified in the income statement and those which may be reclassified in the income statement.
 - Corporation tax due on recognised income and expenses, with the exception of adjustments arising in equity interests held in associates or joint ventures accounted for using the equity method, which are shown net.
 - Total consolidated recognised income and expenses, calculated as the sum of the two previous sections, showing separately the amount attributed to the controlling entity and the amount corresponding to minority interests (non-controlling interests).

1.3.23 Consolidated statement of total changes in equity

This statement sets out all changes in the Group’s equity, including those arising from accounting changes and correction of errors. It sets out a reconciliation of the carrying amount at the beginning and end of the year of all items that comprise consolidated equity, grouping changes together by type in the following items:

- Adjustments due to accounting changes and correction of errors: includes the changes in consolidated equity that arise as a result of the retroactive restatement of financial statement balances, distinguishing between those that arise from changes in accounting criteria and those that correspond to the correction of errors.
- Total recognised income and expenses: includes, in aggregate form, the total of items recognised in the aforesaid consolidated statement of recognised income and expenses.
- Other changes in consolidated equity: includes the remaining items recognised in consolidated equity, such as capital increases or decreases, distribution of dividends, transactions with own equity instruments, payments with own equity instruments, transfers between equity items and any other increase or decrease of consolidated equity.

1.3.24 Consolidated cash flow statement

Consolidated cash flow statements have been prepared using the indirect method, in such a way that, based on the Group’s results, the non-monetary transactions and all types of deferred payment items and accruals which have been or will be the cause of operating income and expense have been taken into account, in addition to the income and expenses associated with cash flows from activities classified as investing or financing activities.

The consolidated cash flow statement includes certain items which are defined as follows:

- Cash flows: inflows and outflows of cash and cash equivalents, where ‘cash equivalents’ are short-term, highly liquid investments with a low risk of changes in value. For these purposes, in addition to cash, deposits held with central banks and demand deposits held with credit institutions are also classified as cash components or equivalents.
- Operating activities: typical day-to-day activities of the Group and other activities that cannot be classified as investing or financing activities.
- Investing activities: the acquisition, sale or other disposal of long-term assets and other investments not included in cash and cash equivalents or in operating activities.
- Financing activities: activities that result in changes in the size and composition of consolidated equity and of liabilities that do not form part of operating activities.

No situations requiring the application of significant judgements to classify cash flows have arisen during the year.

There have been no significant transactions that have generated cash flows not reflected in the consolidated cash flow statement.

1.4 Comparability

The information presented in these consolidated annual financial statements corresponding to 2021 is provided solely and exclusively for purposes of comparison with the information for the year ended 31 December 2022 and therefore does not constitute the Group's consolidated annual financial statements for 2021.

Note 2 – Banco Sabadell Group

Subsidiaries and associates as at 31 December 2022 and 2021 are listed in Schedule I, along with their registered offices, primary activities, the Bank's percentage shareholding in each, key financial data and the consolidation method used (full consolidation or equity method) in each case.

Schedule II provides details of consolidated structured entities (securitisation funds).

A description is provided hereafter of the business combinations, acquisitions and sales or liquidations which are most representative of investments in the capital of other entities (subsidiaries and/or investments in associates) made by the Group during 2022 and 2021. Schedule I also includes details of changes in the scope of consolidation in each financial year and the results obtained by the Group on the disposal of its subsidiaries and associates.

Changes in the scope of consolidation in 2022

Additions to the scope of consolidation:

There were no significant additions to the scope of consolidation in 2022.

Exclusions from the scope of consolidation:

There were no significant exclusions from the scope of consolidation in 2022.

Changes in the scope of consolidation in 2021

Additions to the scope of consolidation:

There were no significant additions to the scope of consolidation in 2021.

Exclusions from the scope of consolidation:

- On 29 April 2021, Banco Sabadell and ALD Automotive Group entered into a long-term strategic partnership to offer vehicle leasing products, allowing Banco Sabadell to improve its customer value proposition for mobility solutions, with a larger and more innovative range of vehicle leasing products. This transaction was closed on 30 November 2021 after obtaining the necessary authorisations.

The agreement included the sale of 100% of the share capital of BanSabadell Renting, S.L.U. for 59 million euros, adjusted by the change in the company's equity between the reference date used for ALD Automotive Group's offer (i.e. 30 September 2020) and the closing date of the transaction. The transaction added 10 basis points to the Group's fully-loaded Common Equity Tier 1 (CET1) ratio. The Group earned 41,907 thousand euros in profit on this transaction, which was recognised under the "Profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations" heading of the consolidated income statement (see Note 37).

- On 5 October 2021, Banco Sabadell sold its entire stake held in Banc Sabadell d'Andorra, S.A., which represented 50.97% of its share capital (51.61% including the proportional part of treasury stock) to Mora Banc Grup, S.A. for 68 million euros. The transaction added 7 basis points to the Group's fully-loaded Common Equity Tier 1 (CET1) ratio. The Group earned 11,725 thousand euros in profit on this transaction, which was recognised under the "Profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations" heading of the consolidated income statement (see Note 37).

With the exception of the transactions described above, there were no significant changes to the scope of consolidation in 2021.

Other significant transactions in 2022

The Group made no other significant transactions worth mentioning in 2022. Nevertheless, on 22 September 2022, the Bank announced that it was in the process of analysing a possible strategic agreement with an industrial partner specialising in its merchant acquiring business. This process of analysis currently underway aims to reinforce the competitive advantage and expand its value proposition in this area.

Other significant transactions in 2021

On 4 June 2021, having obtained the relevant authorisations and having met all the conditions that needed to be met prior to closing the transaction, set out in the agreement reached by the parties on 28 March 2020, Banco Sabadell sold its institutional depository business to BNP Paribas Securities Services S.C.A., Sucursal en España (BP2S) for 115 million euros.

The sale agreement envisages additional collections after closing, subject to the achievement of certain objectives linked to the volume of the assets deposited with BP2S and revenues from the deposit fees on those assets.

The transaction will generate net profit of 75 million euros, of which 59 million euros were recognised on the consolidated income statement for 2021 (mainly, an item of income of 84 million euros under the heading "Gains or (-) losses on derecognition of non-financial assets, net" and an item of expense of 25 million euros under the heading "Tax expense or (-) income related to profit or loss from continuing operations"). The remaining 16 million euros will be accrued in the consolidated income statement over a period of 10 years from the date the transaction is closed (see Note 36).

Note 3 – Shareholder remuneration and earnings per share

Set out below is the proposed distribution of the profits earned by Banco de Sabadell, S.A. in 2022, which the Board of Directors will submit to shareholders for approval at the Annual General Meeting, together with the proposed distribution of profits earned by Banco de Sabadell S.A. in 2021, which was approved by shareholders at the Annual General Meeting of 24 March 2022:

Thousand euro	2022	2021
To dividends	225,079	168,809
To Canary Island investment reserve	279	—
To voluntary reserves	515,193	159,603
Profit for the year of Banco de Sabadell, S.A.	740,551	328,412

On 26 October 2022, the Board of Directors of Banco Sabadell agreed to distribute an interim dividend in cash, to be paid out of its earnings in 2022, of 0.02 euros (gross) per share, which was paid on 30 December 2022.

In fulfilment of the mandatory requirement indicated in Article 277 of Spain's Capital Companies Act (*Ley de Sociedades de Capital*), the provisional statement of accounts provided below was created by the Bank to confirm the existence of sufficient liquidity and profit at the time of its approval of the aforesaid interim dividend:

Thousand euro	30/09/2022
Available for the payment of dividends according to the interim statement at:	
Banco Sabadell profit as at the date indicated, after provisions for taxes	639,537
Estimated statutory reserve	—
Estimated Canary Island investment reserve	(139)
Maximum amount available for distribution	639,398
Interim dividend proposed	111,806
Cash balance available at Banco de Sabadell, S.A. (*)	36,968,295

(*) Includes the balance of the heading "Cash, cash balances at central banks and other demand deposits".

Similarly, on 25 January 2023, the Board of Directors of Banco Sabadell agreed to submit a proposal to the Annual General Meeting for the distribution of a supplementary dividend of 0.02 euros (gross) per share, to be paid out of the earnings of 2022, in cash, foreseeably in the month following the Annual General Meeting.

In addition to the cash dividend, the Board of Directors of Banco Sabadell also agreed to establish a share buyback, to be purchased out of the earnings of 2022, for redemption, subject to the corresponding prior authorisations, at a maximum of 204 million euros, the terms of which will be announced separately prior to launch.

Total shareholder remuneration for the financial year 2022, which combines the cash dividend with the share buyback programme, will be equivalent to 50% of the Group's profit attributable to the owners of the parent.

At the Annual General Meeting held on 24 March 2022, shareholders agreed to distribute a dividend of 0.03 euros (gross) per share, to be paid out of the earnings of 2021, which was paid on 1 April 2022.

The distributions of profits of subsidiaries are subject to approval by shareholders at their respective Annual General Meetings.

Earnings per share

Basic earnings (or loss) per share are calculated by dividing the net profit attributable to the Group, adjusted by earnings on other equity instruments, by the weighted average number of ordinary shares outstanding in the year, excluding any treasury shares acquired by the Group. Diluted earnings (or loss) per share are calculated by applying adjustments for the estimated effect of all potential conversions of ordinary shares to the net profit attributable to the Group and the weighted average number of ordinary shares outstanding.

The Group's earnings per share calculations are shown below:

	2022	2021
Profit or loss attributable to owners of the parent (thousand euro)	858,642	530,238
Adjustment: Remuneration of other equity instruments (thousand euro)	(110,374)	(100,593)
Profit or (-) loss after tax from discontinued operations (thousand euro)	—	—
Profit or loss attributable to the owners of the parent, adjusted (thousand euros)	748,267	429,646
Weighted average number of ordinary shares outstanding (*)	5,593,885,977	5,586,444,414
Assumed conversion of convertible debt and other equity instruments	—	—
Weighted average number of ordinary shares outstanding, adjusted	5,593,885,977	5,586,444,414
Earnings (or loss) per share (euros)	0.13	0.08
Basic earnings (or loss) per share adjusted for the effect of mandatory convertible bonds (euros)	0.13	0.08
Diluted earnings (or loss) per share (euros)	0.13	0.08

(*) Number of shares outstanding, excluding the average number of own shares held in treasury stock during the year.

As at 31 December 2022 and 2021, there were no other financial instruments or share-based commitments with employees with a significant impact on the calculation of diluted earnings (or loss) per share for the periods presented. For this reason, basic earnings per share coincide with diluted earnings (or loss) per share.

Note 4 – Risk management

Throughout 2022, Banco Sabadell Group has continued to strengthen its risk management and control framework by incorporating improvements in accordance with supervisory expectations and market trends.

Bearing in mind that Banco Sabadell Group takes risks during the course of its activity, good management of these risks is a central part of the business. The Group has established a set of principles, set out in policies and rolled out through procedures, strategies and processes, which aim to increase the likelihood of achieving the strategic objectives of the Group's various activities, facilitating management in an uncertain environment. This set of principles is called the Global Risk Framework.

4.1. Macroeconomic, political and regulatory environment

Macroeconomic environment

When managing risks, the Group considers the macroeconomic environment. The most significant aspects of 2022 are set out below:

- The main factors at play in 2022 were the war in Ukraine and the energy crisis in Europe, while increasingly less importance was attached to Covid-19.
- In the wake of deteriorating geopolitical relations, Russia completely and indefinitely cut off its gas supplies flowing to Europe through the main pipeline linking both regions. This led to an unprecedented increase in the price of natural gas and electricity in Europe and stoked fears that strict energy rationing might be introduced during the winter.
- Developed countries across the globe saw their economies deteriorate over the year due to the consequences of the conflict in Ukraine, persistently high inflation and tighter financial conditions.
- In Spain, the economy outperformed the rest of the Eurozone, although it also slowed down over the year. The labour market remained relatively steady, with the lowest unemployment rate since 2008.
- In terms of economic policy in Spain, the government extended existing measures and rolled out new measures to deal with the energy crisis and high inflation.
- Spain also made progress in rolling out the Next Generation European funds, although the allocation and execution of these funds fell short of the government's expectations.
- Emerging economies proved resilient to the global economic environment, although the risks remained in economies with weaker fundamentals. China abandoned its zero-Covid policy at the end of the year.
- In Latin America, Mexico saw good economic performance, thanks to its limited exposure to Ukraine, the improvement of problems in global supply chains and its proximity to the United States.
- Inflation was the macroeconomic variable that aroused the most interest in 2022, reaching new record highs, with inflationary pressures spreading to various components.
- Inflation was pushed up by the higher costs of energy and commodities as a result of the conflict in Ukraine. In the United States and the United Kingdom, the jump in wages also contributed to higher inflation.
- Central banks focused on combatting inflation, introducing widespread interest rate hikes.
- The European Central Bank (ECB) raised interest rates by 250 basis points, introducing hikes of up to 75 basis points in two consecutive meetings. The ECB also discontinued its asset purchase programmes and announced that it would begin to reduce its balance sheet in 2023.
- The Federal Reserve (Fed) began its most aggressive rate hike cycle in several decades, increasing the range of its Fed funds rate by 425 basis points, coinciding with the launch of its quantitative tightening programme.
- The Bank of England (BoE) raised its base rate in each of its monetary policy meetings, gradually increasing the scale of these rate hikes. The BoE also began selling assets from its balance sheet in November.
- 2022 was a very negative year for both fixed-income markets and equity markets across the globe.
- Long-term government bond yields in the main developed countries rebounded sharply, influenced by aspects such as inflation and the interest rate hikes introduced by central banks.
- Peripheral sovereign debt risk premiums also rebounded in 2022, although they remained at relatively contained levels.
- The dollar saw widespread appreciation, acting as a safe-haven asset given the global economic landscape. In its currency pair with the euro, it appreciated to levels not seen since 2002, falling below parity for a few weeks.

- Emerging currencies generally found support, as the monetary tightening cycle began earlier in these economies. Sovereign risk premiums inched upwards but remained far from record high levels.
- Financial authorities believed that the risks to financial stability increased over the year due to the deterioration of financial and economic conditions, meaning that the banking industry faces higher risks in the medium term.

Political and regulatory environment

Impacts stemming from the war in Ukraine

The war between Russia and Ukraine, which broke out at the end of February 2022 and which is still ongoing today, prompted governments to adopt plans and measures similar to those proposed during the health emergency in order to mitigate the impacts of the conflict (ICO guarantee lines and direct aid for affected sectors).

Banco Sabadell's credit risk with both individuals and companies from these countries is limited, and the same is true of its counterparty credit risk with financial institutions from both countries. Specifically, the largest exposures relate to mortgage loans granted to customers of Russian, Ukrainian or Belarusian nationality residing outside Spain, although these amount to less than 300 million euros. The real estate assets securing the aforesaid exposures are located in Spain, with an average loan-to-value of 39%. Furthermore, these are transactions that have been on the balance sheet for an average of six and a half years.

ICO guarantee line in the context of war in Ukraine

On 29 March 2022, the government approved the plan outlining its response to Russia's invasion of Ukraine through Royal Decree-Law 6/2022. The response plan contained, among other measures, an ICO guarantee line of 10 billion euros, designed to ensure that companies affected by the rise in costs of energy and commodities caused by the conflict could have access to liquidity.

The features of the guarantee line included, among others: all companies and self-employed professionals would be able to benefit from it, with the exception of the financial and insurance sectors; the deadline for applying for these guarantees was 1 December 2022; and banks would need to keep their customers' working capital lines open until 31 December 2022.

Subsequently, on 10 May 2022, a Council of Ministers' agreement approved the first tranche of this guarantee line, amounting to 5 billion euros, stating that its granting was subject to the European Commission's authorisation of the guarantee line, which was eventually received on 2 June 2022.

The continuation of the conflict and its impacts required the initially adopted European Temporary Framework to be revised in order to adapt and extend it. To that end, the European Commission amended the European Temporary Framework on 20 July 2022 and again on 28 October 2022, in order to (i) prolong all the measures set out in the Temporary Crisis Framework until 31 December 2023, (ii) increase the ceilings applicable to state aid and (iii) introduce additional flexibility for liquidity support.

In line with the decision of the European Commission, the Council of Ministers approved Royal Decree-Law 19/2022 of 22 November, which extended the guarantee line included in the response plan to Russia's invasion of Ukraine, intended to ensure that all self-employed professionals and companies could access liquidity, to 31 December 2023. In addition to extending the aforesaid guarantee line, the agreement of the Council of Ministers introduced certain amendments to the configuration of the first tranche activated in May. Specifically, the first tranche of the guarantee line was divided into two compartments, one amounting to 3.5 billion euros for SMEs and the self-employed and the other amounting to 1.5 billion euros for large enterprises, to ensure that companies of all sizes could continue to have access to finance.

Similarly, the maximum thresholds that limited the guarantee amount for each enterprise were raised to 2,000,000 euros in general, 250,000 euros for primary agricultural holdings and 300,000 for fishing and aquaculture, with no change to the conditions that existed previously.

Lastly, on 27 December, a 450 million euro direct aid scheme was established for the enterprises hit the hardest by the increase of gas prices, such as those involved in the ceramic industry.

Impacts of interest rate hikes and rising inflation

Measures to ease the mortgage burden

On 22 November 2022, through an agreement of the Council of Ministers, the government introduced a package of measures designed to ease the mortgage burden. The package acts in three ways. Firstly, it amends the 2012 Code of Good Practice, reinforcing the relief measures available to vulnerable households by reducing the applicable interest rate during the five-year grace period (to Euribor minus 0.10% from the current Euribor plus 0.25%), by introducing the option to apply for debt restructuring for a second time and by extending the period during which they can request that their home be surrendered in settlement of the outstanding debt to two years. The scope of application of the aforesaid Code of Good Practice was also extended, so that any households whose effort rate has increased by less than 50% may benefit from a two-year grace period, from a more favourable interest rate during this period and from a term extension on their loans of up to seven years. Secondly, it created a new temporary Code of Good Practice (valid for two years), which will ease the financial burden of mortgages taken out by middle-class families up to 31 December 2022, by freezing repayment instalment amounts and extending the repayment period of the loan to seven years. Thirdly, expenses and fees will be reduced to make it easier to change from a floating rate to a fixed rate and the fees charged for early repayments and for changing from a floating-rate mortgage to a fixed-rate mortgage will be scrapped for the whole of 2023. Uptake of the two Codes of Good Practice by financial institutions is voluntary, although once they become signatories, compliance therewith is mandatory.

Banco Sabadell became a signatory of the new Code of Good Practice on 16 December 2022.

Impacts arising from Covid-19

The public health emergency caused by Covid-19 in March 2020 continued until early 2022 and was gradually overcome in the first half of the year in the main markets in which the Group operates. 2022 saw the application of the support measures approved by governments in 2020 and 2021 to provide the support needed by viable businesses, particularly in the form of public guarantees, as well as a Code of Good Practice specifically for the Covid-19 crisis, of which Banco Sabadell became a signatory in 2021.

Regarding the granting of ICO guarantees, through an agreement of the Council of Ministers on 21 June 2022, the government approved the possibility of applying maturity extensions to the Covid ICO guarantees beyond 30 June 2022, when the EU state aid temporary framework was due to expire. Extending the duration of the guarantees allows companies and self-employed professionals to extend the repayment term of their loans, subject to approval by the relevant financial institution, to up to 8 or 10 years.

In addition, on 28 October 2022, the European Commission also decided to prolong the possibility to grant investment support measures for a sustainable recovery under the State Aid COVID Temporary Framework until 31 December 2023.

Brexit

The Group continues to monitor the developments and consequences of Brexit. Since the Brexit deals came into effect on 1 January 2021, attention has focused mainly on the difficulties identified by certain sectors in relation to the continuation of trade relations between the United Kingdom and the European Union and the way in which companies have been adapting to the new trade arrangements. It is difficult to separate the impacts caused by Brexit from the disruptions observed in global supply chains initially associated with pandemic-related restrictions and subsequently with the reopening of the economy and the recovery of demand as well as, more recently, the conflict in Ukraine and the energy crisis. Another aspect that has attracted attention in 2022 has been the implementation of the Northern Ireland protocol, due to tensions between the United Kingdom and the European Union in spite of the flexibility introduced in border controls for goods crossing between Great Britain and Northern Ireland. Tensions in this regard have continued throughout the year and negotiations between the United Kingdom and the European Union continue in pursuit of a more stable and long-lasting solution.

The United Kingdom has continued with the publication of proposals, for consultation purposes, regarding the regulation of financial services, using the new regulatory freedoms proffered by Brexit. On the other hand, news of financial service activity moving from the United Kingdom to the European Union and the United States continues to trickle through.

On the other hand, in relation to the specific activity of Banco Sabadell Group in the United Kingdom, and from an operational standpoint, there are no signs of vulnerability in terms of existing contracts between counterparties, cross-dependency on financial market infrastructures, reliance on funding markets, etc. It is also worth noting that TSB has a low risk profile, with one of the most robust capital positions in the United Kingdom (fully-loaded CET1 capital ratio of 17.1%), with a balance sheet that is evenly distributed between loans and deposits (loan-to-deposit ratio of 105%) and with a loan book in which over 90% of loans are mortgage-secured. Furthermore, the quality of this mortgage book is very high, with an average LTV of 42%, and only a relatively small exposure to high-risk segments.

In 2022, the Bank analysed the recoverability of the capital invested in TSB, based on the financial forecasts approved by the Board of Directors. The results of the analysis showed that there are no signs of impairment in this investment, as detailed in Note 16.

4.2 Key milestones during the year

4.2.1 The Group's risk profile during the year

The following milestones have been achieved in relation to the Group's risk profile during 2022:

I. Non-performing assets:

- Decrease in the NPL ratio in the year, from 3.7% to 3.4%, due to a reduction of stage 3 volumes as a result of improved credit quality.

II. Lending performance:

- Gross performing loans continue to increase year-on-year in all geographies, excluding the impact of the evolution of foreign currencies, with annual growth figures of 1.7% in Spain, 3.3% in the UK (TSB) and 1.4% in Mexico.
- In Spain, the year-on-year growth is primarily driven by loans to individuals (the increase in the mortgage portfolio is noteworthy) and by business loans.
- In TSB, at a constant exchange rate, annual growth was 3.3%, supported by the positive evolution of the mortgage book.

III. Concentration:

- From a sectoral point of view, the loan portfolio is diversified, has limited exposure to the sectors most sensitive to the current environment and follows a downward trend.
- Similarly, in terms of individual concentration, the risk metrics relating to concentration of large exposures do show a slight upward trend but nevertheless remain within the appetite level. The credit ratings of top segments improve significantly as more recent balance sheets with a more diluted impact of the health crisis are introduced.
- Geographically speaking, the portfolio is positioned in the most dynamic regions, both in Spain and worldwide. International exposures account for 36% of the loan book.

IV. Strong capital position:

- The CET1 ratio improved by 33 basis points to 12.55% in fully-loaded terms as at 2022 year-end (compared to 12.22% as at 2021 year-end).
- The phase-in Total Capital ratio stood at 17.08% as at the end of 2022, thus remaining above requirements with an MDA buffer of 399 basis points. The leverage ratio was 4.59% (in fully-loaded terms).

V. Sound liquidity position:

- The LCR stood at 234% (compared to 221% as at 2021 year-end) and the loan-to-deposit ratio was 96% at the end of 2022.

4.2.2 Strengthened credit risk management and control environment

2022 has been marked by the monitoring and control of the measures introduced to mitigate the effects of Covid-19, as well as high inflation and the effects of the war in Ukraine.

To that end, particular attention has been paid to monitoring and controlling the measures introduced (mainly ICOs). RAS metrics have also been strengthened and exposure to the sectors most affected by the crisis has been assessed to mitigate its impact.

In the case of individuals, the management and control framework has been reinforced, with changes in RAS metrics and with new origination rules and proposals for interest rate adjustments, effort rates and available income to cope with higher interest rates and the inflationary environment.

Performance of the main solutions offered in Spain

In terms of the ICO Covid lines, as at 31 December 2022, the amount of the loans granted was approximately 7.4 billion euros (8.6 billion euros as at 31 December 2021). As at year-end, the bulk of the payment holidays had already expired.

In 2022, Banco Sabadell took up the new ICO guarantee line in the context of war in Ukraine and undertook to adhere to the new Code of Good Practice, which includes measures to ease the mortgage burden of vulnerable individuals.

Performance of the main solutions offered in the United Kingdom

In the United Kingdom, the main solutions offered during 2020 and 2021 to help SMEs during the Covid-19 pandemic were government-guaranteed loans to companies, known as BBLs (Bounce Back Loans). These loans have been benefitting from extensions (Pay-as-you-Grow) introduced by the government during the year, facilitating repayment conditions for customers. The exposure to these loans as at 2022 year-end amounted to 379 million pounds, representing 64% of the business customer portfolio (546 million pounds as 31 December 2021, representing more than 75% of the business customer portfolio). In response to the more recent cost-of-living crisis, regulators and financial Institutions in the country have focused on establishing adequate communication channels, tools and training to support and proactively help their customers, in particular those in vulnerable situations.

4.3 General principles of risk management

Global Risk Framework

The Global Risk Framework aims to establish the common basic principles relating to the risk management and control activity of Banco Sabadell Group, including, among other things, all actions associated with the identification, decision-making, measurement, assessment, monitoring and control of the different risks to which the Group is exposed. With the Global Risk Framework, the Group aims to:

- Follow a structured and consistent approach to risk throughout the Group.
- Foster an open and transparent culture with regard to risk management and control, encouraging the involvement of the entire organisation.
- Facilitate the decision-making process.
- Align the accepted risk with the risk strategy and the risk appetite.
- Understand the risk environment in which it operates.
- Ensure, following the guidelines of the Board of Directors, that critical risks are identified, understood, managed and controlled efficiently.

The Group's Global Risk Framework consists of the following elements:

- The Group's Global Risk Framework Policy.
- The Risk Appetite Framework (RAF) of the Group and subsidiaries.
- The Risk Appetite Statement (RAS) of the Group and subsidiaries.
- Specific policies for the various material risks to which the Group and subsidiaries are exposed.

4.3.1 Global Risk Framework Policy

As an integral part of the Global Risk Framework, the Global Risk Framework Policy establishes the common basic principles for Banco Sabadell Group's risk management and control activities, including, among other things, all actions associated with the identification, decision-making, measurement, assessment, monitoring and control of the different risks to which the Group is exposed. These activities comprise the duties carried out by the various areas and business units of the Group as a whole.

Consequently, the Global Risk Framework Policy sets out a general framework for the establishment of other policies related to risk management and control, determining core/common aspects that are applicable to the various risk management and control policies.

The Global Risk Framework is applied in all of the Group's business lines and entities, taking into account proportionality criteria in relation to their size, the complexity of their activities and the materiality of the risks taken.

Global Risk Framework principles

For risk management and control to be effective, the Group's Global Risk Framework must comply with the following principles:

- Risk governance and involvement of the Board of Directors through the model of three lines of defence, among others;

The risk governance arrangements established in the various policies that form part of the Global Risk Framework promote a sound organisation of risk management and control activities, categorising risk, defining limits and establishing clear responsibilities at all levels of the organisation through policies, procedures and manuals specific to each risk.

Among other duties, the Board of Directors of Banco de Sabadell, S.A. is responsible for identifying the Group's main risks, implementing and monitoring appropriate internal control and reporting systems, which include challenging and monitoring the Group's strategic planning and supervising the management of material risks and their alignment with the risk profile defined by the Group.

Similarly, the equivalent bodies of the Group's various subsidiaries have the same level of involvement in risk management and control activities at the local level.

The Group's risk governance arrangements are designed to organise risk management and control activities by means of the model of three lines of defence, granting independence, hierarchical authority and sufficient resources to the Risk Control function. In the same way, the governance model seeks to ensure that risk management and control processes offer an end-to-end vision of the phases involved.

- Alignment with the Group's business strategy, particularly through the implementation of the risk appetite throughout the organisations;

Through the set of policies, procedures, manuals and other documents that comprise it, the Group's Global Risk Framework is aligned with the Group's business strategy, adding value as it is designed to contribute to the achievement of objectives and improve medium-term performance. It is therefore embedded in key processes such as strategic and financial planning, budgeting, capital and liquidity planning and, in general, business management.

- Integration of the risk culture, focusing on aligning remuneration with the risk profile;

Corporate culture and corporate values are a key element, as they strengthen the ethical and responsible behaviour of all members of the organisation.

The Group's risk culture is based on compliance with the regulatory requirements applicable to it in all of its areas of activity, ensuring compliance with supervisory expectations and best practices in relation to risk management, monitoring and control.

One of the priorities established by the Group is the maintenance of a solid risk culture in the aforesaid terms, on the understanding that this lays the groundwork for appropriate risk-taking, makes it easier to identify and manage emerging risks, and encourages employees to carry out their activities and engage in the business in a legal and ethical manner.

- A holistic view of risk that translates into the definition of a taxonomy of first- and second-tier risks based on their nature; and

The Global Risk Framework, through the set of documents that comprise it, considers a holistic view of risk: it includes all risks, paying particular attention to the correlation between them (inter-risk) and within the risk itself (intra-risk), as well as the effects of concentration.

- Alignment with the interests of stakeholders

The Group regularly makes material disclosures to the public, so that market participants can maintain an informed opinion as to the suitability of the management and control framework for these risks, thus ensuring transparency in risk management.

Similarly, risks are managed and controlled with a view to safeguarding the interests of the Group and its shareholders at all times.

4.3.2 Risk Appetite Framework (RAF)

The risk appetite is a key element in setting the risk strategy, as it determines the scope of activity. The Group has a Risk Appetite Framework (RAF) that sets out the governance framework governing its risk appetite.

Consequently, the RAF establishes the structure and mechanisms associated with the governance, definition, disclosure, management, measurement, monitoring and control of the Group's risk appetite established by the Board of Directors of Banco de Sabadell, S.A.

An effective implementation of the RAF requires an adequate combination of policies, processes, controls, systems and procedures that enable a set of defined objectives to not only be achieved, but to be done so in an effective and continuous way.

The RAF covers all of the Group's business lines and units, in accordance with the proportionality principle, and it is designed to enable suitably informed decisions to be made, taking into account the material risks to which it is exposed, including both financial and non-financial risks.

The RAF is aligned with the Group's strategy and with the strategic planning and budgeting processes, the internal capital and liquidity adequacy assessments, the Recovery Plan and the remuneration framework, among other things, and it takes into account the material risks to which the Group is exposed, as well as their impact on stakeholders such as shareholders, customers, investors, employees and the general public.

4.3.3 Risk Appetite Statement (RAS)

The RAS is a key element in determining the Institution's risk strategies. It establishes qualitative expressions and quantitative limits for the different risks that the Institution is willing to accept, or seeks to avoid, in order to achieve its business objectives. Depending on the nature of each risk, the RAS includes both qualitative aspects and quantitative metrics, which are expressed in terms of capital, asset quality, liquidity, profitability or any other measure deemed to be relevant. The RAS is therefore a key element in setting the risk strategy, as it determines the area of activity.

Qualitative aspects of the RAS

The Group's RAS includes the definition of a set of qualitative aspects, which essentially help to define the Group's position with regard to certain risks, especially when those risks are difficult to quantify.

These qualitative aspects complement the quantitative metrics, establish the general tone of the Group's approach to risk-taking and define the reasons for taking or avoiding certain types of risks, products, geographical exposures and other matters.

Quantitative aspects of the RAS

The set of quantitative metrics defined in the RAS are intended to provide objective elements with which to compare the Group's situation against the goals or challenges proposed at the risk management level. These quantitative metrics follow a hierarchical structure, as established in the RAF, with three levels: board (or first-tier) metrics, executive (or second-tier) metrics and operational (or third-tier) metrics.

Each of these levels has its own approval, monitoring and action arrangements that should be followed in the event a threshold is ruptured.

In order to gradually detect possible situations of deterioration of the risk position and thus be able to monitor and control it more effectively, the RAS sets out a system of thresholds associated with the quantitative metrics. These thresholds reflect the desirable levels of risk for each metric, as well as the levels that should be avoided. A breach of these thresholds can trigger the activation of remediation plans designed to rectify the situation.

These thresholds are established to reflect different levels of severity, making it possible to take preventive action before excessive levels are reached. Some or all of the thresholds will be established for a given metric, depending on the nature of that metric and its hierarchical level within the structure of RAS metrics.

4.3.4 Specific policies for the different material risks

The various policies in place for each of the risks, together with the operating and conceptual procedures and manuals that form part of the set of regulations of the Group and its subsidiaries, are tools on which the Group and subsidiaries rely to expand on the more specific aspects of each risk.

For each of the Group’s material risks, the policies describe the principles and critical management parameters, the main people and units involved and their duties (including the roles and responsibilities of the various divisions and committees in relation to risks and their control systems), the associated procedures, as well as monitoring and control mechanisms.

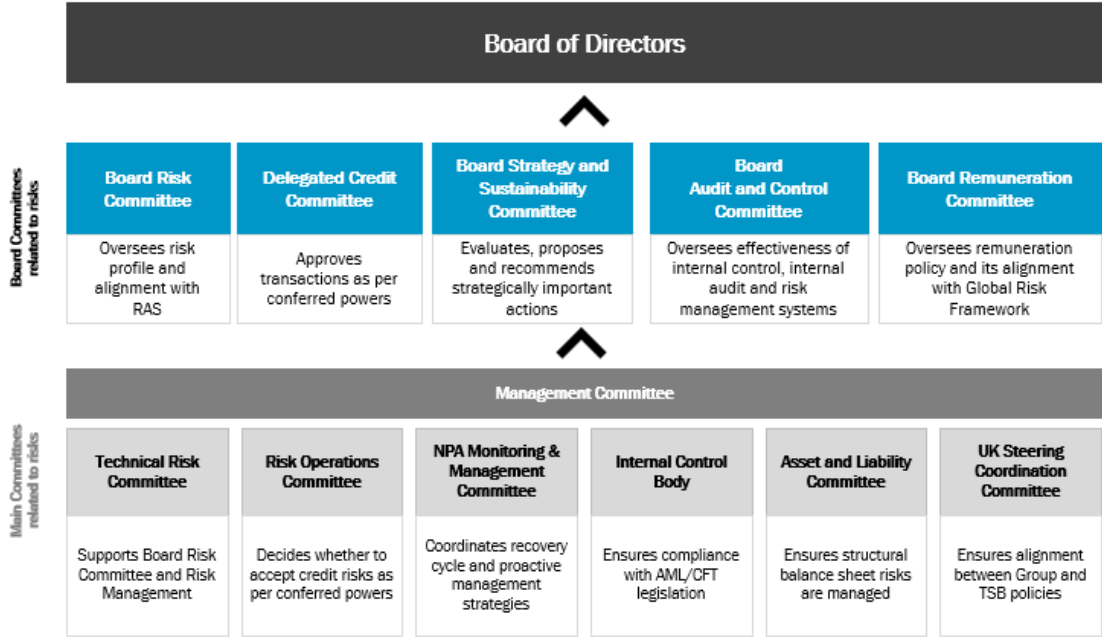
4.3.5 Overall organisation of the risk function

Governance structure

The Board of Directors of Banco de Sabadell, S.A. is the body responsible for establishing the general guidelines for the organisational distribution of the risk management and control functions, as well as determining the main strategies in this regard, and for ensuring consistency with the Group’s short- and long-term strategic objectives, as well as with the business plan, capital and liquidity planning, risk-taking capacity and remuneration schemes and policies.

The Board of Directors of Banco de Sabadell, S.A. is also responsible for approving the Group’s Global Risk Framework.

In addition, within the Board of Directors of Banco de Sabadell, S.A., there are five committees involved in the Group’s Global Risk Framework and, therefore, in risk management and control (the Board Risk Committee, the Board Strategy and Sustainability Committee, the Delegated Credit Committee, the Board Audit and Control Committee and the Board Remuneration Committee). There are also other Committees and Divisions with a significant level of involvement in the risk function.



The governance structure that has been defined aims to ensure a suitable development and implementation of the Global Risk Framework and, consequently, of the risk management and control activity within the Group, while at the same time it aims to facilitate:

- The participation and involvement of the Group's governing bodies and Senior Management in decisions regarding risks, and also in their supervision and control.
- The alignment of targets and objectives at all levels, monitoring their achievement and implementing corrective measures where necessary.
- The existence of an adequate management and control environment for all risks.

Organisation

The Group establishes an organisational model for assigning and coordinating risk control responsibilities based on the three lines of defence. This model is described, for each of the risks, in the various policies that make up the Group's body of regulations, in which responsibilities specific to each of the three lines of defence are established.

For each line of defence, the risk policies describe and assign responsibilities, as appropriate, to the following functions (or any other additional ones that ought to be considered):

- First line of defence: responsible for maintaining adequate and effective internal control and implementing corrective actions to rectify deficiencies in its processes and controls. The responsibilities attributed to this line under the Global Risk Framework are as follows:
 - Maintain effective internal controls and perform day-to-day risk assessment and control procedures;
 - Identify, quantify, control and mitigate risks, complying with the established internal policies and procedures and ensuring that activities are consistent with the established goals and objectives;
 - Implement adequate management and oversight processes to ensure compliance with regulations, focusing mainly on control errors, inadequate processes and unforeseen events.
- Second line of defence: in general, the second line of defence ensures that the first line of defence is well designed and performs its assigned duties. It also puts forward suggestions for its continuous improvement. The core responsibilities attributed to this line are the following:
 - Ensure the existence and promote the update of a Global Risk Framework, which establishes the core principles for adequate risk management and control.
 - Put forward the Institution's Risk Appetite Statement (RAS) for approval, ensuring it is kept fully up to date at all times and monitoring it on an ongoing basis.
 - Supervise the risk management and control activities carried out by the first line of defence to ensure they conform to the established policies and procedures, bearing in mind the functions specifically assigned this task, and identify areas for improvement within risk management.
 - Formulate independent opinions to lend support in decision-making processes.
 - Periodically analyse and report to the governance and management bodies on the risk profile of the Institution through the RAS.
 - Report to the Board Risk Committee on the status and potential development of the Institution's risks.
 - Provide guidance and support to identify, assess, monitor, manage and mitigate the Institution's risks.
 - The Validation Division gives opinions regarding the suitability of new proposals, changes or adjustments to models, tools and processes with material methodological components. It also designs and rolls out the model risk management and control framework and monitors the Group's model risk profile.

- Third line of defence: helps the Group to achieve its objectives by providing a systematic and disciplined approach to assess the adequacy and effectiveness of the organisation's governance processes and its risk management and internal control activities.

4.4 Management and monitoring of the main material risks

The most salient aspects concerning the management of the first-tier risks identified in the Banco Sabadell Group risk taxonomy and concerning the actions taken in this regard in 2022 are set out below:

4.4.1 Strategic risk

Strategic risk is associated with the risk of losses or negative impacts materialising as a result of strategic decisions or their subsequent implementation. It also includes the inability to adapt the Group's business model to changes in the environment in which it operates.

The Group develops a Strategic Plan which sets out the Bank's strategy for a specified period of time. In 2021, Banco Sabadell defined a new Strategic Plan which sets out the key courses of action and transformation for each business line over the coming years, in order to seize the opportunity of consolidating its position as a major domestic bank.

As part of the Strategic Plan, the Group carries out five-year financial projections, which are the result of the implementation of the strategies defined in the Plan. These projections are carried out on the basis of the most likely economic scenario for the key geographies (baseline scenario) and they are also included in the ICAAP as a baseline scenario. The economic scenario is described in terms of the key risk factors impacting the Group's income statement and balance sheet. In addition, the Plan is regularly monitored in order to analyse the Group's most recent performance and changes in the environment, as well as the risks taken.

The projection exercises and their monitoring are integrated into management arrangements, as they set out the key aspects of the Group's medium- and long-term strategy. The Plan is drawn up at the business unit level, on the basis of which the Group manages its activities, and annual results are also assessed in terms of compliance with the risk appetite.

Strategic risk includes the management and control of four risks:

- Solvency risk: this is the risk of not having sufficient capital, in terms of either quality or quantity, to achieve strategic and business objectives, withstand operational losses or meet regulatory requirements and/or the expectations of the market in which an institution operates.
- Business risk: this refers to the possibility of incurring losses as a result of adverse events that negatively affect the capacity, strength and recurrence of the income statement, either because of its viability (short term) or sustainability (medium term).
- Reputational risk: this is the current or future risk of losses being incurred as a result of failures related to processes and operations, strategy or corporate governance and which generate a negative perception among customers, counterparties, shareholders, investors or regulators that could negatively affect the Group's ability to maintain its business relationships or establish new ones, and to continue to access funding sources.
- Environmental risk: the risk of incurring losses as a result of the impacts, both those existing at present and those that may exist in the future, stemming from the environmental risk factors (associated with climate change and environmental degradation) and affecting counterparties or invested assets, as well as aspects affecting financial institutions as legal entities. Environmental factors can produce negative impacts through different risk drivers, which can be categorised as either physical risks or transition risks.

4.4.1.1 Solvency risk

Banco Sabadell's ratios are above the minimum capital requirements established by the European Central Bank. Therefore, the Group is not subject to any caps on the distribution of dividends, variable remuneration or coupon payments made to holders of AT1 capital instruments.

Banco Sabadell is also compliant with MREL, which coincides with supervisory expectations and is in line with its funding plans.

Details on the closing data as at 31 December 2022 for solvency risk and capital management are available in Note 5 to these annual financial statements.

4.4.1.2 Business risk

The economic environment in 2022 has been marked by the conflict between Russia and Ukraine, an energy crisis, continuously climbing rates of inflation, higher interest rates, as well as the slowdown of the main global economies, although in the last few months of the year annual inflation figures in Spain surprised to the downside, becoming more moderate during the month of December for the fifth consecutive month and reaching 5.5%.

Against this backdrop, a number of European governments adopted new tax packages in order to protect households and companies from the sharp rise in energy prices. The exacerbation of the energy crisis also deteriorated the growth-inflation mix, leaving various developed economies in a situation tantamount to stagflation.

In 2022, inflationary pressures resulted in a faster pace of monetary policy normalisation, in turn causing: (i) interest rate hikes, (ii) the discontinuation of central banks' bond-buying schemes, (iii) the removal of other liquidity stimulus measures such as haircuts applied to assets eligible as collateral and, lastly, (iv) the repayment of long-term borrowings (TLTRO III). All of this increases the risk of returning to a more competitive environment in search of liquidity, with potential increases in financial costs and a reduction of liquidity buffers, which had fallen to record low levels in recent years. This new environment of higher interest rates is causing both institutions and the Supervisor to focus on managing and controlling its associated risks.

The change of course of central banks' monetary policies has incentivised the Group's profitability and net interest income, although no significant impact on funding costs has been observed as yet.

In spite of this context, in 2022 the Bank has significantly increased its net profit, with the year-on-year increase of net interest income being particularly worthy of note, and the cost savings delivered by the efficiency plan that began in 2020 and ended in March 2022 have fully come through. This all contributed to year-end ROTE levels standing higher than those disclosed to the market and set as guidance for the Institution in 2023.

4.4.1.3 Reputational risk

In recent years, both customers and society as a whole have attached more importance to the service offered by banks. Vulnerable customers and their specific needs have gained visibility. The change of the Group's business model, shifting to one in which less of the service is provided in person, increases the materiality of this risk as these stakeholders' perception of its performance is one of the factors that it considers.

Banco Sabadell Group bases its business model on corporate values such as ethics, professionalism, rigour, transparency, quality and, in general, long-term business relationships that are beneficial to both the Group and its counterparties.

The Group rigorously manages its reputational risk, identifying any potential or actual threat of this type in good time and ensuring that it is suitably dealt with as quickly and as early as possible, as the materialisation of such a risk could jeopardise the achievement of the vision that the Group has for its future and that it wishes to convey to the market, with its own unique and recognisable personality.

The Group monitors this risk through the Board Risk Committee, which has a dashboard with indicators associated with the main stakeholders. The qualitative aspects of the RAS include the following aspects:

- Low appetite in the event of threats to the Group's reputation.
- Special consideration of restrictions on transactions with borrowers associated with political parties and the media.
- The Group neither invests nor provides funding to companies linked to the development, manufacture, distribution, storage, transfer or sale of controversial weapons, as set forth in the various conventions of the United Nations currently in force.
- The products and services offered to customers need to be known by all of the parties involved, who must be specifically trained for their sale, only offering customers products and services that are appropriate to their needs, and safeguarding their interests.

4.4.1.4 Environmental risk

The big milestone in the international commitment to fight against climate change materialises in the 2015 Paris Agreement, which promotes the reduction of carbon emissions to limit global warming to “well below” 2°C in 2100 and which aims not to exceed 1.5°C in relation to pre-industrial average temperatures (1850-1900). The European Union included the Agreement in its legislation, detailing and tightening it through a ‘regulatory tsunami’ whose main initiatives are established in the Action Plan on Sustainable Finance (APSF) of March 2018, as well as in its subsequent restatement in the Renewed Sustainable Finance Strategy (RSFS) of July 2021.

Banco Sabadell Group’s commitment to sustainability has been incorporated into all areas of its strategy and business model, internal governance, risk management and assessment arrangements, steering its activity and processes in order to make a firm contribution to sustainability and the fight against climate change and environmental degradation. The aim is to support the Group’s customers in the transition towards a sustainable future, either by providing them with the appropriate and necessary funding for this or by offering them savings and investment products that help to achieve a world with greenhouse gas emissions neutrality. This is in addition to the Institution’s own aims of achieving greenhouse gas (GHG) emissions neutrality and of continuing to reduce its own consumption.

As part of this corporate goal, throughout 2022 Banco Sabadell Group has continued to implement the Sustainable Finance Plan, which includes a series of initiatives that add to its track record of projects designed to pursue a more sustainable economy.

Furthermore, all these initiatives make it possible to adopt and implement the various sustainability regulations to which Banco Sabadell Group is subject, as well as to comply with supervisory expectations with regard to the management and disclosure of environmental risks established by the European Central Bank (ECB).

In line with our commitment to achieve a sustainable future, since 2021 Banco Sabadell Group has been a member of the Net-Zero Banking Alliance (NZBA), an international banking alliance under the auspices of the United Nations, whose main goal is to achieve the alignment of their loan and investment portfolios with net-zero emissions scenarios by 2050 or earlier. Undertaking this commitment implies being able to achieve one of the most ambitious climate targets established in the Paris Agreement.

Lastly, since 2020 Banco Sabadell Group has also undertaken to follow the recommendations for disclosure of financial information related to climate-related risks established by the Task Force on Climate-related Financial Disclosures (TCFD).

Banco Sabadell Group Sustainable Finance Plan

Since 2020, Banco Sabadell Group has been developing a cross-cutting Sustainable Finance Plan that will allow the Institution to honour its sustainability commitments and adopt all the regulations, regulatory initiatives and supervisory expectations relating to banking in the European Union (EU).

Within the initiatives carried out, it is worth noting the approval by the Board of Directors of the Sustainability Policy in 2020 (which defines the vision, governance and responsibilities of the three lines of defence in relation to sustainability) and of the Environmental Risk Policy drawn up in July 2021 (which defines the critical management parameters to progressively and proportionally integrate these risks in the risk management and control units and business units).

During this year, environmental risk indicators have also continued to be defined and developed and are gradually being converted to metrics that are included in the Risk Appetite Framework in order to manage and monitor these risks. Furthermore, the Climate Risk Policy has been reviewed and its scope of application and content have been expanded in order to include the risks associated with environmental degradation (air pollution, water pollution, water scarcity, land pollution, loss of biodiversity, deforestation, etc.). This is why the Climate Risk Policy has been renamed the Environmental Risk Policy.

Environmental risk management

Environmental risk should be understood as the risk of incurring losses as a result of the impacts, both those existing at present and those that may exist in the future, stemming from the environmental risk factors (associated with climate change and environmental degradation) and affecting counterparties or invested assets, as well as aspects affecting financial institutions as legal entities.

Environmental factors can produce negative impacts through different risk drivers, which can be categorised as either physical risks or transition risks:

- Physical risks are those that occur due to the physical effects of climate change (consequence of adverse climate-related and geological events or changes in climate patterns) and due to environmental degradation (consequence of changes and severe effects on the balance of ecosystems). They can in turn be categorised as either acute risks or chronic risks.
- Transition risks are those that occur due to the uncertainty related with the timing and speed of the process for adjusting to an environmentally sustainable economy. This process can be affected by four drivers: political (regulatory) and legal risks, technology risks, market and economic risks, as well as reputational and social risks.

For more information on environmental risk, please refer to the Non-Financial Disclosures Report (NFDR), which forms part of the consolidated Directors' report.

In line with the EBA's Sustainable Finance Plan to be implemented throughout 2020-2025 and under which ESG risks and factors are expected to be included in the EU regulatory framework (Pillars I, II and III of the Basel prudential framework for credit institutions), Banco Sabadell Group is adapting and aligning its internal corporate governance, strategy, structure and risk management and control processes, as well as its disclosures, in order to comply with these planned regulations. This change process is based on the materiality assessment of the impacts of environmental risk (the E in ESG) and on the analysis of the transmission channels that they feed into. In the final instance, environmental risk ultimately acts as an additional risk driver affecting traditional bank risks (e.g. credit, market, liquidity and operational risks). It is therefore important to measure its final impact (e.g. in terms of the solvency of both customers/counterparties and of the Institution itself).

At present, as the EBA and the ECB themselves acknowledge, the academic world is working intensively and rapidly to develop and define the most suitable methodologies that can be used to tackle technical challenges and the lack of robust data facing the field of sustainability-related risks (with each of the letters of the ESG acronym).

Every year, Banco Sabadell Group carries out a qualitative materiality assessment of the impacts that environmental risks have on the main traditional bank risks affected: credit risk, market risk, liquidity risk, operational risk, reputational risk, strategy risk and business model risk. In 2022, this assessment has been expanded to include not only climate-related risk but also the risk associated with environmental degradation. Thus, the following activities now take place on a regular basis: (i) a quantitative estimate of the impacts stemming from environmental risk on credit risk, market risk, liquidity risk and operational risk, (ii) a quantitative analysis of the exposure of its credit portfolios to the most carbon-intensive sectors and (iii) a measurement of its sustainable exposure (green, social and sustainability-linked transactions).

It is worth noting that the Group has incurred no previous material losses associated with climate-related risk. Furthermore, it is worth mentioning that in an initial qualitative assessment of the materiality of the environmental risk factors for those risks in which those could be considerable, it was concluded that the impacts were concentrated in credit portfolios. Specifically, transition risks were found to be the most material, from a triple point of view: regulations, technological change and market factors. While no impact is expected in the near term, the potential medium- and long-term impacts should continue to be monitored and assessed on an ongoing basis, depending on the sector.

As regards banking activity, a network of teams specialising in environmental risks is being developed and deployed in both risk management and control areas and in the business units themselves, who collect information related to the sustainability of customers and their banking activity through specific ESG questionnaires and indicators. The end goal is to support customers during the transition to a more sustainable economy.

It is also worth noting the implementation of an internal eligibility guide, aligned with the EU's taxonomy and the ICMA's Social Bond Principles, which will be updated with the Social Taxonomy and which can be used to validate the sustainability of the credit transactions financed by Banco Sabadell Group, as well as the adoption of sector-specific rules which set out the commitment to sustainability of the Institution when granting finance to certain greenhouse gas-intensive sectors and sectors with the greatest potential social and environmental impact.

In the same vein, the Sustainable Finance Plan expands the portfolio of sustainable products with the aim of paving the way for the transition of the economy towards sustainability. New financing solutions have been launched, including products such as 'eco-leases' and the 'eco-reformas' loan for energy-efficient and sustainable home renovations. They have also been integrated across the entire product portfolio, making it possible for a wide range of products to be made sustainable, provided the financed investment meets the stipulated requirements.

In addition, it is worth mentioning that over the year Banco Sabadell Group has continued to issue new green bonds in the capital markets amounting to 1,695 million euros (500 million euros in 2021).

4.4.2. Credit risk

Credit risk refers to the risk of losses being incurred as a result of borrowers' failure to fulfil their payment obligations, or of losses in value taking place due simply to the deterioration of borrower quality.

4.4.2.1 Credit risk management framework

Acceptance and monitoring

Credit risk exposures are rigorously managed and monitored through regular assessments of borrowers' solvency and their ability to honour their payment obligations undertaken with the Group, adjusting the exposure limits established for each counterparty to levels that are deemed to be acceptable. It is also normal practice to mitigate credit risk exposures by requiring borrowers to provide collateral or other guarantees to the Bank.

The Board of Directors grants powers and discretions to the Delegated Credit Committee to allow the latter to confer different approval powers to different decision-making levels. The implementation of authority thresholds in credit approval systems ensures that the conferral of approval powers established at each level is linked to the expected loss calculated for each transaction, also considering the total amount of the total risk exposure with an economic group and the amount of each transaction.

To optimise the business opportunities provided by each customer and guarantee an appropriate level of security, responsibility for accepting and monitoring risks is shared between the account manager and the risk analyst who, by maintaining effective communication, are able to obtain a comprehensive (360°) and forward-looking insight into each customer's individual circumstances and needs.

The account manager monitors the business aspect through direct contact with customers and by handling their day-to-day banking activity, while the risk analyst takes a more system-based approach making use of his/her specialised knowledge.

The implementation of advanced risk management methodologies also benefits the process as it ensures that proactive measures can be taken once a risk has been identified. Of vital importance in this process are tools such as credit rating systems for companies and credit scoring systems for individuals, as well as early warning indicators for monitoring risk. These are integrated into a single tool that provides a comprehensive and forward-looking vision of customers.

The analysis of indicators and early warnings, in addition to credit rating reviews, allow an integrated and continuous measurement to be made of the level of risk taken. The establishment of efficient procedures to manage performing loans also benefits the management of past-due loans as it enables a proactive policy to be devised based on a timely identification of any cases with propensity to default.

Risk monitoring is carried out for all exposures in order to identify potentially problematic situations and prevent credit impairment. In general, this monitoring is based on early warnings system at both the transaction/borrower level and at the portfolio level, and both systems use the firm's internal information and external information in order to obtain results. Risk monitoring is carried out prior to any default and on a forward-looking basis, i.e. with an outlook based on the foreseeable future development of circumstances, in order to determine both actions to strengthen the business (increase lending) and to prevent risk (risk mitigation, improvement of guarantees, etc.).

The early warnings system allows an integrated measurement to be made of the level of the risk taken and allows it to be transferred to recovery management specialists, who determine the different types of procedures that should be implemented. Therefore, different groups or categories are established for risks that exceed a given limit and according to predicted default rates, so that they can be treated individually. These warnings are additionally managed by the account manager and the risk analyst.

Management of non-performing exposures

Generally, during stages of weakness in the economic cycle, debt refinancing and restructuring are the main risk management techniques used. The Bank's aim, when faced with debtors and borrowers that have, or are expected to have, financial difficulties to honour their payment obligations under the prevailing contractual terms, is to facilitate the repayment of the debt by reducing the probability of default as much as possible. A number of common policies to achieve this are in place in the Institution, as well as procedures for the approval, monitoring and control of potential debt forbearance (refinancing and restructuring) processes, the most significant of which are the following:

- The existence of a sufficiently long good payment history by the borrower and a manifest intention to repay the loan, assessing the period of time during which the customer is likely to continue to experience financial difficulties (in other words, whether they are facing short-term or long-term difficulties).
- Refinancing and restructuring conditions based on a realistic repayment schedule that is in line with borrowers' current and expected payment capacity, also taking into account the macroeconomic situation and outlooks, avoiding their postponement to a later date.
- If new guarantees are provided, these must be regarded as a secondary and exceptional means of recovering the debt, so as to avoid adversely affecting existing means. In any case, the ordinary interest accrued should be paid up to the refinancing or restructuring date.
- Limits are applied to the length of grace periods and to the granting of successive refinancing.

The Group continually monitors compliance with the agreed terms and with the above policies.

Internal risk models

Banco Sabadell Group also has a system in place which is made up of three lines of defence to ensure the quality and oversight of internal models, as well as a governance process specifically designed to manage and monitor these models and to ensure compliance with regulations and the Supervisor's instructions.

The governance framework of internal credit risk and impairment models (management of risk, calculation of regulatory capital and provisions) is based on the following pillars:

- Effective management of changes to internal models.
- Ongoing monitoring of the performance of internal models.
- Regular reporting, both internal and external.
- Management tools for internal models.

One of the main bodies within the governance framework of internal credit risk and impairment models is the Models Committee, which meets on a monthly basis and has internal approval responsibilities, depending on the materiality of the risks, and which also monitors internal credit risk models.

Banco Sabadell Group also has an advanced management model for its non-performing exposures in place to manage the impaired assets portfolio. The purpose of managing non-performing exposures is to find the best solution for the customer upon detecting the first signs of impairment, reducing the entry into default of customers with financial difficulties, ensuring intensive management and avoiding downtime between the different phases.

For further quantitative information, see Schedule V "Other risk information: Refinancing and restructuring transactions" to these consolidated annual financial statements.

Real estate credit risk management

As part of its general policy on risks and, in particular, its policy on the real estate development sector, the Group has a number of specific policies in place for mitigating risks.

The main measure that is implemented in this portfolio is the ongoing monitoring of projects, both during the construction phase and once the works have been completed. This monitoring makes it possible to validate the progress made, ensuring everything is moving forward as planned, and to take action in the event of any possible deviations. The aim at all times is for the available funding to be sufficient to complete the works and for the existing sales to be able to significantly reduce the risks.

The Bank has established three strategic courses of action:

– New lending: real estate development business

New lending to developers is governed by a “Real Estate Development Framework”, which defines the optimum allocation of the new business on the basis of the quality of the customer and development project. This analysis is based on models that allow an objective appraisal to be obtained, taking into account the views of real estate experts.

To this end, the Bank has:

- The Real Estate Business Division (a unit within the Business Banking Division), with a team of real estate specialists who exclusively manage the Bank’s developer customers. This unit has an acceptance and monitoring methodology that allows the Group to gain in-depth knowledge about all the projects analysed by the unit.
- Two Real Estate Investment Analysis and Monitoring divisions (reporting to the Real Estate Risks Division), whose role is to analyse all real estate projects from a technical and real estate point of view. They analyse both the location and suitability of the product, as well as the potential supply and demand. They also compare them against the figures of the business plan submitted by the customer (particularly costs, income, margin and timelines). This analysis process goes hand in hand with a model used to monitor the real estate developments through monitoring reports, which validate the progress made in each development project in order to keep track of drawdowns and compliance with the business plan (income, costs and timelines).
- The Real Estate Risks Division, with specialised analysts in each of the Territorial Divisions. This makes it possible to ensure that newly accepted risks are in line with the policies and acceptance framework for this type of risk.

– Management of non-performing real estate credit

Non-performing exposures are managed in line with the defined policy. In general, they are managed taking into account:

- The customer.
- The guarantees.
- The status of the loan (from the time when a warning is triggered, warning of a potential deterioration of the current status, up until refinancing or restructuring takes place, or until the properties are surrendered in payment of debt (payment in kind)/purchased in an amicable settlement/settlement with debt reduction, or until an auction is held following a mortgage enforcement process and whenever there is a ruling in favour of foreclosure).

After analysing the three aforementioned aspects, an optimal solution is sought to stabilise or settle the position (whether through an amicable settlement or through judicial proceedings), which differs depending on the evolution of each customer/case.

Cases in which the stabilisation of the loan or its settlement by the customer is not a feasible option are managed using support models depending on the type of loan or financed item.

In the case of completed real estate developments or completed non-residential properties, these can be put on sale at prices that drive market traction.

For other funded real estate, the possibility of entering into sale agreements with third parties is considered, out-of-court settlement solutions are proposed (purchase, payment in kind, which in the case of properties owned by individuals can be arranged under favourable conditions for relocation or social rental depending on the needs of the customer, or with a settlement with debt reduction), or else court proceedings are initiated.

– Management of foreclosed assets

Once the loan has been converted into a real estate asset, a management strategy is defined depending on the type of asset, in order to maximise the potential of each asset during the sale.

The main disposal mechanism is the sale of the asset, for which the Bank has developed different channels depending on the type of property and customer.

The Group, which has had high concentrations of this type of risk in the past, has a first-tier RAS metric in place which establishes a maximum level of concentration of exposures associated with real estate development based on Tier 1 capital in Spain. This metric is monitored on a monthly basis and reported to the Technical Risk Committee, the Board Risk Committee and the Board of Directors.

Lastly, it is worth highlighting that the Risk Control Division, together with the Business and Risk Management Divisions, regularly monitors the adequacy of new loans granted to real estate developers. The monitoring process includes a review of compliance with policies and asset allocation. The results of this monitoring exercise are escalated to the Technical Risk Committee for information.

For further quantitative information, see Schedule V “Other risk information: Exposure to construction and real estate development sector” to these consolidated annual financial statements.

4.4.2.2. Risk management models

Credit ratings

Credit risks incurred with companies, real estate developers, specialised lending projects, financial institutions and countries are rated using a rating system based on predictive factors and an internal estimate of their probability of default (see section “Impairment of financial assets” in Note 1).

The rating model is reviewed annually based on the analysis of performance patterns of actual defaulted loans. An estimated default rate is assigned to each internal credit rating level, which also allows a uniform comparison to be made against other segments and ratings issued by external credit rating agencies using a master ratings scale.

The percentage distribution by credit rating of Banco Sabadell's portfolio of companies as at 31 December 2022 and 2021 is detailed below:

%

Distribution, by credit rating, of Banco Sabadell's portfolio of companies 2022										
9	8	7	6	5	4	3	2	1	0	TOTAL
0.64%	1.56%	9.02%	18.80%	28.88%	23.20%	13.11%	4.08%	0.62%	0.10%	100%

In this scale of 0 to 9, probability of default (PD) goes from high to low. The PD used is the risk management PD.

%

Distribution, by credit rating, of Banco Sabadell's portfolio of companies 2021										
9	8	7	6	5	4	3	2	1	0	TOTAL
0.64%	1.65%	6.03%	19.98%	27.70%	23.32%	14.76%	5.10%	0.67%	0.15%	100%

In this scale of 0 to 9, probability of default (PD) goes from high to low. The PD used is the risk management PD.

Credit scores

In general, credit risks undertaken with individuals are rated using credit scoring systems, which are in turn also based on a quantitative model of historical statistical data, identifying the relevant predictive factors (see section “Impairment of financial assets” in Note 1).

Scoring models are used in both the new risk origination process (reactive scoring) and to monitor portfolio risk (behavioural scoring).

The percentage distribution by behavioural score of Banco Sabadell’s portfolio of individuals as at 31 December 2022 and 2021 is detailed below:

%

Distribution, by behavioural score, of Banco Sabadell’s portfolio of individuals 2022										
9	8	7	6	5	4	3	2	1	0	TOTAL
0.89%	8.92%	26.39%	35.56%	17.11%	6.21%	2.50%	1.35%	0.67%	0.40%	100%

In this scale of 0 to 9, probability of default (PD) goes from high to low. The PD used is the risk management PD.

%

Distribution, by behavioural score, of Banco Sabadell’s portfolio of individuals 2021										
9	8	7	6	5	4	3	2	1	0	TOTAL
1.03%	9.85%	25.86%	35.10%	16.63%	6.31%	2.66%	1.43%	0.68%	0.45%	100%

In this scale of 0 to 9, probability of default (PD) goes from high to low. The PD used is the risk management PD.

Warning tools

In general, the Group has a system of warning tools in place, which include both individual warnings and advanced early warning models for both the Companies segment and the Individuals segment. These warning tools are based on performance factors obtained from available sources of information (credit ratings or credit scores, customer files, balance sheets, CIRBE (Bank of Spain Central Credit Register), information relating to the industry or past banking activity, etc.). They measure the risk presented by the customer on a short-term basis (predicted propensity to default), obtaining a high level of predictability to detect potential defaulters. The resulting rating or score, which is obtained automatically, is used as a basic input in monitoring the risk of individuals and companies (see section “Impairment of financial assets” in Note 1).

This warnings system enables:

- Efficiency to be improved, as monitoring exercises focus on customers with the lowest credit rating or credit score (different cut-off points for each group).
- The Institution to anticipate actions required to manage any negative change in the situation of the customer (change in rating, new severe warnings, etc.).
- Customers whose situation remains unchanged and who have been assessed by the Basic Management Team to be regularly monitored.

4.4.2.3. Credit risk exposure

The table below shows the distribution, by headings of the consolidated balance sheet, of the Group's maximum gross credit risk exposure as at 31 December 2022 and 2021, without deducting collateral or credit enhancements obtained in order to ensure the fulfilment of payment obligations, broken down by portfolios and in accordance with the nature of the financial instruments:

Thousand euro			
Maximum credit risk exposure	Note	2022	2021
Financial assets held for trading		417,131	592,631
Equity instruments	9	—	2,258
Debt securities	8	417,131	590,373
		77,421	79,559
Non-trading financial assets mandatorily at fair value through profit or loss			
Equity instruments	9	23,145	14,582
Debt securities	8	54,276	64,977
Financial assets at fair value through other comprehensive income		5,923,703	6,999,326
Equity instruments	9	301,011	314,235
Debt securities	8	5,622,692	6,685,091
Financial assets at amortised cost		188,068,718	182,173,414
Debt securities	8	21,453,031	15,190,212
Loans and advances	11	166,615,687	166,983,202
Derivatives	10, 12	6,672,213	1,904,380
Total credit risk due to financial assets		201,159,186	191,749,310
Loan commitments given	26	27,460,615	28,403,146
Financial guarantees given	26	2,086,993	2,034,143
Other commitments given	26	9,674,382	7,384,863
Total off-balance sheet exposures		39,221,990	37,822,152
Total maximum credit risk exposure		240,381,176	229,571,462

Schedule V to these consolidated annual financial statements shows quantitative data relating to credit risk exposures by geographical area and activity sector.

4.4.2.4. Credit risk mitigation

Credit risk exposures are rigorously managed and monitored through regular assessments of borrowers' solvency and their ability to honour their payment obligations undertaken with the Group, adjusting the exposure limits established for each counterparty to levels that are deemed to be acceptable. It is also normal practice to mitigate credit risk exposures by requiring borrowers to provide collateral or other guarantees to the Bank.

Generally, these take the form of collateral, mainly mortgages on properties used as housing, whether completed or under construction. The Group also accepts, although to a lesser degree, other types of collateral, such as mortgages on retail properties, industrial warehouses, etc. and financial assets. Another credit risk mitigation technique commonly used by the Institution is the acceptance of sureties, in this case subject to the guarantor presenting a certificate of good standing.

All of these mitigation techniques are established ensuring their legal certainty, i.e. under legal contracts that are legally binding on all parties and which are enforceable in all relevant jurisdictions, thus guaranteeing that the collateral can be seized at any time. The entire process is subject to an internal verification of the legal adequacy of these contracts, and legal opinions of international specialists can be requested and applied where these contracts have been entered into under foreign legislation.

All collateral is executed before a notary public through a public document, thus ensuring its enforceability before third parties. In the case of property mortgages, these public documents are also registered with the corresponding land registries, thus gaining constitutive effectiveness before third parties. In the case of pledges, the pledged items are generally deposited with the Institution. Unilateral cancellation by the obligor is not permitted, and the guarantee remains valid until the debt has been fully repaid.

Personal guarantees or sureties are established in favour of the Institution and, except in certain exceptional cases, these are also executed before a notary through a public document, to vest the agreement with the highest possible legal certainty and to allow legal claims to be filed through executive proceedings in the event of default. They constitute a credit right with respect to the guarantor that is irrevocable and payable on first demand.

The Group has not received any significant guarantees which it is authorised to sell or pledge, irrespective of any non-payment by the owner of the referred guarantees, except for those intrinsic in treasury activities, which are mostly repos with maturities of no more than six months, therefore their fair value does not differ substantially from their carrying amount (see Note 6). The fair value of the assets sold in connection with repos is included under the heading “Financial liabilities held for trading” as part of the short positions of securities.

Assets assigned under the same transactions amounted to 417,982 thousand euros (694,554 thousand euros as at 31 December 2021) and are included by type under the repos heading in Notes 18 and 19.

There have been no significant changes in Banco de Sabadell’s policies on the topic of guarantees during this year. Neither have there been any significant changes in the quality of the Group’s guarantees with respect to the previous year.

The values of the guarantees received to ensure collection, broken down into collateral and other guarantees, as at 31 December 2022 and 2021 are as follows:

Thousand euro	2022	2021
Value of collateral	97,340,958	97,877,766
<i>Of which: securing stage 2 loans</i>	8,515,648	6,740,264
<i>Of which: securing stage 3 loans</i>	2,046,793	2,291,061
Value of other guarantees	17,180,550	17,315,699
<i>Of which: securing stage 2 loans</i>	2,635,673	2,886,141
<i>Of which: securing stage 3 loans</i>	1,080,167	604,726
Total value of guarantees received	114,521,508	115,193,465

The main risk concentration in relation to all of these types of collateral and credit enhancements corresponds to the use of mortgage guarantees as a credit risk mitigation technique in exposures of loans intended for the financing or construction of housing or other types of real estate. On a like-for-like basis, as at 31 December 2022, the exposure to home equity loans and credit lines represented 57.2% of total gross performing lending items granted to customers (58.6% as at 31 December 2021).

In addition, the Bank carried out three synthetic securitisation transactions in 2022, 2021 and 2020.

In September 2022, the Bank carried out a synthetic securitisation transaction of a 1 billion euro portfolio of project finance loans, having received an initial guarantee from Sabadell Boreas 1-2022 Designated Activity Company for 105 million euros (103 million euros as at 31 December 2022), which covers losses of up to 10.5% on the securitised portfolio.

In September 2021, the Bank carried out a synthetic securitisation of a 1.5 billion euro portfolio of loans to SMEs and mid-corporates, having received an initial guarantee from Chorus Capital Management in the amount of 75 million euros (50 million euros as at 31 December 2022), covering losses of between 0.9% and 5.9% on the securitised portfolio.

In June 2020, the Bank carried out a synthetic securitisation of a 1.6 billion euro portfolio of loans to SMEs and mid-corporates, having received an initial guarantee from the European Investment Fund in the amount of 96 million euros (63 million euros as at 31 December 2022), covering losses of between 1.5% and 7.5% on the securitised portfolio.

These transactions did not involve a substantial transfer of the risks and rewards from the assets concerned and, consequently, did not entail the derecognition of those assets from the consolidated balance sheet.

These transactions are given preferential treatment for capital consumption purposes, in accordance with Article 270 of Regulation (EU) 2017/2401 (see Note 5).

In the case of market transactions, counterparty credit risk is managed as explained in section 4.4.2.7 of these consolidated annual financial statements.

4.4.2.5. Credit quality of financial assets

As stated earlier, in general terms, the Group uses internal models to rate most borrowers (or transactions) through which credit risk is incurred. These models have been designed considering the best practices proposed by the New Basel Capital Accord (NBCA). However, not all portfolios in which credit risk is incurred have internal models, partly due to the fact that these models can only be reasonably designed if a minimum level of experience with cases of non-payment is available. The standardised approach is followed for these portfolios, for solvency purposes.

The exposure percentage calculated by the Group using internal models, for solvency purposes, is 83%. This percentage has been calculated following the specifications of the ECB guide to internal models (Article 26a) published in October 2019.

The breakdown of total exposures, rated based on the various internal rating levels, as at 31 December 2022 and 2021 is as follows:

Million euro

Breakdown of exposure by rating	Loans assigned rating/score					Total
	2022					
	Note	Stage 1	Stage 2	Stage 3	Of which: purchased credit-impaired	
AAA/AA		20,031	202	7	—	20,240
A		10,905	52	—	—	10,957
BBB		86,498	182	—	—	86,680
BB		30,428	474	1	2	30,903
B		20,728	3,843	4	68	24,575
Other		4,022	8,929	5,414	54	18,365
No rating/score assigned		3,531	20	35	—	3,586
Total gross value	11	176,143	13,702	5,461	124	195,306
Impairment allowances	11	(347)	(480)	(2,196)	(1)	(3,023)
Total net amount		175,796	13,222	3,265	123	192,283

Million euro

Breakdown of exposure by rating	Loans assigned rating/score					Total
	2021					
	Note	Stage 1	Stage 2	Stage 3	Of which: purchased credit-impaired	
AAA/AA		18,848	140	11.34	—	19,000
A		12,337	38	0.03	—	12,375
BBB		86,246	220	4.33	1	86,470
BB		23,747	520	2	2	24,269
B		21,667	3,827	18.62	74	25,512
Other		3,979	7,496	5,662	83	17,137
No rating/score assigned		4,515	86	—	—	4,601
Total gross value	11	171,339	12,327	5,698	160	189,364
Impairment allowances	11	(378)	(494)	(2,432)	(1)	(3,304)
Total net amount		170,962	11,833	3,266	159	186,060

The breakdown of total off-balance sheet exposures, rated based on the various internal rating levels, as at 31 December 2022 and 2021 is as follows:

Million euro

Breakdown of exposure by rating	Loans assigned rating/score					Total
	2022					
	Note	Stage 1	Stage 2	Stage 3	Of which: purchased credit-impaired	
AAA/AA		1,433	64	—	—	1,497
A		1,235	—	—	—	1,235
BBB		11,866	40	1	—	11,907
BB		9,791	164	3	—	9,958
B		11,585	867	5	24	12,457
Other		693	959	397	—	2,049
No rating/score assigned		117	2	—	—	119
Total gross value	26	36,720	2,096	406	24	39,222
Provisions recognised on liabilities side of the balance sheet	26	(51)	(30)	(96)	—	(177)
Total net amount		36,669	2,066	310	24	39,045

Million euro

Breakdown of exposure by rating	Loans assigned rating/score					Total
	2021					
	Note	Stage 1	Stage 2	Stage 3	Of which: purchased credit-impaired	
AAA/AA		1,598	38	—	—	1,636
A		2,546	4	—	—	2,550
BBB		10,642	106	4.35	—	10,752
BB		9,095	158	2.86	0.27	9,255
B		10,323	684	1.65	24	11,009
Other		406	587	550	1	1,543
No rating/score assigned		725	352	—	—	1,077
Total gross value	26	35,335	1,928	559	25	37,822
Provisions recognised on liabilities side of the balance sheet	26	(52)	(18)	(121)	—	(191)
Total net amount		35,283	1,910	438	25	37,631

Further details on the credit rating and credit scoring models are included in section 4.4.2.2 of these consolidated annual financial statements.

For borrowers included within business in Spain whose coverage has been assessed using internal models as at 31 December 2022 and 2021, the following table shows the breakdown by segment of the average EAD-weighted PD and LGD parameters, distinguishing between on-balance sheet and off-balance sheet exposures, and the stage in which the transactions are classified according to their credit risk:

%

	31/12/2022							
	Average ECL parameters for on-balance sheet exposures							
	Stage 1		Stage 2		Stage 3		Total portfolio	
	PD	LGD	PD	LGD	PD	LGD	PD	LGD
Loans and advances	1.00%	20.70%	21.00%	20.30%	100.00%	56.10%	4.30%	21.20%
Other financial corporations	0.90%	21.10%	20.50%	17.70%	100.00%	84.70%	1.70%	21.10%
Non-financial corporations	1.60%	30.90%	15.70%	25.20%	100.00%	60.60%	4.90%	30.80%
Households	0.50%	13.00%	28.40%	13.50%	100.00%	52.60%	3.90%	13.70%

%

31/12/2022								
Average ECL parameters for off-balance sheet exposures								
	Stage 1		Stage 2		Stage 3		Total portfolio	
	PD	LGD	PD	LGD	PD	LGD	PD	LGD
Loans and advances	1.40%	32.50%	16.20%	34.20%	100.00%	73.50%	2.10%	32.60%
Other financial corporations	1.20%	35.30%	21.00%	27.10%	0.00%	0.00%	1.30%	35.30%
Non-financial corporations	1.50%	30.80%	15.60%	34.50%	100.00%	74.00%	2.50%	31.10%
Households	0.80%	36.70%	21.40%	31.70%	100.00%	55.00%	1.30%	36.60%

%

31/12/2021								
Average ECL parameters for on-balance sheet exposures								
	Stage 1		Stage 2		Stage 3		Total portfolio	
	PD	LGD	PD	LGD	PD	LGD	PD	LGD
Loans and advances	1.00%	20.10%	17.90%	21.20%	100.00%	42.40%	6.70%	21.20%
Other financial corporations	1.00%	22.10%	18.80%	20.60%	100.00%	60.20%	2.30%	22.20%
Non-financial corporations	1.70%	29.40%	13.20%	24.30%	100.00%	47.10%	6.90%	29.40%
Households	0.50%	13.20%	28.10%	14.30%	100.00%	39.40%	6.70%	14.50%

%

31/12/2021								
Average ECL parameters for off-balance sheet exposures								
	Stage 1		Stage 2		Stage 3		Total portfolio	
	PD	LGD	PD	LGD	PD	LGD	PD	LGD
Loans and advances	1.30%	32.00%	9.90 %	29.30%	100.00%	27.80%	2.20%	31.90%
Other financial corporations	1.50%	31.80%	13.20 %	32.00%	100.00%	19.50%	1.60%	31.80%
Non-financial corporations	1.50%	30.40%	8.60 %	29.90%	100.00%	28.20%	2.40%	30.30%
Households	0.80%	36.70%	24.40 %	21.50%	100.00%	31.00%	1.20%	36.50%

The development of new LGD models began in 2020 and continued in 2021 and 2022 in order to renew previous models that were in use since the implementation of IFRS 9 and to improve some aspects that had been previously identified, during either the ongoing monitoring carried out by Banco Sabadell or during the independent reviews conducted by the internal control units (Models Validation and Internal Audit). The adjustment processes follow the internal governance arrangements established for their validation, review and approval by the corresponding units. The new developments primarily affect the LGD of the portfolio in non-performing status (stage 3), in which an increase in LGD is essentially recorded for the exposures that have been in default status the longest.

Details of the PD and LGD parameters for exposures in the business of the subsidiary TSB as at 31 December 2022 and 2021 are shown below:

%

31/12/2022								
Average ECL parameters for on-balance sheet exposures								
	Stage 1		Stage 2		Stage 3		Total portfolio	
	PD	LGD	PD	LGD	PD	LGD	PD	LGD
Secured loans	0.34%	3.48%	3.50%	7.97%	100.00%	3.07%	1.44%	4.01%
Credit cards	0.89%	84.08%	5.47%	78.63%	100.00%	51.72%	3.71%	82.53%
Current accounts	0.50%	69.85%	8.76%	67.52%	100.00%	56.78%	3.58%	69.35%
Loans	1.36%	81.02%	5.96%	82.23%	100.00%	80.45%	3.99%	81.21%

%

31/12/2022								
Average ECL parameters for off-balance sheet exposures								
	Stage 1		Stage 2		Stage 3		Total portfolio	
	PD	LGD	PD	LGD	PD	LGD	PD	LGD
Secured loans	0.83%	4.31%	0.00%	0.00%	0.00%	0.00%	0.83%	4.31%
Credit cards	0.89%	84.08%	5.47%	78.63%	100.00%	51.72%	3.71%	82.53%
Current accounts	0.50%	69.85%	8.76%	67.52%	100.00%	56.78%	3.58%	69.35%
Loans	1.36%	81.02%	5.96%	82.23%	100.00%	80.45%	3.99%	81.21%

%

31/12/2021								
Average ECL parameters for on-balance sheet exposures								
	Stage 1		Stage 2		Stage 3		Total portfolio	
	PD	LGD	PD	LGD	PD	LGD	PD	LGD
Secured loans	0.21%	2.41%	4.61%	4.48%	100.00%	1.89%	1.28%	2.21%
Credit cards	1.00%	84.90%	9.25%	83.70%	100.00%	67.76%	3.80%	84.44%
Current accounts	0.82%	69.65%	7.71%	70.40%	100.00%	68.56%	3.52%	69.68%
Loans	2.21%	81.35%	8.28%	82.70%	100.00%	80.75%	4.58%	81.52%

%

31/12/2021								
Average ECL parameters for off-balance sheet exposures								
	Stage 1		Stage 2		Stage 3		Total portfolio	
	PD	LGD	PD	LGD	PD	LGD	PD	LGD
Secured loans	0.55%	4.89%	0.00%	0.00%	0.00%	0.00%	0.55%	4.89%
Credit cards	1.00%	84.90%	9.25%	83.70%	100.00%	67.76%	3.80%	84.44%
Current accounts	0.82%	69.65%	7.71%	70.40%	100.00%	68.56%	3.52%	69.68%
Loans	2.21%	81.35%	8.28%	82.70%	100.00%	80.75%	4.58%	81.52%

In the case of the United Kingdom, the parameters in general show an improvement compared to 2021, in line with the economic recovery in 2022 compared to previous years, in which negative impacts on PD and LGD materialised as a result of the economic situation.

During 2022, stage 3 assets have decreased by 389 million euros, consequently reducing the Group's NPL ratio, as shown in the table below:

%

	2022	2021
NPL ratio (*)	3.41	3.65
NPL coverage ratio (*)	39.42	41.16
NPL (stage 3) coverage ratio, with total provisions (*)	55.04	56.34

(*) The NPL ratio ex-TSB stands at 4.13%, the NPL (stage 3) coverage ratio stands at 42.25% and the NPL (stage 3) coverage ratio with total provisions stands at 56.41% (4.44%, 44.66% and 58.45%, respectively, in 2021).

The NPL ratio, broken down by lending segment as at 31 December 2022 and 2021, is set out below:

%

	2022	Proforma 2022 (*)	2021	Proforma 2021 (*)
Real estate development and construction	6.95	6.99	9.79	9.86
Non-real estate construction	7.06	7.07	11.95	11.97
Corporates	2.02	2.02	2.35	2.35
SMEs and self-employed	7.62	7.66	6.40	6.43
Individuals with 1st mortgage guarantee	2.08	2.86	2.50	3.60
Banco Sabadell Group NPL ratio	3.41	4.13	3.65	4.44

(*) Corresponds to the NPL ratio excluding TSB.

A more detailed quantitative breakdown of allowances and assets classified as stage 3 can be found in Note 11, and a more detailed breakdown of refinancing and restructuring transactions is included in Schedule V.

4.4.2.6. Concentration risk

Concentration risk refers to the level of exposure to a series of economic groups which could, given the size of that exposure, give rise to significant credit losses in the event of an adverse economic situation.

Exposures can be concentrated within a single customer or economic group, or within a given sector or geography.

Concentration risk can be caused by two risk subtypes:

- Individual concentration risk: this refers to the possibility of incurring significant credit losses as a result of maintaining large exposures to specific customers, either to a single customer or to an economic group.
- Sector concentration risk: imperfect diversification of systematic components of risk within the portfolio, which can be sector-based factors, geographical factors, etc.

Banco Sabadell has a series of specific tools and policies in place to ensure its concentration risk is managed efficiently:

- Quantitative metrics from the Risk Appetite Statement and their subsequent monitoring, including both first-tier (Board) metrics and second-tier (Executive) metrics.
- Individual limits for risks and customers considered to be significant, which are set by the Delegated Credit Committee.
- A structure of conferred powers which requires transactions with significant customers to be approved by the Credit Operations Committee, or even by the Delegated Credit Committee.

In order to control its concentration risk, Banco Sabadell Group has deployed the following critical control parameters:

Consistency with the Global Risk Framework

The Group ensures that its concentration risk exposures are consistent with its concentration risk tolerance defined in the RAS. Overall concentration risk limits and adequate internal controls are in place to ensure that concentration risk exposures do not go beyond the risk appetite levels established by the Group.

Establishment of limits and metrics for concentration risk control

Given the nature of the Group's activity and its business model, concentration risk is primarily linked to credit risk, and various metrics are in place, along with their associated limits.

Credit risk exposure limits are set based on the Institution's past loss experience, seeking to ensure that exposures are in line with the Group's level of capitalisation as well as the expected level of profitability under different scenarios.

The metrics used to measure such levels, as well as appetite limits and tolerance thresholds for the identified risks, are described in the RAS metrics.

Risk control monitoring and regular reporting

Banco Sabadell Group ensures that concentration risk is monitored on a regular basis, in order to enable any weaknesses in the mechanisms implemented to manage this risk to be quickly identified and resolved. This information is also reported to the Board of Directors on a recurring basis in accordance with the established risk governance arrangements.

Action plans and mitigation techniques

When dealing with exceptions to internally established limits, the criteria based on which such exceptions can be approved must be included.

The Group will take any measures necessary to match the concentration risk to the levels approved in the RAS by the Board of Directors.

Exposure to customers or significant risks

As at 31 December 2022 and 2021, there were no borrowers with an approved lending transaction that individually exceeded 10% of the Group's own funds.

Country risk: geographical exposure to credit risk

Country risk is defined as the risk associated with a country's debts, taken as a whole, due to factors inherent to the sovereignty and the economic situation of a country, i.e. for circumstances other than regular credit risk. It manifests itself in the eventual inability of obligors to honour their foreign currency payment obligations undertaken with external creditors due to, among other reasons, the country preventing access to that foreign currency, the inability to transfer it, or the non-enforceability of legal actions against borrowers for reasons of sovereignty, war, expropriation or nationalisation.

Country risk not only affects debts undertaken with a state or entities guaranteed by it, but also all private debtors that belong to that state and who, for reasons outside their control and not at their volition, are generally unable to satisfy their debts.

An exposure limit is set for each country which is applicable across the whole of Banco Sabadell Group. These limits are approved by the Board of Directors and the corresponding decision-making bodies, as per their conferred powers, and they are continuously monitored to ensure that any deterioration in the economic, political or social prospects of a country can be detected in good time.

The main component of the procedure for the acceptance of country risk and financial institution risk is the structure of limits for different metrics. This structure is used to monitor the various risks and it is also used by Senior Management and the delegated bodies to establish the Group's risk appetite.

Different indicators and tools are used to manage country risk: credit ratings, credit default swaps, macroeconomic indicators, etc.

Schedule V includes quantitative data relating to the breakdown of the concentration of risks by activity and on a global scale.

Exposure to sovereign risk and exposure to the construction and real estate development sector

Schedule V includes quantitative data relating to sovereign risk exposures and exposures to the construction and real estate development sector.

4.4.2.7. Counterparty credit risk

This heading considers credit risk associated with activities in financial markets involving specific transactions that have an associated counterparty credit risk. Counterparty credit risk is a type of credit risk that refers to the risk of a counterparty defaulting before definitively settling cash flows of either a transaction with derivatives or a transaction with a repurchase commitment, with deferred settlements or collateral financing.

The amount exposed to a potential default by the counterparty does not correspond to the notional amount of the contract, instead, it is uncertain and depends on market price fluctuations until the maturity or settlement of the financial contracts.

Exposure to counterparty credit risk is mainly concentrated in customers, financial institutions and central counterparty clearing houses.

The following tables show the breakdown of exposures by credit rating and by the geographical areas in which the Group operates, as at 31 December 2022 and 31 December 2021:

%

2022															
AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	Other	TOTAL
17.4%	0.0%	2.4%	31.0%	14.5%	11.8%	9.0%	4.6%	2.5%	1.9%	2.2%	1.5%	0.7%	0.1%	0.4%	100%

%

2021															
AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	Other	TOTAL
0.0%	0.0%	18.2%	30.1%	15.8%	0.9%	8.2%	8.9%	5.7%	1.9%	2.2%	2.4%	1.3%	0.6%	3.8%	100%

%	2022	2021
Eurozone	70.7%	71.6%
Rest of Europe	24.5%	18.3%
United States and Canada	3.0%	6.6%
Rest of the world	1.8%	3.5%
Total	100%	100%

As can be seen in the table, the risk is concentrated in counterparties with a high credit quality, with 86% of the risk relating to counterparties rated A, whereas in 2021 this concentration was 73%.

In 2016, under the European Market Infrastructure Regulation (EMIR) (Regulation 648/2012), the obligation to settle and clear certain over-the-counter (OTC) derivatives through central counterparty clearing houses (CCPs) began to apply to the Group. For this reason, the derivatives arranged by the Group and subject to the foregoing are channelled via these agents. At the same time, the Group has improved the standardisation of OTC derivatives with a view to fostering the use of clearing houses. The exposure to risk with CCPs largely depends on the value of the deposited guarantees.

With regard to derivative transactions in organised markets (OMs), based on management criteria, it is considered that there is no exposure, given that there is no risk as the OMs act as counterparties in the transactions and a daily settlement and guarantee mechanism is in place to ensure the transparency and continuity of the activity. In OMs the exposure is equivalent to the deposited guarantees.

The breakdown of transactions involving derivatives in financial markets, according to whether the counterparty is another financial institution, a clearing house or an organised market, is shown below:

Thousand euro	2022	2021
Transactions with organised markets	979,533	1,999,937
OTC transactions	183,975,718	149,279,832
<i>Settled through clearing houses</i>	114,649,971	96,403,417
Total	184,955,251	151,279,769

There are currently no transactions that meet the accounting criteria for offsetting transactions involving financial assets and financial liabilities on the balance sheet. The netting of derivative and repo transactions is only material when calculating the amount pending collateralisation, and it is not material in terms of their presentation on the balance sheet.

The following tables show the aggregate amount reflected on the balance sheet for the financial instruments subject to a master netting and collateral agreement for 2022 and 2021:

Financial assets	2022				
	Financial assets subject to collateral agreements				
	Amount recognised on balance sheet	Amount offset (for collateral calculations only)	Guarantee received		Net amount
			Cash	Securities	
(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	
Derivatives	6,445,760	3,603,978	2,249,400	129,934	462,448
Repos	3,114,965	—	23,590	3,008,362	83,013
Total	9,560,725	3,603,978	2,272,990	3,138,296	545,461

Thousand euro

	2022				
	Financial liabilities subject to collateral agreements				
	Amount recognised on balance sheet	Amount offset (for collateral calculations only)	Guarantee given		Net amount
			Cash	Securities	
(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	
Financial liabilities					
Derivatives	4,090,024	3,603,978	574,218	489,144	(577,316)
Reverse repos	8,528,435	—	126,059	8,819,189	(416,813)
Total	12,618,459	3,603,978	700,277	9,308,333	(994,129)

Thousand euro

	2021				
	Financial assets subject to collateral agreements				
	Amount recognised on balance sheet	Amount offset (for collateral calculations only)	Guarantee received		Net amount
			Cash	Securities	
(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	
Financial assets					
Derivatives	1,603,160	1,338,552	278,944	—	(14,336)
Repos	4,935,785	—	22,350	4,927,409	(13,974)
Total	6,538,945	1,338,552	301,294	4,927,409	(28,310)

Thousand euro

	2021				
	Financial liabilities subject to collateral agreements				
	Amount recognised on balance sheet	Amount offset (for collateral calculations only)	Guarantee given		Net amount
			Cash	Securities	
(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	
Financial liabilities					
Derivatives	1,744,351	1,338,552	596,202	159,273	(349,676)
Reverse repos	5,454,650	—	37,643	5,680,214	(263,207)
Total	7,199,001	1,338,552	633,845	5,839,487	(612,883)

The values of derivative financial instruments which are settled through a clearing house as at 31 December 2022 and 2021 are indicated hereafter:

Thousand euro

	2022	2021
Derivative financial assets settled through a clearing house	5,367,736	1,148,242
Derivative financial liabilities settled through a clearing house	3,204,917	949,365

The philosophy behind counterparty credit risk management is consistent with the business strategy, seeking to ensure the creation of value at all times whilst maintaining a balance between risk and return. To this end, criteria have been established for controlling and monitoring counterparty credit risk arising from activity in financial markets, which ensure that the Bank can carry out its business activity whilst adhering to the risk thresholds approved by the Board of Directors.

The approach for quantifying counterparty credit risk exposure takes into account current and future exposure. Current exposure represents the cost of substituting a transaction at market value in the event of a default by a counterparty. To calculate it, the current or Mark to Market (MtM) value of the transaction is required. The future exposure represents the risk that a transaction could potentially represent over a certain period of time, given the characteristics of the transaction and the market variables on which it depends. In the case of transactions carried out under a collateral agreement, the future exposure represents the possible fluctuation of the MtM between the time of default and the substitution of such transactions in the market. If the transaction is not carried out under a collateral agreement, it represents the possible changes in MtM throughout the life of the transaction.

Each day at close of business, all of the exposures are recalculated in accordance with the transaction inflows and outflows, changes in market variables and risk mitigation mechanisms established by the Group.

Exposures are thus subject to daily monitoring and they are controlled in accordance with the limits approved by the Board of Directors. This information is included in risk reports for disclosure to the departments and areas responsible for their management and monitoring.

With regard to counterparty credit risk, the Group has different mitigation techniques. The main techniques are:

- Netting agreements for derivatives (ISDA and Spain's Framework Agreement for Financial Transactions, Contrato Marco de Operaciones Financieras, or CMOF).
- Variation margin collateral agreements for derivatives (CSA and Annex 3 - CMOF), repos (GMRA, EMA) and securities lending (GMSLA).
- Initial margin collateral agreements for derivatives (CTA and SA).

Netting agreements allow positive and negative MtM to be aggregated for transactions with a single counterparty, in such a way that in the event of default, a single payment or collection obligation is established in relation to all of the transactions closed with that counterparty.

By default, the Group has netting agreements with all of the counterparties that wish to trade in derivatives.

Variation margin collateral agreements, as well as including the netting effect, also include the regular exchange of guarantees which mitigate the current exposure with a counterparty in respect of the transactions subject to such agreements.

In order to trade in derivatives or repos with financial institutions, the Group requires variation margin collateral agreements to be in place. Furthermore, for derivative transactions with these institutions, the Group is obliged to exchange variation margin collateral with financial counterparties pursuant to Delegated Regulation (EU) 2251/2016. The Group's standard variation margin collateral agreement, which complies with the aforesaid regulation, is bilateral (i.e. both parties are obliged to deposit collateral) and includes the daily exchange of guarantees in the form of cash and in euros.

Initial margin collateral agreements include the provision of guarantees to mitigate the potential future exposure with a counterparty in respect of the transactions subject to such agreements.

The Group has initial margin collateral agreements in place for derivative transactions with financial institutions pursuant to Delegated Regulation (EU) 2251/2016.

4.4.2.8 Assets pledged in financing activities

As at 31 December 2022 and 2021, there were certain financial assets pledged in financing operations, i.e. offered as collateral or guarantees for certain liabilities. These assets correspond mainly to loans linked to the issuance of mortgage covered bonds, public sector covered bonds, TSB covered bonds and long-term asset-backed securities (see Note 20 and Schedules II and III). The remaining pledged assets are debt securities which are submitted in transactions involving assets sold under repurchase agreements, pledged collateral (loans or debt instruments) to access certain financing operations with central banks and all types of collateral provided to secure derivative transactions.

Royal Decree-Law 24/2021, of 2 November, was published on 3 November 2021 and transposes, in its Book One, Directive (EU) 2019/2162 on the issue of covered bonds and covered bond public supervision. The aim of this transposition is to harmonise mortgage market regulations in member states and to make it easier for credit institutions to access funding. In particular, this directive establishes the different types of covered bonds, the regime for their issuance, disclosure obligations and, lastly, it establishes effective mechanisms for investor protection. Its entry into force on 8 July 2022 entails the repeal of Law 2/1981 of 25 March on the regulation of the mortgage market.

Detailed information on home equity loans granted in Spain included in the "Loans and advances – Customers" portfolio and linked to the issuance of mortgage covered bonds can be found in Schedule III on "Information required to be kept by issuers of mortgage market securities".

The issuing entity Banco Sabadell did not issue any public sector covered bonds in either 2022 or 2021.

The Group has used part of its portfolio of loans and similar credit in fixed-income securities by transferring assets to various securitisation funds created for this purpose. Under current regulations, securitisations in which there is no significant risk transfer cannot be derecognised from the balance sheet.

The balance of the financial assets securitised under these programmes by the Group, as well as other financial assets transferred, depending on whether they have been derecognised or retained in full on the consolidated balance sheet, is as follows:

Thousand euro	2022	2021
Fully derecognised from the balance sheet:	693,853	808,862
Securitised mortgage assets	116,868	118,986
Other securitised assets	319,468	397,367
Other financial assets transferred	257,517	292,509
Fully retained on the balance sheet:	7,753,225	6,950,706
Securitised mortgage assets	7,087,569	6,721,857
Other securitised assets	665,656	228,849
Total	8,447,078	7,759,568

The assets and liabilities associated with securitisation funds of assets originated after 1 January 2004, and for which inherent risks and rewards of ownership have not been transferred to third parties, have been retained on the consolidated balance sheet. As at 31 December 2022 and 2021, there was no significant financial aid from the Group for unconsolidated securitisations.

Schedule II to these consolidated annual financial statements includes certain information regarding the securitisation funds originated by the Group.

4.4.3. Financial risks

Financial risk is defined as the possibility of obtaining inadequate returns or having insufficient levels of liquidity that prevent an institution from meeting future requirements and expectations.

4.4.3.1 Liquidity risk

Liquidity risk refers to the possibility of losses being incurred as a result of the Institution being unable, albeit temporarily, to honour payment commitments due to a lack of liquid assets or because it is unable to access the markets to refinance debts at a reasonable cost. This risk may be associated with factors of a systemic nature or specific to the Institution itself.

In this regard, the Group aims to maintain liquid assets and a funding structure that, in line with its strategic objectives and based on its Risk Appetite Statement, allow it to honour its payment commitments as usual and at a reasonable cost, both under business-as-usual conditions and in a stress situation caused by systemic and/or idiosyncratic factors.

The fundamental pillars of Banco Sabadell's governance structure for liquidity management and control are the direct involvement of the governing body, Board committees and management bodies, following the model of three lines of defence, and a clear segregation of duties, as well as a clear-cut structure of responsibilities.

Liquidity management

Banco Sabadell's liquidity management seeks to ensure funding for its business activity at an appropriate cost and term while minimising liquidity risk. The Institution's funding policy focuses on maintaining a balanced funding structure, based mainly on customer deposits, and it is supplemented with access to wholesale markets that allows the Group to maintain a comfortable liquidity position at all times.

The Group follows a structure based on Liquidity Management Units (LMUs) to manage its liquidity. Each LMU is responsible for managing its own liquidity and for setting its own metrics to control liquidity risk, working together with the Group's corporate functions. At present, these LMUs are Banco Sabadell (includes Banco de Sabadell, S.A., which incorporates activity in foreign branches, as well as the business in Mexico of Banco de Sabadell, S.A., I.B.M. (IBM) and Sabcapital S.A. de C.V., SOFOM, E.R. (SOFOM)) and TSB.

In order to achieve these objectives, the Group's current liquidity risk management strategy is based on the following principles and pillars, in line with the LMUs' retail business model and the defined strategic objectives:

- Risk governance and involvement of the Board of Directors and Senior Management in managing and controlling liquidity risk. The Board of Directors has the highest level of responsibility for the oversight of liquidity risk, while the management bodies of the LMUs are in charge of transposing these strategies to their local areas of activity.
- Integration of the risk culture, based on prudent liquidity risk management and clear and consistent definitions of their terminology, and on its alignment with the Group's business strategy through the established risk appetite.
- Clear segregation of responsibilities and duties between the different areas and bodies within the organisation, with a clear-cut distinction between each of the three lines of defence, providing independence in the evaluation of positions and in risk assessment and control.
- Implementation of best practices in liquidity risk management and control, ensuring not only compliance with regulatory requirements but also, under a criterion of prudence, the availability of sufficient liquid assets to overcome possible stress events.
- Decentralised liquidity management system for the more significant units but with a centralised risk oversight and management system.
- Sound processes for the identification, measurement, management, control and disclosure of the different liquidity sub-risks to which the Group is exposed.
- Existence of a transfer pricing system to transfer the cost of funding.
- Balanced funding structure with a predominance of customer deposits.
- Ample base of unencumbered liquid assets that can be used immediately to generate liquidity and which comprise the Group's first line of liquidity.
- Diversification of funding sources, with controlled use of short-term wholesale funding without having to depend on individual fund suppliers.
- Self-funding by the main banking subsidiaries outside Spain.
- Oversight of the balance sheet volume being used as collateral in funding operations.
- Maintenance of a second line of liquidity comprising mainly the issuing capacity of covered bonds or assets prepositioned in central banks and not considered in the first line of liquidity.
- Holistic overview of risk, through first- and second-tier risk taxonomies, and complying with regulatory requirements, recommendations and guidelines.
- Alignment with the interests of stakeholders through regular public disclosure of liquidity risk information.
- Availability of a Liquidity Contingency Plan.

In 2022, the mitigating measures introduced by central banks following the outbreak of Covid-19 were partially discontinued; however, some measures are still in place, including support for banks' loan transactions, allowing them to accept a wider range of credit claims as collateral, and the partial reduction of the temporary collateral haircuts, among others.

Tools/metrics for monitoring and controlling liquidity risk management

Banco Sabadell Group has a system of metrics and thresholds which are provided in the RAS and which define the appetite for liquidity risk, previously approved by the Board of Directors. This system enables liquidity risk to be assessed and monitored, ensuring the achievement of strategic objectives, adherence to the risk profile, as well as compliance with regulations and supervisory guidelines. Within the Group-level monitoring of liquidity metrics, there are metrics established at the Group level and calculated on a consolidated basis, metrics established at the Group level and rolled out to each Group LMU, as well as metrics established at the LMU level to reflect specific local characteristics.

Both the metrics defined in the Banco Sabadell Group RAS and those defined in the local RAS of subsidiaries are subject to governance arrangements relating to the approval, monitoring and reporting of threshold breaches, as well as remediation plans established in the RAF on the basis of the hierarchical level of each metric (these are classified into three tiers).

It should be mentioned that the Group has designed and implemented a system of early warning indicators (EWIs) at the LMU level, which includes market and liquidity indicators adapted to the funding structure and business model of each LMU. The rollout of these indicators at the LMU level complements the RAS metrics and allows tensions in the local liquidity position and funding structure to be detected early, thereby making it easier to take corrective measures and actions and reducing the risk of contagion between the different management units.

The risk of each LMU is also monitored on a daily basis through the Structural Treasury Report, which measures the daily changes in the funding needs of the balance sheet, the daily changes in the outstanding balance of transactions in capital markets, as well as the daily changes in the first line of liquidity maintained by each LMU.

The metrics reporting and control framework involves, among other things:

- Monitoring the RAS metrics and their thresholds on a consolidated basis, as well as those established for each LMU, in line with the established monitoring frequency.
- Reporting on the relevant set of metrics to the governing body, Board committees and management bodies, depending on the tiers into which those metrics have been classified.
- In the event a threshold breach is detected, activating the communication protocols and necessary plans for its resolution.

Within the Group's overall budgeting process, Banco Sabadell plans its liquidity and funding requirements over different time horizons, which it aligns with the Group's strategic objectives and risk appetite. Each LMU has a 1-year and 5-year funding plan in which they set out their potential funding needs and the strategy for their management, and they regularly analyse compliance with that plan, any deviations from the projected budget and the extent to which the plan is appropriate to the market environment.

In addition, Banco Sabadell regularly reviews the identification of potential liquidity risks and assesses their materiality. It also conducts regular liquidity stress tests, which envisage a series of stress scenarios in the short and longer term, and it analyses their impact on the liquidity position and the main metrics in order to ensure that the existing exposures are consistent at all times with the established liquidity risk tolerance level.

The Institution also has an internal transfer pricing system to transfer the funding costs to business units.

Lastly, Banco Sabadell has a Liquidity Contingency Plan (LCP) in place, which sets forth the strategy for ensuring that the Institution has sufficient management capabilities and measures in place to minimise the negative impacts of a crisis situation on its liquidity position and to allow it to return to a business-as-usual situation. The LCP can be invoked in response to different crisis situations affecting either the markets or the Institution itself. The key components of the LCP include, among others: the definition of the strategy for its implementation, the inventory of measures available to generate liquidity in business-as-usual situations or in a crisis situation linked to the invocation of the LCP and a communication plan (both internal and external) for the LCP.

Residual maturity periods

The tables below show the breakdown, by contractual maturity, of certain pools of items on the consolidated balance sheet as at 31 December 2022 and 2021, under business-as-usual market conditions:

Thousand euro										
2022										
Time to maturity	On demand	Up to 1 month	1 to 3 months	3 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total
ASSETS										
Cash, balances at central banks and other demand deposits	3,681,237	37,009,112	563,743	18	1,043	51	1,206	—	3,986	41,260,395
Financial assets at fair value through other comprehensive income	—	124,536	86,954	855,454	777,596	582,648	196,407	244,104	2,934,565	5,802,264
Debt securities	—	124,536	86,954	855,454	777,596	582,648	196,407	244,104	2,754,993	5,622,692
Loans and advances	—	—	—	—	—	—	—	—	—	—
Customers	—	—	—	—	—	—	—	—	—	—
Financial assets at amortised cost	3,371,931	8,590,617	4,437,359	11,540,390	9,820,139	10,505,170	10,274,823	11,211,714	115,293,310	185,045,452
Debt securities	—	236,772	44,310	1,403,285	1,371,253	1,126,338	459,093	1,935,711	14,876,058	21,452,820
Loans and advances	3,371,932	8,353,845	4,393,049	10,137,104	8,448,886	9,378,833	9,815,730	9,276,002	100,417,252	163,592,632
Central banks	2,221	160,443	—	—	—	—	—	—	—	162,664
Credit institutions	978,063	2,341,986	428,487	753,460	131,473	83	175	34	66,525	4,700,287
Customers	2,391,648	5,851,416	3,964,561	9,383,645	8,317,413	9,378,751	9,815,555	9,275,968	100,350,726	158,729,681
Total assets	7,053,167	45,724,266	5,088,056	12,395,862	10,598,777	11,087,869	10,472,437	11,455,817	118,231,861	232,108,111
LIABILITIES										
Financial liabilities at amortised cost	119,453,858	47,461,256	4,223,087	24,152,729	12,151,025	9,370,909	3,903,867	4,233,378	7,579,822	232,529,932
Deposits	113,012,257	47,375,927	2,719,435	22,548,986	7,666,937	6,556,190	650,136	1,855,757	907,897	203,293,522
Central banks	43,223	—	—	17,223,750	4,939,290	4,974,464	—	662,961	—	27,843,687
Credit institutions	843,529	7,506,691	901,048	714,986	329,534	136,998	160,605	117,597	662,402	11,373,390
Customers	112,125,507	39,869,236	1,818,387	4,610,250	2,398,113	1,444,728	489,531	1,075,199	245,495	164,076,445
Debt securities issued	6,213	66,725	1,486,936	1,590,320	4,477,376	2,807,926	3,248,767	2,371,575	6,521,711	22,577,549
Other financial liabilities	6,435,388	18,605	16,717	13,422	6,712	6,793	4,964	6,046	150,214	6,658,861
Total liabilities	119,453,858	47,461,256	4,223,087	24,152,729	12,151,025	9,370,909	3,903,867	4,233,378	7,579,822	232,529,932
Trading and Hedging derivatives										
Receivable	—	46,863,268	9,509,600	24,047,648	22,014,057	9,609,213	9,828,147	7,123,277	33,292,235	162,287,446
Payable	—	34,864,873	10,226,762	22,347,484	25,943,323	10,464,426	9,068,820	7,440,695	40,138,871	160,495,254
Contingent risks										
Financial guarantees	33,551	39,680	102,916	389,668	188,159	163,372	58,470	50,582	1,060,594	2,086,993

(*) For details of maturities of issues aimed at institutional investors, see the section entitled "Funding strategy and evolution of liquidity in 2022" in this note.

Thousand euro

2021										
Time to maturity	On demand	Up to 1 month	1 to 3 months	3 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total
ASSETS										
Cash, balances at central banks and other demand deposits	43,287,519	5,323,980	595,040	121	7	1,476	2	1,186	3,866	49,213,196
Financial assets at fair value through other comprehensive income	—	33,689	163,585	149,509	811,365	787,051	511,205	132,308	4,280,926	6,869,637
Debt securities	—	33,689	163,585	149,509	811,365	787,051	511,205	132,308	4,096,380	6,685,091
Loans and advances	—	—	—	—	—	—	—	—	—	—
Customers	—	—	—	—	—	—	—	—	—	—
Financial assets at amortised cost	2,913,878	7,419,781	3,327,551	10,538,647	12,003,901	10,165,453	11,122,305	10,510,625	110,867,176	178,869,317
Debt securities	—	214,269	—	501,837	1,099,888	1,010,560	981,452	131,712	11,250,496	15,190,212
Loans and advances	2,913,878	7,205,512	3,327,551	10,036,810	10,904,014	9,154,893	10,140,853	10,378,913	99,616,681	163,679,105
Central banks	104,066	66,815	—	—	—	—	—	—	—	170,881
Credit institutions	806,766	3,755,350	75,104	775,331	623,260	7,714	311	44	98,060	6,141,939
Customers	2,003,046	3,383,347	3,252,447	9,261,479	10,280,754	9,147,180	10,140,543	10,378,869	99,518,621	157,366,285
Total assets	46,201,397	12,777,450	4,086,175	10,688,277	12,815,274	10,953,980	11,633,511	10,644,119	115,151,968	234,952,150
LIABILITIES										
Financial liabilities at amortised cost	112,437,439	47,456,749	4,091,224	8,649,275	32,257,737	10,991,361	9,761,839	2,538,505	6,995,092	235,179,222
Deposits	107,866,967	47,380,609	3,118,324	5,832,223	29,467,405	6,466,431	7,113,160	1,062,777	998,703	209,306,598
Central banks	1,896	159,006	—	—	26,583,000	4,960,694	6,545,435	—	—	38,250,031
Credit institutions	598,147	4,925,571	723,784	710,162	712,193	177,218	138,140	167,065	664,835	8,817,114
Customers	107,266,924	42,296,032	2,394,540	5,122,061	2,172,213	1,328,518	429,586	895,712	333,868	162,239,453
Debt securities issued	(1,090)	54,733	956,082	2,804,401	2,784,337	4,519,573	2,644,956	1,472,131	5,815,833	21,050,955
Other financial liabilities	4,571,563	21,407	16,818	12,651	5,994	5,358	3,724	3,598	180,556	4,821,669
Total liabilities	112,437,439	47,456,749	4,091,224	8,649,275	32,257,737	10,991,361	9,761,839	2,538,505	6,995,092	235,179,222
Trading and Hedging derivatives										
Receivable	—	37,657,192	12,793,414	17,066,751	11,655,363	11,102,861	17,367,136	7,210,749	35,423,997	150,277,464
Payable	—	27,076,014	11,677,128	21,519,242	16,033,022	12,528,729	17,085,968	7,210,312	37,374,924	150,505,339
Contingent risks										
Financial guarantees	1,009	42,947	71,565	321,960	133,084	78,916	44,775	34,319	1,305,569	2,034,143

In this analysis, very short-term maturities traditionally represent funding requirements, as they include continuous maturities of short-term liabilities, which in typical banking activities see higher turnover rates than assets, but as they are continuously rolled over they actually end up satisfying these requirements and at times even result in the growth of outstanding balances.

Furthermore, the Group's funding capacity in capital markets is systematically checked to ensure it can meet its short-, medium- and long-term needs.

With regard to the information included in these tables, it is worth highlighting that they show the residual term to maturity of the asset and liability positions on the balance sheet, broken down into different time brackets.

The information provided is static and does not reflect foreseeable funding needs.

It should also be noted that cash flow breakdowns in the parent company have not been deducted.

In order to present the contractual maturities of financial liabilities with certain particular characteristics, the parent company has taken the following approach:

- Transactions are placed in different time brackets according to their contractual maturity date.
- Demand liabilities are included in the “on demand” tranche, without taking into account their type (stable vs. unstable).
- There are also contingent commitments which could lead to changes in liquidity needs. These are fundamentally credit facilities with amounts undrawn by the borrowers as at the balance sheet date. The Board of Directors also establishes limits in this regard for control purposes.

- Balances related to financial guarantee contracts have been included for the parent company, assigning the maximum amount of the guarantee to the first year in which the guarantee can be enforced.
- Funding in capital markets obtained through instruments that include clauses which could lead to accelerated repayment (puttables or instruments with clauses linked to a credit rating downgrade) is reduced in line with the Group's financial liabilities. It is for this reason that the estimated impact on the parent company would not be significant.
- As at 31 December 2022 and 2021, the Group had no instruments in addition to those regulated by master agreements associated with the arrangement of derivatives and repos/reverse repos.
- The Group did not have any instruments which allow the Institution to decide whether to settle its financial liabilities using cash (or another financial asset) or through the submission of its own shares as at 31 December 2022 and 2021.

Funding strategy and evolution of liquidity in 2022

The Group's primary source of funding is customer deposits (mainly demand deposits and term deposits acquired through the branch network), supplemented with funding raised through interbank and capital markets in which the Institution has and regularly renews various short-term and long-term funding programmes in order to achieve an adequate level of diversification by type of product, term and investor. The Institution maintains a diversified portfolio of liquid assets that are largely eligible as collateral in exchange for access to funding operations with the European Central Bank (ECB).

On-balance sheet customer funds

As at 31 December 2022 and 2021, on-balance sheet customer funds broken down by maturity were as follows:

Million euro / %

	Note	2022	3 months	6 months	12 months	>12 months	No mat.
Total on-balance sheet customer funds (*)		164,140	3.9 %	1.1 %	1.9 %	3.2 %	89.9 %
Deposits with agreed maturity		15,690	39.5 %	8.2 %	19.3 %	33.0 %	— %
Sight accounts	19	147,540	— %	— %	— %	— %	100.0 %
Retail issues		910	33.9 %	58.4 %	5.6 %	2.1 %	— %

(*) Includes customer deposits (excl. repos) and other liabilities placed via the branch network: straight bonds issued by Banco Sabadell, commercial paper and others.

Million euro / %

	Note	2021	3 months	6 months	12 months	>12 months	No mat.
Total on-balance sheet customer funds (*)		162,020	3.5 %	1.4 %	1.5 %	2.7 %	90.9 %
Deposits with agreed maturity		13,623	36.7 %	13.8 %	17.1 %	32.4 %	— %
Sight accounts	19	147,268	— %	— %	— %	— %	100.0 %
Retail issues		1,129	62.9 %	33.9 %	3.2 %	— %	— %

(*) Includes customer deposits (excl. repos) and other liabilities placed via the branch network: straight bonds issued by Banco Sabadell, commercial paper and others.

Despite rising interest rates in financial markets, the composition of on-balance sheet customer funds remains the same.

Details of off-balance sheet customer funds managed by the Group and those sold but not under management are provided in Note 27 to these consolidated annual financial statements.

The Group's deposits are sold through the business units/companies of the Group (Banking Business Spain, TSB and Mexico). Details of the volumes of these business units are included in the "Business" section of the consolidated Directors' Report.

In 2022, the funding gap has widened, mainly due to a greater growth of customer funds than of lending items, thus placing the Group's Loan-to-Deposit (LtD) ratio at 95.6% as at 2022 year-end (96.3% as at 2021 year-end).

Capital markets

In 2022, the level of funding in capital markets has increased, with senior non-preferred debt being the item with the greatest net increase, in order to keep an adequate level of own funds and eligible liabilities above the applicable regulatory requirement or MREL (Minimum Requirement for own funds and Eligible Liabilities). The outstanding nominal balance of funding in capital markets, by type of product, as at 31 December 2022 and 2021, is shown below:

Million euro		2022	2021
Outstanding nominal balance		22,077	21,086
Covered Bonds		9,409	9,754
Of which: TSB		1,409	2,083
Commercial paper and ECP		7	—
Senior debt		4,440	4,335
Senior non-preferred debt		3,505	2,042
Subordinated debt and preferred securities		3,465	4,215
Asset-backed securities		1,251	738
Other		—	2

Maturities of issues in capital markets, by type of product (excluding securitisations and commercial paper), and considering their legal maturity, as at 31 December 2022 and 2021, are analysed below:

Million euro								
	2023	2024	2025	2026	2027	2028	>2028	Balance outstanding
Mortgage bonds and covered bonds (*)	1,388	2,696	836	390	1,100	1,549	1,450	9,409
Senior debt (**)	975	735	1,480	—	500	750	—	4,440
Senior non-preferred debt (**)	—	975	500	1,317	18	500	195	3,505
Subordinated debt and preferred securities (**)	—	—	—	500	—	500	2,465	3,465
Other medium/long term financial instruments (**)	—	—	—	—	—	—	—	—
Total	2,363	4,406	2,816	2,207	1,618	3,299	4,110	20,819

(*) Secured issues.

(**) Unsecured issues.

Million euro								
	2022	2023	2024	2025	2026	2027	>2027	Balance outstanding
Mortgage bonds and covered bonds (*)	1,717	1,388	2,743	836	390	1,100	1,580	9,754
Senior debt (**)	25	1,475	735	1,600	—	500	—	4,335
Senior non-preferred debt (**)	—	—	975	500	67	—	500	2,042
Subordinated debt and preferred securities (**)	—	—	—	—	500	—	3,715	4,215
Other medium/long term financial instruments (**)	—	—	2	—	—	—	—	2
Total	1,742	2,863	4,455	2,936	957	1,600	5,795	20,348

(*) Secured issues.

(**) Unsecured issues.

The Group is an active participant in capital markets and has a number of funding programmes in operation, with a view to diversifying its different funding sources.

In terms of short-term funding, as at year-end the Bank had one corporate commercial paper programme in operation, which governs the issuance of commercial paper and is aimed at institutional and retail investors. The Banco Sabadell Commercial Paper Programme for 2022, registered with Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores, S.A.U. (IBERCLEAR), has an issuance limit of 7 billion euros, which can be extended to 9 billion euros. As at 31 December 2022, the outstanding balance of the programme was 872 million euros (net of commercial paper subscribed by Group companies), compared with 426 million euros as at 31 December 2021.

Regarding medium- and long-term funding, the Institution has the following programmes in operation:

- Programme for the issuance of non-equity securities (“Fixed Income Programme”) registered with the CNMV on 17 November 2022, with an issuance limit of 10 billion euros: this programme regulates the issuance of straight, non-preferred, subordinated or structured bonds and debentures, in addition to mortgage covered bonds and public sector covered bonds issued under Spanish law through the CNMV and aimed at institutional and retail investors, both domestic and foreign. As at 31 December 2022, the limit available for new issues under the Banco Sabadell Programme for the issuance of non-equity securities for 2022 was 9,000 million euros (as at 31 December 2021, the available limit under the Fixed Income Programme for 2021 was 9,933 million euros).

In 2022, Banco Sabadell executed five public issues under the current Fixed Income Programme amounting to a total of 1,638 million euros, including one non-preferred debt issue in green format of 120 million euros:

Million euro					
	ISIN code	Type of investor	Issue date	Amount	Term (years)
Issue of Straight Non-Preferred Bonds 1/2022 CNMV	ES0213860341	Institutional	30/03/2022	120	15
Mortgage covered bonds 2/2022	ES0413860802	Institutional	30/05/2022	1,000	7
Issue of Straight Non-Preferred Bonds 2/2022 CNMV	ES0313860314	Institutional	03/06/2022	8.9	5
Issue of Straight Non-Preferred Bonds 3/2022 CNMV	ES0213860358	Institutional	01/08/2022	9.2	5
Mortgage covered bonds BEI 1/2022	ES0413860828	Institutional	21/12/2022	500	8

- Euro Medium Term Notes (EMTN) programme, registered with the Irish Stock Exchange on 1 June 2022 and renewed on 28 July and 28 October 2022. This programme allows senior debt (preferred and non-preferred) and subordinated debt to be issued in various currencies, with a maximum limit of 15 billion euros.

In 2022, Banco Sabadell executed four issues under the EMTN Programme, amounting to a total of 2,075 million euros; one of these was senior preferred debt and the other three were all senior non-preferred debt. Of the four issues, three were in green format, amounting to 1,575 million euros. The issues executed by Banco Sabadell over the year are indicated here below (showing the legal maturity period in the case of issues with an early call option):

Million euro					
	ISIN code	Type of investor	Issue date	Amount	Term (years)
Senior Non Preferred 1/2022 issue	XS2455392584	Institutional	24/3/2022	750	4
Senior Non Preferred 2/2022 issue	XS2528155893	Institutional	8/9/2022	500	4
Senior Preferred 1/2022 issue	XS2553801502	Institutional	10/11/2022	750	6
Senior Non Preferred 3/2022 issue	XS2560673829	Institutional	23/11/2022	75	10

In 2022, upon receiving the relevant authorisations, Banco Sabadell exercised the early call option for the AT1 1/2017 issue amounting to 750 million euros on 18 May 2022, executed the early redemption of the Senior Preferred 1/2020 issue amounting to 500 million euros on 29 June 2022, as well as the early redemption of the Senior Bonds 3/2020 issue amounting to 120 million euros on 23 November 2022.

In relation to asset securitisation:

- The Group is a very active participant in this market and it takes part in various securitisation programmes, sometimes acting together with other institutions, granting mortgage loans, loans to small and medium-sized enterprises and consumer loans.

- There are currently 16 outstanding traditional asset securitisation transactions fully recognised on the balance sheet. Although some of the securities issued were retained by the Institution as liquid assets eligible as collateral in exchange for access to funding operations with the European Central Bank or with the Bank of England, in the case of TSB Bank, the rest of the securities were placed in capital markets. As at 31 December 2022, the nominal balance of asset-backed securities placed in the market was 1,251 million euros.
- On 13 July 2022, Banco Sabadell sold all of the tranches that are financing the loan book of the securitisation fund Sabadell Consumo 2, FT to the market, for a nominal amount of 750 million euros. This is Banco Sabadell's second consumer loan securitisation. This transaction was carried out to manage liquidity and capital.
- On 18 August 2022, TSB Bank incorporated the RMBS securitisation fund Duncan Funding 2022-1 PLC for the amount of 1,333 million pounds sterling, which was retained in full. The tranches retained by the Institution may be used as collateral for liquidity operations with the Bank of England.
- In 2022, Banco Sabadell called three securitisation funds early. On 20 June, it called the fund IM Sabadell PYME 11, FT, whose securities had been fully retained. On 22 September it called the multi-seller fund TDA 23, FTA, the clean-up call date having been reached and on 28 October it called the fund Caixa Penedés 2 TDA, FTA, whose securities were also retained in full.

As at the end of 2022, Banco Sabadell had 22 billion euros of outstanding TLTRO III borrowing, of which 17 billion euros mature in June 2023 and 5 billion euros mature in March 2024, having prepaid 10 billion euros of the aforesaid borrowing during the year. In 2022, the Group recognised 162 million euros in interest income on TLTRO III (313 million euros in 2021).

TSB, for its part, also had outstanding amounts borrowed from the Bank of England, namely 5 billion pounds sterling borrowed under the Term Funding Scheme with additional incentives for Small and Medium-sized Enterprises (TFSME) and 500 million pounds sterling borrowed under the Indexed Long Term Repo (ILTR), giving rise to a total amount borrowed from the Bank of England as at 31 December 2022 of 5.5 billion pounds sterling.

Liquid assets

In addition to these sources of funding, the Group maintains a liquidity buffer in the form of liquid assets to meet potential liquidity needs:

Million euro	2022	2021
Cash(*) + Net Interbank Position	35,012	43,189
Funds available in Bank of Spain facility	7,788	1,527
ECB eligible assets not pledged in facility	6,010	4,429
Other non-ECB eligible marketable assets (**)	5,234	4,738
<i>Memorandum item:</i>		
<i>Balance drawn from Bank of Spain facility (***)</i>	22,000	32,000
<i>Balance drawn from Bank of England Term Funding Scheme (****)</i>	6,201	6,545
Total Liquid Assets Available	54,044	53,883

(*) Excess reserves and Marginal Deposit Facility in Central Banks.

(**) Market value, and after applying the Liquidity Coverage Ratio (LCR) haircut. Includes Fixed Income qualifying as a high quality liquid asset according to LCR (HQLA) and other marketable assets from different Group entities.

(***) Correspond to TLTRO-III facility.

(****) At year-end 2022, includes 5 billion pounds to support Small and Medium-sized Enterprises (TFSME) and 500 million pounds of Indexed Long Term Repo (ILTR). At year-end 2021, included 5.5 billion pounds of TFSME borrowing.

In terms of 2022, the Group's first line has remained stable over the year, increasing by 161 million euros. The balance of reserves and the marginal deposit facility in central banks, as well as the net interbank position, decreased by 8,177 million euros in 2022, while in the case of the volume of liquid assets deemed eligible by the European Central Bank, its balance over the year 2022 increased by 7,842 million euros. These changes can be explained, not only by the reduction of assets' valuations, but also by the early repayment of the funds borrowed under TLTRO III and by the fixed-income portfolio purchases made. Similarly, assets available and not deemed eligible by the European Central Bank increased by 496 million euros in 2022, due mainly to the increase in available assets of foreign subsidiaries.

It should be noted that the Group follows a decentralised liquidity management model. This model tends to limit the transfer of liquidity between the different subsidiaries involved in liquidity management, thereby limiting intra-group exposures, beyond any restrictions imposed by the local regulators of each subsidiary. Thus, the subsidiaries involved in liquidity management determine their liquidity position by considering only those assets in their possession that meet the eligibility, availability and liquidity criteria set forth both internally and in regulations in order to comply with regulatory minima.

In addition to the first line of liquidity, called the counterbalancing capacity, each LMU monitors its liquidity buffer with an internal conservative criterion. In the case of the BSab LMU (includes Banco de Sabadell S.A., which in turn includes activity in foreign branches as well as the businesses of Banco de Sabadell S.A. in Mexico), this liquidity buffer comprises the first and second lines of liquidity. As at 31 December 2022, the second line of liquidity added a volume of 12,885 million euros to the liquidity buffer, including the covered bond issuing capacity, considering the average valuation applied by the European Central Bank to own-use covered bonds to obtain funding, as well as the deposits held in other financial institutions and immediately available for the business in Mexico not included in the first line of liquidity.

For the TSB LMU, this metric is calculated as the sum of the first line of liquidity and loans pre-positioned with the Bank of England to obtain funding. As at 31 December 2022, the second line of liquidity, considering the amount of loans pre-positioned with the Bank of England, amounted to 3,366 million euros.

There are no significant amounts of cash or cash equivalents that are unavailable for use by the Group.

Compliance with regulatory ratios

As part of its liquidity management, Banco Sabadell Group monitors the short-term Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) and reports the necessary information to the Regulator on a monthly and quarterly basis, respectively. The measurement of liquidity based on these metrics forms part of liquidity risk control arrangements in LMUs.

In terms of the LCR, since 1 January 2018, the regulatory required minimum LCR has been 100%, a level which is amply surpassed by all of the Group's LMUs. At the Group level, throughout the year, the LCR has consistently been well above 100%. As at 31 December 2022, the LCR stood at 196% for the TSB LMU, 270% for Banco Sabadell Spain and 234% for the Group.

In terms of the NSFR, the regulatory minimum requirement, effective from June 2021, is 100%, a level amply surpassed by all LMUs of the Institution given their funding structure, in which customer deposits are predominant and where the majority of market funding is in the medium/long term. As at 31 December 2022, the NSFR stood at 151% for the TSB LMU, 132% for Banco Sabadell Spain and 138% for the Group.

4.4.3.2. Market risk

Market risk is defined as the risk of financial instrument positions losing some or all of their market value due to changes in risk factors affecting their market price or quotations, their volatility, or the correlations between them.

Positions that generate market risk are usually held in connection with trading activity, which consists of the hedging transactions arranged by the Bank to provide services to its customers as well as discretionary proprietary positions.

Market risk can also arise from the mere maintenance of overall (also known as structural) balance sheet positions that in net terms are left open. This risk is addressed in the sections on structural risks.

The items of the consolidated balance sheet as at 31 December 2022 and 2021 are shown below, making a distinction between positions included in trading activity and other positions. In the case of items not included in trading activity, their main risk factor is indicated:

Thousand euro

31/12/2022				
	On-balance sheet balance	Trading activity	Other	Main market risk factor in "Other"
Assets subject to market risk	251,379,528	2,670,824	248,708,704	
Cash, cash balances at central banks and other demand deposits	41,260,395	—	41,260,395	Interest rate
Financial assets held for trading	4,017,253	2,670,824	1,346,429	Interest rate
Non-trading financial assets mandatorily at fair value through profit or loss	77,421	—	77,421	Interest rate; credit spread
Financial assets at fair value through other comprehensive income	5,802,264	—	5,802,264	Interest rate; credit spread
Financial assets at amortised cost	185,045,452	—	185,045,452	Interest rate
Derivatives – Hedge accounting	3,072,091	—	3,072,091	Interest rate
Fair value changes of the hedged items in portfolio hedge of interest rate risk	(1,545,607)	—	(1,545,607)	Interest rate
Investments in joint ventures and associates	515,245	—	515,245	Equity
Other assets	13,135,014	—	13,135,014	—
Liabilities subject to market risk	238,155,107	2,149,776	236,005,331	
Financial liabilities held for trading	3,598,483	2,149,776	1,448,707	Interest rate
Derivatives – Hedge accounting	1,242,470	—	1,242,470	Interest rate
Fair value changes of the hedged items in portfolio hedge of interest rate risk	(959,106)	—	(959,106)	Interest rate
Financial liabilities at amortised cost	232,529,932	—	232,529,932	Interest rate
Other liabilities	1,743,328	—	1,743,328	—
Equity	13,224,421	—	13,224,421	

Thousand euro

31/12/2021				
	On-balance sheet balance	Trading activity	Other	Main market risk factor in "Other"
Assets subject to market risk	251,946,591	1,754,670	250,191,921	
Cash, cash balances at central banks and other demand deposits	49,213,196	—	49,213,196	Interest rate
Financial assets held for trading	1,971,629	1,754,670	216,959	Interest rate; credit spread
Non-trading financial assets mandatorily at fair value through profit or loss	79,559	—	79,559	Interest rate; credit spread
Financial assets at fair value through other comprehensive income	6,869,637	—	6,869,637	Interest rate; credit spread
Financial assets at amortised cost	178,869,317	—	178,869,317	Interest rate
Derivatives – Hedge accounting	525,382	—	525,382	Interest rate
Investments in joint ventures and associates	638,782	—	638,782	Equity
Other assets	13,779,089	—	13,779,089	—
Liabilities subject to market risk	238,950,310	1,180,734	237,769,576	
Financial liabilities held for trading	1,379,898	1,180,734	199,164	Interest rate
Derivatives – Hedge accounting	512,442	—	512,442	Interest rate
Financial liabilities at amortised cost	235,179,222	—	235,179,222	Interest rate
Other liabilities	1,878,748	—	1,878,748	—
Equity	12,996,281	—	12,996,281	

The market risk acceptance, management and oversight system is based on managing positions expressly assigned to different trading desks and establishing limits for each one, in such a way that the different trading desks have the obligation to always manage their positions within the limits established by the Board of Directors and the Technical Risk Committee. Market risk limits are aligned with the Group's targets and risk appetite framework.

Trading activity

The main market risk factors considered by the Group in its trading activity are the following:

- Interest rate risk: risk associated with the possibility of interest rate fluctuations adversely affecting the value of a financial instrument. This is reflected, for example, in transactions involving interbank deposits, fixed income and interest rate derivatives.
- Credit spread risk: this risk arises from fluctuations in the credit spreads at which instruments are quoted with respect to other benchmark instruments, such as interbank interest rates. This risk occurs mainly in fixed-income instruments.
- Foreign exchange risk: risk associated with the fluctuation of exchange rates with respect to the functional currency. In the case of Banco Sabadell, the functional currency is the euro. This risk occurs mainly in currency exchange transactions and currency derivatives.
- Equity price risk: risk arising from fluctuations in the value of capital instruments (shares and quoted indices). This risk is reflected in the market prices of the securities and their derivatives.

Changes in commodities prices have not had an impact in the year, as the Group has residual (both direct and underlying) exposures.

Market risk incurred in trading activity is measured using the VaR and stressed VaR methodologies. These allow risks to be standardised across different types of financial market transactions.

VaR provides an estimate of the maximum potential loss associated with a position due to adverse, but normal, movements of one or more of the identified parameters generating market risk. This estimate is expressed in monetary terms and refers to a specific date, a particular level of confidence and a specified time horizon. A 99% confidence interval is used. Due to the low complexity of the instruments and the high level of liquidity of the positions, a time horizon of 1 day is used.

The methodology used to calculate VaR is historical simulation. The advantages of this methodology are that it is based on a full revaluation of transactions under recent historical scenarios, and that no assumptions need to be made as regards the distribution of market prices. The main limitation to this methodology is its reliance on historical data, given that, if a possible event has not materialised within the range of historical data used, it will not be reflected in the VaR data.

The reliability of the VaR methodology used can be verified using backtesting techniques, which serve to verify that the VaR estimates fall within the confidence level considered. Backtesting consists of comparing daily VaR against daily results. If losses exceed the VaR level, an exception occurs. No backtesting exceptions occurred in 2022 or 2021.

Stressed VaR is calculated in the same way as VaR but with a historical insight into variations of the risk factors in stressed market conditions. These stressed conditions are determined on the basis of currently outstanding transactions, and may vary if the portfolios' risk profile changes. The methodology used for this risk measurement is historical simulation.

Market risk monitoring is supplemented with additional measurements such as risk sensitivities, which refer to a change in the value of a position or portfolio in response to a change in a particular risk factor, and also with the calculation of management results, which are used to monitor stop-loss limits.

Furthermore, specific simulation exercises are carried out considering extreme market scenarios (stress testing). These exercises consist of revaluing the portfolios in scenarios to which different assumptions are applied. Broadly speaking there are two types of scenarios: on one hand, historical scenarios, developed based on historical events that have occurred in the markets in the past and which are relevant to the current position of the portfolios (e.g. the global financial crisis or the Covid-19 crisis) and, on the other hand, hypothetical scenarios, which consider theoretical shifts in risk factors, such as shifts in yield curves, credit spreads or exchange rates, as well as movements in these factors resulting from the application of different macroeconomic forecasts determined based on the current situation. As at the end of 2022, the impact of the most adverse scenario considered was -11 million euros.

Market risk is monitored on a daily basis and reports are made to supervisory bodies on the existing risk levels and on the compliance with the limits set forth by the Technical Risk Committee for each trading desk (limits based on nominal value, VaR and sensitivity, as applicable). This makes it possible to keep track of changes in exposure levels and measure the contribution of market risk factors.

The market risk incurred on trading activity in terms of 1-day VaR with a 99% confidence interval for 2022 and 2021 was as follows:

Million euro						
	2022			2021		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Interest rate risk	1.08	2.21	0.61	0.88	1.86	0.55
Foreign exchange risk (trading)	1.30	2.42	0.90	1.61	3.13	0.03
Equity	0.13	1.24	—	0.16	1.89	0.04
Credit spread	0.25	0.57	0.11	0.25	0.62	0.07
Aggregate VaR	2.75	4.81	2.10	2.89	5.39	1.15

During 2022, the overall VaR figures of trading activity have remained at medium-low levels, the exchange rate being the main risk factor, due to a higher exposure of portfolios to this risk factor. In spite of the increased volatility during the year, on average the figures dropped slightly compared to the previous year as the Covid-19 scenarios, which had a considerable impact on the foreign exchange risk factor, no longer fell within the time window considered, although a slight rebound of interest rates and credit spreads was observed.

Structural interest rate risk

Structural interest rate risk is inherent in banking activity and is defined as the current or future risk to both the income statement (income and expenses) and the economic value of equity (present value of assets, liabilities and off-balance sheet positions) arising from adverse interest rate fluctuations affecting interest rate-sensitive instruments in non-trading activities (also known as Interest Rate Risk in the Banking Book, or IRRBB). The Group identifies five interest rate sub-risks:

- Repricing risk is the risk arising from mismatches at the time the repricing of interest rate-sensitive instruments occurs, including those changes in the time structure of interest rates that occur consistently along the yield curve (parallel shifts).
- Curve risk is the risk arising from mismatches at the time the repricing of interest rate-sensitive instruments occurs, including those changes in the time structure of interest rates that occur differently depending on the time to maturity (non-parallel shifts).
- Basis risk includes the risk arising from the impact of relative changes in interest rates on instruments with similar maturities but whose repricing is determined using different interest rate indices.
- Automatic optionality risk comprises the risk arising from automatic options (e.g. lending floors and caps), both embedded and explicit, in which the Balance Sheet Management Unit (BSMU) or its customer can alter the level and timing of their cash flows and in which the holder will almost certainly exercise the option when it is in their financial interest to do so.
- Behavioural optionality risk arises from the flexibility embedded within the terms of certain financial contracts, which allow variations in interest rates to produce a change in customer behaviour.

The Group's management of this risk pursues two fundamental objectives:

- To stabilise and protect the net interest margin, preventing interest rate movements from causing excessive variations in the budgeted margin.
- To minimise the volatility of the economic value of equity, this perspective being complementary to that of the margin.

Interest rate risk is managed through a Group-wide approach on the basis of the RAS, approved by the Board of Directors. A decentralised model is followed based on Balance Sheet Management Units (BSMUs). In coordination with the Group's corporate functions, each BSMU has the autonomy and capability to carry out risk management and control duties.

The Group's current interest rate risk management strategy is based on the following principles in particular, in line with the business model and the defined strategic objectives:

- Each BSMU has appropriate tools and robust processes and systems in place to adequately identify, measure, manage, control and report on IRRBB, following the main criteria defined by the Group's internal methodology. The Group uses these to obtain information about all of the identified sources of IRRBB, assess their effect on the net interest margin and the economic value of equity and measure the vulnerability of the Group/BSMU in the event of potential losses arising from IRRBB under different scenarios affecting the interest rate curves.
- At the corporate level, a series of limits are established for overseeing and monitoring IRRBB exposure levels, which are aligned with internal risk tolerance policies. However, each BSMU has the autonomy and structure required to properly manage and control IRRBB. Specifically, each BSMU has sufficient autonomy to choose the management target that it will pursue, although all BSMUs should follow the principles and critical parameters set by the Group, adapting them to the specific characteristics of the region in which they operate.
- The existence of a transfer pricing system.
- The set of systems, processes, metrics, limits, reporting arrangements and governance arrangements included within the IRRBB strategy must comply with regulatory precepts at all times.

As defined in the IRRBB Management and Control Policy, the first line of defence is undertaken by the various BSMUs, which report to their respective local Asset and Liability Committees. Their main role is to manage interest rate risk, ensuring it is assessed on a recurrent basis through management and regulatory metrics, taking into account the modelling of the various balance sheet totals and the level of risk taken.

The metrics developed to control and monitor the Group's structural interest rate risk are aligned with the market's best practices and are implemented consistently across all BSMUs, based on the results obtained from the exercise carried out to identify sub-risks and assess their materiality mentioned previously, and by each of the local asset and liability committees. The diversification effect between currencies and BSMUs is taken into account when disclosing overall figures.

The metrics that the Group calculates on a monthly basis are as follows:

- Interest rate gap: static metric showing the breakdown of maturities and repricing of sensitive balance sheet items. This metric compares the values of assets that are due to be revised or that mature in a given period and the liabilities that mature or reprice in that same period.
- Duration analysis: a static metric based on the assignment of all cash flows of interest-rate sensitive balance sheet items to time brackets. The duration of each pool of balance sheet items is calculated based on the variation of its net present value due to a parallel shift of 1 basis point in the interest rate curve. This gives the duration of both assets and liabilities.
- Net interest margin sensitivity: dynamic metric that measures the impact of interest rate fluctuations over different time horizons. It is obtained by comparing the net interest margin over given time horizon in the baseline scenario, which would be the one obtained from implied market rates, against the one obtained in a scenario of instant disruption, always considering the result obtained in the least favourable scenario. This metric supplements the economic value of equity sensitivity.
- Economic value of equity sensitivity: static metric that measures the impact of interest rate fluctuations. It is obtained by comparing the economic value of the balance sheet in the baseline scenario against the one obtained in a scenario of instant disruption, always considering the result obtained in the least favourable scenario. This is done by calculating the present value of interest rate-sensitive items as an update in the risk-free yield curve, on the reference date, of future payments of principal and interest without taking into account mark-ups, in line with the Group's IRRBB management strategy. This metric supplements the net interest margin sensitivity.
- Metric that combines the two above metrics: the effect of changes in value of instruments recognised directly through profit or loss or through equity is added to the net interest margin sensitivity.

In the quantitative interest rate risk estimations made by each BSMU, a series of interest rate scenarios are designed which allow the different sources of risk mentioned above to be identified. These scenarios include, for each significant currency, parallel shifts and non-parallel shifts of the interest rate curve. Based on these, sensitivity is calculated as the difference resulting from:

- Baseline scenario: market interest rate movements based on implied interest rates.
- Stressed scenario: a shift in interest rates in relation to the baseline scenario, with the extent of this shift varying depending on the scenario to be calculated. A minimum post-disruption interest rate is applied, starting at -100 basis points for current maturities and increasing by 5 basis point intervals, eventually reaching 0% after 20 years or more.

In addition, in the annual planning exercises, measurements are carried out that include assumptions regarding the evolution of the balance sheet based on the forward-looking scenarios of the Group's Financial Plan, referring to scenarios of interest rates, volumes and margins.

Furthermore, in accordance with the Group's corporate principles, all BSMUs regularly carry out stress tests, which allow them to forecast high-impact situations with a low probability of occurrence that could place BSMUs in a position of extreme exposure in relation to interest rate risk, and they also consider mitigating actions for such situations. The stress test is complemented with reverse stress tests which aim to identify the scenarios capable of producing a particular impact within a pre-established range of values.

The following table gives details of the Group's interest rate gap as at 31 December 2022 and 2021:

Thousand euro									
2022									
Time to maturity	Up to 1 month	1 to 3 months	3 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total
Money Market	41,797,003	920,472	1,438,829	125,651	—	—	—	—	44,281,955
Loans and advances	24,331,743	19,232,160	40,248,534	19,007,600	13,430,353	10,564,714	10,073,683	20,016,175	156,904,962
Debt securities	1,219,034	450,395	2,078,877	1,769,818	1,496,546	620,315	2,825,650	17,658,927	28,119,562
Other assets	—	—	—	—	—	—	—	—	—
Total assets	67,347,780	20,603,027	43,766,240	20,903,069	14,926,899	11,185,029	12,899,333	37,675,102	229,306,479
Money Market	36,299,672	352,799	2,153,181	133,675	2,964	8,256	—	10,096	38,960,643
Customer deposits	122,637,719	3,113,055	10,248,158	7,513,006	5,980,224	5,372,466	5,938,140	507,717	161,310,485
Issues of marketable securities	3,083,924	2,925,321	1,853,628	3,510,000	3,908,110	2,457,000	3,118,100	2,145,025	23,001,108
<i>Of which: Subordinated liabilities</i>	—	400,000	500,000	—	300,000	1,500,000	750,000	15,025	3,465,025
Other liabilities	55,015	122,537	277,700	217,712	144,908	130,335	113,172	670,277	1,731,656
Total liabilities	162,076,330	6,513,712	14,532,667	11,374,393	10,036,206	7,968,057	9,169,412	3,333,115	225,003,892
Hedging derivatives	11,271,252	(6,214,446)	550,236	283,019	1,334,541	1,383,868	1,086,452	(9,694,922)	—
Interest rate gap	(83,457,298)	7,874,869	29,783,809	9,811,695	6,225,234	4,600,840	4,816,373	24,647,064	4,302,586

Thousand euro

Time to maturity	2021								Total
	Up to 1 month	1 to 3 months	3 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	
Money Market	51,444,557	642,925	536,886	560,946	—	—	—	—	53,185,314
Loans and advances	21,535,549	17,995,202	44,644,079	21,591,930	13,065,877	10,720,014	8,498,091	18,379,384	156,430,126
Debt securities	857,839	486,726	237,455	1,824,255	1,546,186	1,494,251	972,214	13,124,187	20,543,113
Other assets	—	—	—	—	—	—	—	—	—
Total assets	73,837,945	19,124,853	45,418,420	23,977,131	14,612,063	12,214,265	9,470,305	31,503,571	230,158,553
Money Market	44,399,516	68,987	726,837	562,504	11,387	10,632	9,396	9,521	45,798,780
Customer deposits	120,591,033	3,273,525	9,927,201	6,240,826	5,196,402	4,045,350	4,747,226	5,769,470	159,791,033
Issues of marketable securities	3,268,999	2,336,211	2,137,459	2,539,000	3,510,000	2,658,110	2,457,000	3,350,025	22,256,804
Of which: Subordinated liabilities	—	—	1,150,000	500,000	—	300,000	1,500,000	765,025	4,215,025
Other liabilities	67,713	182,548	343,475	180,694	157,013	129,087	114,763	680,161	1,855,454
Total liabilities	168,327,261	5,861,271	13,134,972	9,523,024	8,874,802	6,843,179	7,328,385	9,809,177	229,702,071
Hedging derivatives	21,026,307	(3,048,310)	(1,768,615)	(9,450,677)	(1,689,870)	655,000	1,488,242	(7,212,077)	—
Interest rate gap	(73,463,008)	10,215,271	30,514,834	5,003,429	4,047,390	6,026,086	3,630,161	14,482,316	456,479

Banco Sabadell has positive exposure to interest rate increases in its net interest income (NII) insofar as higher interest rates are passed through on the asset side and contained on the liabilities side. Assuming that interest rate variations are gradually passed through to the cost of customer funds, Banco Sabadell estimates that the sensitivity of its net interest income to increases of +100 basis points would be +7.9% in the first year and +16.2% in the second year, on the assumption that the pass-through would take place in the same way as it has done thus far.

In addition, the following table shows the interest rate risk levels in terms of the sensitivity of the Group's main currencies, as at 2022 year-end, to the most frequently used interest rate scenarios in the sector, under stressed pass-through assumptions:

Interest rate sensitivity	Instant and parallel interest rate increase	
	100 bp	200 bp
	Net Interest Income impact	Impact on economic value of equity
EUR	0.6%	(6.0)%
GBP	2.6%	1.0%
USD	1.1%	(0.2)%
MXN	0.1%	(0.1)%

In addition to the impact on the net interest income within the time horizon of one year shown in the previous table, the Group calculates the impact on the margin over a time horizon of two and three years, the result of which is considerably more positive for all currencies.

The metrics are calculated taking into account the behavioural assumptions concerning items with no contractual maturity and those whose expected maturity is different from the maturity established in the contracts, in order to obtain a view that is more realistic and, therefore, more effective for management purposes. The most significant of these include:

- Prepayment of the loan portfolio and early termination of term deposits (implicit optionality): in order to reflect customers' reactions to interest rate movements, prepayment/termination assumptions are defined, broken down by type of product. To this end, the Institution uses historical data to ensure it is in line with the market's best practices. Changes in market interest rates can prompt customers to terminate their loans or term deposits early, altering the future behaviour of balances with respect to that envisaged in the contractual schedule. Prepayment mainly affects fixed-rate mortgages when their contractual interest rates are high compared to market interest rates.

- Modelling of demand deposits and other liabilities with no contractual maturity: a model has been defined using historical monthly data to reproduce customer behaviour, establishing parameters concerning the deposits' stability, the percentage of interest rate movements that is passed through to the interest paid on the deposits and the delay with which this occurs, depending on the type of product (type of account/transactionality/interest paid) and the type of customer (retail/wholesale). The model captures the effect of low interest rates on the stability of deposits, as well as the potential migration to other deposits that earn more interest in different interest rate scenarios.
- Modelling of non-performing lending items: a model has been defined that allows the expected payment flows associated with non-performing positions (net of provisions, i.e. those expected to be recovered) to be included in pools of interest rate-sensitive items. To this end, both existing balances and estimated recovery periods are included.

The process for approving and updating IRRBB models is part of the corporate governance arrangements for models, whereby these models are reviewed and validated by a division that is always separate from the division that created them. This process is included in the corresponding model risk policy and establishes both the duties of the different areas involved in the models and the internal validation framework to be followed.

As for the measurement systems and tools used, all sensitive transactions are identified and recorded taking into account their interest rate characteristics, the sources of information being the official ones of the Institution. These transactions are aggregated according to predefined criteria, so that calculations can be made faster without undermining the quality or reliability of the data. The entire data process is subject to the requirements of information governance and data quality, to ensure compliance with the best practices in relation to information governance and data quality. Additionally, a regular process is carried out to reconcile the information uploaded onto the measurement tool against accounting information. The calculation tool includes sensitive transactions and its parameters are also configured to reflect the result of the behavioural models described above, the volumes and prices of the new business, defined according to the Financial Plan, and the interest rate curves on which the aforesaid scenarios are built.

Based on the balance sheet position and the market situation and outlooks, risk mitigation techniques are proposed and agreed upon to adjust this position to match the one desired by the Group and to ensure it remains within the established risk appetite. Interest rate instruments additional to the natural hedges of balance sheet items are used as mitigation techniques, such as fixed-income bond portfolios or hedging derivatives that enable metrics to be placed at levels in keeping with the Institution's risk appetite. In addition, proposals can be put forward to redefine the interest rate characteristics of commercial products or the launch of new products.

Derivatives, mainly interest rate swaps (IRS), which qualify as hedges for accounting purposes, are arranged in financial markets to be used as risk hedging instruments. Two separate types of macro-hedges are used:

- Cash flow macro-hedges of interest rate risk, the purpose of which is to reduce the volatility of the net interest margin due to changes in interest rates over one-year time horizon.
- Fair value macro-hedges of interest rate risk, the purpose of which is to maintain the economic value of the hedged items, consisting of fixed-rate assets and liabilities.

For each type of macro-hedge, there is a framework document that includes the hedging strategy, defining it in terms of management and accounting and establishing its governance.

In Banco Sabadell, as part of the continuous improvement process, structural interest rate risk management and monitoring activities are implemented and regularly updated, aligning the Institution with best market practices and current regulations. In particular, throughout 2022 work has continued on the review and continuous improvement of the systems and behavioural models in accordance with the guidelines established by the EBA. Among other things, it is worth noting the calibration of the main behavioural modelling assumptions for demand deposits based on the different interest rate scenarios and their ongoing monitoring to ensure the suitability of those assumptions. Further progress has also been made with the definition, from a Group perspective, of the methodological and modelling criteria and principles relating to customers' behavioural options to enable greater standardisation and coordination with the different BSMUs, and stress testing procedures have also been reinforced.

In 2022, the Bank's loan book shifted towards a higher proportion of fixed-rate transactions (mainly mortgages and business loans), while on the liabilities side demand deposit balances increased. In addition, other balance sheet variations in 2022 included: the increase of the fixed-income portfolio on the asset side and the early TLTRO III repayment of 10 billion euros, with the total outstanding amount now standing at 22 billion euros. The repayment conditions were changed in November 2022. This all translated into a smaller net balance of interest-rate sensitive items.

With regard to interest rates, in 2022 benchmark rates have increased sharply in all currencies, in particular in the euro, where they have gone from negative to positive, with the 12-month Euribor, for example, standing above 3% as at the end of 2022. The marginal deposit rate of the European Central Bank (ECB) ended the year at 2% (+250 basis points over the year), while the base rate of the Bank of England (BoE) ended at 3.50% (+325 basis points over the year). The situation envisaged in the short-to-medium term is that rates of the Group's main currencies (EUR, USD and GBP) will continue to rise, influenced by inflationary pressures.

Taking into account the balance sheet variations detailed previously, as well as episodes of volatility and significant variations in the benchmark interest rates of all the Group's major currencies, the IRRBB metrics have been affected during the year, although the measures taken have allowed the Group's IRRBB metrics to be kept within the risk appetite and below the levels considered significant under current legislation.

Furthermore, the Group continues to monitor customer behaviour in reaction to interest rate hikes and variations of other economic variables (unemployment rates, gross domestic product, etc.), in order to anticipate possible changes and impacts on the behavioural assumptions used to measure and manage IRRBB. In particular, it analyses customer behaviour related to non-maturing items (changes in the stability of demand deposits and possible migration to other products that earn more interest) and related to items with an expected maturity that may be different to the contractually established maturity (due to early repayment of loans, early termination of term deposits or recovery time and balance of non-performing exposures).

4.4.3.3. Structural foreign exchange risk

Structural foreign exchange risk occurs when changes in market exchange rates between different currencies generate losses on permanent investments in foreign branches and subsidiaries with functional currencies other than the euro.

The purpose of managing structural foreign exchange risk is to minimise the impact on the value of the Institution's portfolio/equity in the event of any adverse movements in currency markets. The foregoing takes into account the potential impacts on the capital (CET1) ratio and on the net interest margin, subject to the risk appetite defined in the RAS. Furthermore, the levels set for the established risk metrics must be complied with at all times.

Foreign exchange risk is monitored regularly and reports are sent to supervisory bodies on existing risk levels and on compliance with the limits set forth by the Board of Directors. The main monitoring metric is currency exposure, which measures the maximum potential loss that the open structural position could produce over a 1-month time horizon, with a 99% confidence level and in stressed market conditions.

Compliance with, and the effectiveness of, the Group's targets and policies are monitored and reported on a monthly basis to the Board Risk Committee.

The Bank's Financial Division, through the Asset and Liability Committee (ALCO), designs and executes strategies to hedge structural FX positions in order to achieve its objectives in relation to the management of structural foreign exchange risk.

The most prominent permanent investments in non-local currencies are made in US dollars, pounds sterling and Mexican pesos.

As regards permanent investments in US dollars, the overall position in this currency has gone from 1,170 million as at 31 December 2021 to 1,278 million as at 31 December 2022. In relation to this position, as at 31 December 2022, a buffer of 33% of total investment is maintained.

In terms of permanent investments in Mexican pesos, the capital buffer has gone from 10,003 million Mexican pesos as at 31 December 2021 (of a total exposure of 14,572 million Mexican pesos) to 9,253 million Mexican pesos as at 31 December 2022 (of a total exposure of 15,261 million Mexican pesos), representing 61% of the total investment made.

As regards permanent investments in pounds sterling, the capital buffer has increased by 213 million pounds sterling as at 31 December 2021 to 333 million pounds sterling as at 31 December 2022 (total exposure has gone from 1,890 million pounds sterling as at 31 December 2021 to 1,998 million pounds sterling as at 31 December 2022), representing 17% of the total investment made (excluding intangibles).

Currency hedges are continuously reviewed in light of market movements.

The exchange value in euros of assets and liabilities in foreign currencies maintained by the Group as at 31 December 2022 and 2021, classified in accordance with their nature, is as follows:

Thousand euro				
2022				
	USD	GBP	Other currencies	Total
Assets denominated in foreign currency:	11,230,828	57,349,488	4,111,351	72,691,667
Cash, cash balances at central banks and other demand deposits	606,605	5,963,971	1,044,938	7,615,514
Debt securities	1,136,840	2,775,734	423,855	4,336,429
Loans and advances	9,210,413	45,410,799	2,375,221	56,996,433
Central banks and Credit institutions	70,704	514,160	165,627	750,491
Customers	9,139,709	44,896,639	2,209,594	56,245,942
Other assets	276,970	3,198,984	267,337	3,743,291
Liabilities denominated in foreign currency:	6,962,558	53,016,847	3,118,316	63,097,721
Deposits	6,671,410	48,123,748	3,044,677	57,839,835
Central banks and Credit institutions	1,120,977	6,373,980	331,899	7,826,856
Customers	5,550,433	41,749,768	2,712,778	50,012,979
Other liabilities	291,148	4,893,099	73,639	5,257,886

Thousand euro				
2021				
	USD	GBP	Other currencies	Total
Assets denominated in foreign currency:	10,063,410	57,229,033	3,577,568	70,870,011
Cash, cash balances at central banks and other demand deposits	464,724	5,825,313	863,459	7,153,496
Debt securities	1,158,570	3,862,850	478,752	5,500,172
Loans and advances	8,255,149	46,259,554	1,987,782	56,502,485
Central banks and Credit institutions	49,286	258,741	39,984	348,011
Customers	8,205,863	46,000,813	1,947,798	56,154,474
Other assets	184,967	1,281,316	247,575	1,713,858
Liabilities denominated in foreign currency:	7,606,360	53,111,696	2,476,766	63,194,822
Deposits	7,405,911	49,911,932	2,410,628	59,728,471
Central banks and Credit institutions	1,559,034	6,757,419	292,431	8,608,884
Customers	5,846,877	43,154,513	2,118,197	51,119,587
Other liabilities	200,449	3,199,764	66,138	3,466,351

The net position of foreign currency assets and liabilities includes the structural position of the Institution, valued as at 31 December 2022, which amounted to 3,021 million euros, of which 1,877 million euros corresponded to permanent equity holdings in pounds sterling, 808 million euros corresponded to permanent equity holdings in US dollars and 288 million euros to permanent equity holdings in Mexican pesos. Net assets and liabilities valued at historical exchange rates are hedged with currency forwards and currency options in line with the Group's risk management policy.

As at 31 December 2022, the sensitivity of the equity exposure to a 1.3% exchange rate depreciation against the euro of the main currencies to which exposure exists, calculated based on quarterly exchange rate volatility over the past three years, would amount to 39 million euros, of which 62% would correspond to the pound sterling, 27% to the US dollar and 10% to the Mexican peso.

4.4.4. Operational risk

Operational risk is defined as the risk of incurring losses due to inadequacies or failures of processes, staff or internal systems or due to external events. This definition includes but is not limited to legal risk, model risk and information and communications technology (ICT) risk and excludes strategic risk and reputational risk.

The management of operational risk is decentralised and devolved to process managers throughout the organisation. The processes that they manage are indicated in the corporate process flowchart, which facilitates the integration of data according to the organisational structure. The Group has a central unit that specialises in the management of operational risk, whose main duties are to coordinate, oversee and promote the identification, assessment and management of risks by the process managers, based on the management model adopted by Banco Sabadell Group.

Senior Management and the Board of Directors are directly involved and effectively take part in managing this risk by approving the management framework and its implementation as proposed by the Board Risk Committee (formed of Senior Management members from different functional areas within the Institution) and by ensuring that regular audits are carried out of the application of the management framework and of the reliability of the reported information, as well as audits of the internal validation tests of the operational risk model. Operational risk is managed through two main courses of action:

The first course of action is based on the analysis of processes, the identification of risks associated with those processes that may result in losses, and a qualitative assessment of the risks and the associated controls. The foregoing are carried out jointly between process managers and the central operational risk unit. This provides an assessment of the future exposure to risk in terms of expected and unexpected losses and also allows trends to be foreseen and the corresponding mitigating actions to be adequately planned.

This is complemented by the identification, monitoring and active management of the risk through the use of key risk indicators. These allow warnings to be established, which alert the Institution to any increase in this exposure, and also enable it to identify the causes of that increase and measure the effectiveness of the implemented controls and improvements.

At the same time, checks are run to verify that specific business continuity plans have been defined and implemented for processes identified as being highly critical in the event of any service disruption. In terms of the identified risks, a qualitative estimate is made of the reputational impact that they could cause if they were to materialise.

The second course of action is based on experience. It consists of recording all losses incurred by the Institution in a database, which provides information about the operational risks encountered by each business line as well as their causes, so as to be able to take action to minimise these risks and detect potential weaknesses in processes that require action plans to be drawn up aimed at mitigating the associated risks. Recoveries are also recorded, which make it possible to reduce the extent of the loss either as a result of its direct management or by having an insurance policy that covers all or part of the resulting impacts.

Furthermore, this information allows the consistency between estimated losses and actual losses to be determined, in terms of both frequency and severity, iteratively improving the estimates of exposure levels.

Within operational risk, the following risks are also managed and controlled:

- Conduct risk: defined as the possibility, at present or in the future, of incurring losses as a result of the inadequate provision of financial services, including cases of wilful misconduct or negligence. It is comprehensively managed using the elements defined in the methodological framework for operational risk and through the governance structures and lines of defence defined therein.
- Technology risk: technology risk (or information and communications technology (ICT) risk) is defined as the current or future risk of incurring losses due to inadequacies or failures of technical infrastructures' hardware and software, which could compromise the availability, integrity, accessibility or security of these infrastructures and data, or make it impossible for IT platforms to be changed at a reasonable cost and within a reasonable timeframe in response to the changing needs of the environment or the business.

It also includes security risks resulting from inadequate or failed internal processes or external events, including cyberattacks or inadequate physical security in data centres.

- Outsourcing risk: the possibility of incurring losses as a result of suppliers failing to provide subcontracted services or discontinuing their provision, weaknesses in their systems' security, disloyal employees or a breach of applicable regulations. It also includes other related risks such as concentration risk, country risk, legal risk and compliance risk.
- Model risk: the possibility of incurring losses due to decisions made using inadequate models.
- Tax risk: the probability of failing to achieve the objectives set out in Banco Sabadell's tax strategy from a dual perspective due to either internal or external factors:
 - On one hand, the probability of failing to fulfil tax obligations, potentially resulting in a failure to pay taxes that are due, or the occurrence of any other event that could potentially prevent the Bank from achieving its goals.
 - On the other hand, the probability of paying taxes not actually due under tax obligations, thus negatively affecting shareholders and other stakeholders.
- Compliance risk: defined as the risk of incurring legal or administrative penalties, significant financial losses or reputational damage as a result of an infringement of laws, regulations, internal rules or codes of conduct applicable to the Group's activity.

Reputational risk, understood as the possibility of incurring losses as a result of negative publicity related to the Institution's practices and business, is also managed and controlled according to the methodological framework for operational risk, as this is a potentially significant source of reputational risk. This risk also considers the loss of trust in the Institution, which could affect its solvency.

Senior Management and, in particular, the Board Risk Committee, have closely monitored the Group's risk profile through specific reports containing information and indicators associated with the main operational risks (including those associated with technology, human error, conduct, processes, security and fraud) and reputational impacts that could potentially affect the Group's different stakeholders (employees and partners, customers, suppliers, supervisors). No noteworthy impacts have been detected.

Detailed information on the risks that the Group deems most material is provided below:

4.4.4.1 Technology risk

In recent years, the importance, complexity and use of technology and data have increased even further in banking processes, especially in remote channels (online banking) as a result of the impact of Covid-19. Consequently, the reliance on information systems and their availability is a key factor, as the Bank is more exposed to cyberattacks just like the other operators in the sector. The conflict between Ukraine and Russia has brought with it the risk of becoming a target for cyberattacks, in reaction to the restrictions imposed on Russia and due to Ukraine's de facto membership of NATO, requiring the introduction of back-up measures. At the present time, this risk related to this conflict is stable, though latent.

Furthermore, the Institution is currently undergoing a process of transformation, based on the digitisation and automation of processes, which increases the reliance on systems and the exposure to risks associated with this change, including digital fraud. Technology risk therefore remains one of the key focus areas of Banco Sabadell Group's risk management.

It should be mentioned that this risk is not only applicable to the Group's own systems and processes, but it is also applicable to suppliers, given the widespread use of third parties for support in technological and business processes, and this therefore represents a significant risk when it comes to managing outsourcing. On the topic of IT outsourcing, with regard to 2022 it is particularly worth noting the implementation of Project Dingle, which has concentrated the outsourcing of application development and testing in three key suppliers and which therefore requires a greater level of control and monitoring of those suppliers, while at the same time reducing the probability of experiencing cybersecurity incidents in this area.

In order to holistically and adequately manage all risks related to technology and data, the Institution classifies and categorises these risks into eight categories, in line with the Guidelines on ICT and security risk management (EBA/GL/2019/04):

- IT security (cybersecurity): risk of unauthorised access to IT systems, and of there being an impact on the confidentiality, availability, integrity and traceability of the information (data and metadata) that they contain (including cyberattacks and deliberate action), as well as the potential repudiation of digital operations.

- IT availability (technological resilience): risk of critical services provided to customers and employees becoming affected by systems failures.
- IT change: risk arising from errors in the change and development processes of information systems.
- Data integrity: risk of data stored and processed by IT systems being incomplete, inaccurate or inconsistent.
- IT outsourcing: risk that engaging a third party or another Group entity (intra-group outsourcing) to provide IT systems, their management or related services produces a negative effect on the Institution's performance (including impacts on customers, as well as reputational, regulatory or financial impacts).
- IT governance: risk arising from inadequate or insufficient management and use of technology, as well as a poor alignment of these technologies and their intended uses with the business strategy.
- Technological transformation: risk associated with inappropriate adoption or inefficient use of technology within the organisation for the development of new value propositions.
- IT skills: risk arising from the insufficiency of adequate IT profiles (internal and/or external partners) to ensure effective and efficient coverage of technological activities, processes and services.

4.4.4.2 Tax risk

With regard to tax risk, the tax risk policies of Banco Sabadell Group aim to establish the general guidelines for managing and controlling tax risk, specifying the applicable principles and critical parameters and covering all significant elements to systematically identify, assess and manage any risks that may affect the Group's tax strategy and fiscal objectives, meeting the requirements of the Spanish Capital Companies Act and of Banco Sabadell Group stakeholders.

In terms of tax risk, Banco Sabadell Group aims to fulfil its tax obligations at all times, adhering to the existing legal framework in this regard.

Banco Sabadell Group's tax strategy, approved by the Board of Directors, reflects its commitment to fostering responsible taxation, promoting preventive measures and developing key transparency schemes in order to gain the confidence and trust of its various stakeholders.

The tax strategy is governed by the principles of efficiency, prudence, transparency and mitigation of tax risk, and it is aligned with the business strategy of Banco Sabadell Group.

The Board of Directors of Banco Sabadell, under the mandate set out in the Spanish Capital Companies Act for the improvement of corporate governance, is responsible, and cannot delegate such responsibility, for the following:

- Setting the Institution's tax strategy.
- Approving investments and operations of all types which are considered to be strategic or to carry considerable tax risk due to their high monetary value or particular characteristics, except when such approval corresponds to the Annual General Meeting.
- Approving the creation and acquisition of shareholdings in special purpose entities or entities registered in countries or territories classified as tax havens.
- Approving any transaction which, due to its complexity, might undermine the transparency of the Institution and its Group.

Consequently, the duties of the Board of Directors of Banco Sabadell include the obligation to approve the corporate tax policy and ensure compliance therewith by implementing an appropriate control and oversight system, which is enshrined in the general risk management and control framework of the Group.

4.4.4.3 Compliance risk

As regards compliance risk, one of the core aspects of the Group's policy, and the foundation of its organisational culture, is strict compliance with all legal provisions, meaning that the achievement of business objectives must be compatible, at all times, with adherence to the law and the established legal system.

To this end, the Group has a Compliance Division whose mission is to seek the highest levels of compliance with existing legislation and ensure that professional ethics are present in all areas of the Group's activity.

This Division assesses and manages compliance risk, understood as the risk of incurring legal or administrative penalties, significant financial losses or reputational damage as a result of an infringement of laws, regulations, internal rules or codes of conduct applicable to banking activity, minimising the possibility of any breaches of the foregoing, and ensuring that any breaches that do occur are identified, reported and diligently resolved. It does this by performing the following tasks:

- Monitoring and overseeing the adaptation to new regulations through proactive management to ensure regular and systematic monitoring of legal updates.
- Identifying and periodically assessing compliance risks in the different areas of activity and contributing to their management in an efficient manner. To this end, establishing, applying and maintaining appropriate procedures to prevent, detect, correct and minimise any compliance risk.
- Establishing, in accordance with the above, an up-to-date oversight and control programme, with the appropriate tools and methodologies for control.
- Supervising the risk management activities carried out by the first line of defence to ensure that they are aligned with the established risk policies and procedures.
- Keeping, for at least the period of time established by the legislation in force at any given time, the documentary justification of the controls carried out by the Compliance Division, as well as any other policies and procedures implemented for the best possible fulfilment of regulatory obligations.
- Submitting to the administrative and management bodies the regular or ad hoc reports on compliance that are legally required at any given time.
- Reporting to the administrative and management bodies on any information relevant to compliance arising from all areas and activities of each Group entity.
- Assisting the Board of Directors and Senior Management in compliance matters.
- Controlling and coordinating inspections, as well as responses to the requirements of Supervisors and Regulators, and checking that their recommendations have been acted on accordingly.
- Taking on institutional responsibilities and interacting with supervisory authorities and institutions in relation to matters within its remit and where agreed by the Institution's management and administrative bodies.
- Assigning functional responsibilities for compliance where necessary.
- Intervening in the process for establishing remuneration policies and practices.
- With regard to Anti-Money Laundering, Counter-Terrorist Financing (AML/CTF) and International Sanctions, implementing, managing and updating policies and procedures; carrying out the preliminary classification of the AML/CTF risk of customers during the onboarding process; applying enhanced due diligence measures when onboarding high-risk customers so that they may be accepted and duly updated beforehand; managing tracking alerts; detecting matches in lists of designated persons and transactions of countries subject to international sanctions; performing special analyses of suspicious activities and reporting them as necessary; preparing training plans; approving new products, services, channels and business areas; and conducting a periodic risk assessment of internal control procedures in relation to AML/CTF and international sanctions.
- Promoting a culture of compliance and appropriate conduct in each of the Group entities, adopting measures that will enable employees to obtain the training and experience they need to perform their duties correctly.

- Taking part in the development of training programmes in order to advise and make employees aware of the importance of complying with the established internal procedures.
- Advising on data protection through the Data Protection Office, acting as the point of contact with the Spanish Data Protection Agency (Agencia Española de Protección de Datos) and performing all other duties assigned in regulations to the Data Protection Officer.

The following compliance risks have been identified:

- Anti-Money Laundering and Counter-Terrorist Financing.
- Data protection.
- Market integrity.
- MiFID.
- EBA.
- Other products and services.
- Publicity.
- New legislation.
- Corporate crime prevention.
- Remuneration.
- Code of Conduct and Ethics.
- Subsidiaries and foreign branches.
- Customer Care Service (*Servicio de Atención al Cliente*, or SAC).

Note 5 – Minimum own funds and capital management

Minimum own funds requirements

The Group calculates minimum capital requirements based on Directive 2013/36/EU, amended by Directive 2019/878/EU (hereinafter, CRD-V), and Regulation (EU) 575/2013, amended by Regulation (EU) 2019/876 (hereinafter, CRR-II).

Regulation CRR-II and Directive CRD-IV entered into force on 27 June 2019 and have been implemented in successive stages since that date, although most of the provisions are applicable as from 28 June 2021.

The Spanish government transposed Directive CRD-V into national law through Royal Decree-Law 7/2021, of 27 April, Royal Decree 970/2021, of 8 November, and Circular 5/2021, of 22 December.

The Covid-19 health crisis prompted competent institutions in Europe to temporarily lower liquidity, capital and operational requirements applicable to banks, to ensure that they could continue carrying out their role of providing funding to the real economy.

In particular, the European Commission, the European Central Bank and the EBA provided clarity as regards the application of the flexibility already embedded in Regulation (EU) 575/2013 by issuing interpretations and guidance on the application of the prudential framework in the context of Covid-19.

This guidance included the European Central Bank (ECB) announcement, released on 18 June 2021, that euro area credit institutions that it directly supervises could continue to exclude certain central bank exposures from the leverage ratio, given the continuing presence of exceptional macroeconomic circumstances due to the Covid-19 pandemic. As a result, the leverage ratio relief originally authorised in September 2020, which was due to end on 27 June 2021, was extended until 31 March 2022. On 10 February 2022, the European Central Bank announced that it would not extend this measure beyond 31 March 2022.

In addition, in line with the ECB's communication dated 18 June 2021, credit institutions were able to exclude certain exposures to central banks from the leverage ratio until 31 March 2022.

In accordance with the aforesaid regulatory framework, credit institutions must comply with a total capital ratio of 8% at all times. However, regulators may exercise their authority and require institutions to maintain additional capital.

In this regard, on 2 February 2022, Banco Sabadell received the decision of the European Central Bank concerning the minimum prudential requirements applicable to the Bank as from 1 March 2022, as a result of the Supervisory Review and Evaluation Process (SREP). On a consolidated basis, Banco Sabadell was required to keep a phase-in Common Equity Tier 1 (CET1) ratio of at least 8.46% and a phase-in Total Capital ratio of at least 12.90%. These ratios include the minimum required by Pillar 1 (8%, of which 4.50% corresponds to CET1), the Pillar 2R (2.15%, of which 1.21% must be covered with CET1), the capital conservation buffer (2.50%), the requirement applicable due to the Bank's status as an 'other systemically important institution' (0.25%), and the requirement arising from the calculation of the counter-cyclical capital buffer which, as at December 2021, was 0%. Following this decision, the capital requirement was lowered by 10 basis points compared to 2021.

On 14 December 2022, Banco Sabadell received the decision of the European Central Bank concerning the minimum prudential requirements applicable to the Bank as from 1 January 2023, as a result of the Supervisory Review and Evaluation Process (SREP). At a consolidated level, Banco Sabadell is required to keep a phase-in Common Equity Tier 1 (CET1) ratio of at least 8.65% and a phase-in Total Capital ratio of at least 13.09%. These ratios include the minimum required by Pillar 1 (8%, of which 4.50% corresponds to CET1), the Pillar 2 requirement, or Pillar 2R (2.15%, of which 1.21% must be covered with CET1), the capital conservation buffer (2.50%), the requirement applicable due to the Bank's status as an 'other systemically important institution' (0.25%), and the counter-cyclical buffer (0.19%) that stems from the Bank of England's Financial Policy Committee (FPC) decision dated 13 December 2021 of increasing the counter-cyclical buffer from 0% to 1% as from 13 December 2022.

As at 31 December 2022, the Group's phase-in CET1 capital ratio stands at 12.67% (12.50% as at 31 December 2021) and a phase-in total capital ratio of 17.08% (17.98% as at 31 December 2021); therefore, the capital requirements indicated in the preceding points are being comfortably met.

The following table sets out the minimum prudential requirements applicable to Banco Sabadell following the Supervisory Review and Evaluation Process (SREP) for the years 2021-2023:

	2023	2022	2021
Pillar 1 CET1	4.50%	4.50%	4.50%
Pillar 2 Requirement	1.21%	1.21%	1.27%
Capital conservation buffer	2.50%	2.50%	2.50%
Systemic buffer	0.25%	0.25%	0.25%
Countercyclical buffer	0.19%	0.00%	0.00%
Common Equity Tier 1 (CET1) ratio	8.65%	8.46%	8.52%
Dates of communication of the SREP outcome	14/12/2022	2/2/2022	23/11/2020

On a standalone basis, the requisite Common Equity Tier 1 (CET1) ratio resulting from the 2022 SREP was 8.21% and the required Total Capital ratio was 12.65%. This requirement included the minimum required by Pillar 1 (8%, of which 4.50% corresponds to CET1), the Pillar 2R (2.15%, of which 1.21% must be covered with CET1), the capital conservation buffer (2.50%) and the requirement arising from the calculation of the specific counter-cyclical capital buffer which, as at December 2021, was 0%.

On 14 December 2022, Banco Sabadell received the decision of the European Central Bank concerning the minimum prudential requirements applicable to the Bank as from 1 January 2023, as a result of the Supervisory Review and Evaluation Process (SREP). On a standalone basis, Banco Sabadell is required to keep a phase-in Common Equity Tier 1 (CET1) ratio of at least 8.35% and a phase-in Total Capital ratio of at least 12.79%. These ratios include the minimum required by Pillar 1 (8%, of which 4.50% corresponds to CET1), the Pillar 2R (2.15%, of which 1.21% must be covered with CET1), the capital conservation buffer (2.50%) and the requirement arising from the calculation of the counter-cyclical capital buffer which, as at December 2022, was 0.14%.

As at 31 December 2022, Banco Sabadell's CET1 capital ratio stands at 13.30%, and its phase-in Total Capital ratio at 17.58%; consequently, with regard to standalone capital requirements, it also comfortably exceeds the SREP requirements.

Requirements related to the restructuring and resolution of credit institutions

On 15 May 2014, Directive 2014/59/EU was published in the Official Journal of the European Union, which establishes a framework for the restructuring and resolution of credit institutions and investment firms, known by its acronym BRRD (Bank Recovery and Resolution Directive).

Through the publication of Royal Decree 1012/2015, of 6 November 2015, implementing Law 11/2015, of 18 June 2015, on the recovery and resolution of credit institutions and investment firms, the BRRD was adopted in Spain.

The BRRD arises from the need to establish a framework that provides authorities with a credible set of tools to intervene sufficiently early and quickly in an unsound or failing institution so as to ensure the continuity of the institution's critical financial and economic functions, to avoid a significant adverse effect on financial stability, and to adequately protect public funds by minimising reliance on extraordinary public financial support. Likewise, covered depositors enjoy special treatment.

The framework proposed by the BRRD is based on the principle that traditional insolvency proceedings are not, in many cases, the best alternative to achieve the aforementioned objectives. Therefore, the BRRD introduces the resolution procedure, whereby competent resolution authorities obtain administrative powers to manage a failing institution.

In that sense, the preamble of Law 11/2015 defines a resolution process as a unique administrative process, which would manage the insolvency of those credit institutions and investment firms that cannot be undertaken through bankruptcy liquidation for reasons of public interest and financial stability. In order to achieve the aforementioned objectives, the BRRD envisages a series of instruments at the disposal of the relevant resolution authority, including a bail-in mechanism. For these purposes, the BRRD introduces a minimum requirement of own funds and eligible liabilities (MREL) that organisations must comply with at all times in order to ensure their loss-absorbing capacity is sufficient to guarantee the effective implementation of the resolution mechanisms and that, under the current regulatory environment, would be expressed as the amount of own funds and eligible liabilities as a percentage of the total liabilities and own funds of the organisation.

Similarly, in 2015 the FSB defined the TLAC (Total Loss-Absorbing Capacity) requirement, which was designed to ensure that institutions have sufficient capacity to absorb losses and execute a bail-in in the event of resolution. It should be noted that this requirement only applies to global systemically important banks (G-SIBs); therefore, it does not apply to Banco Sabadell Group.

In June 2019, after more than two and a half years of negotiations, a reform of the bank resolution framework was agreed with the approval of the new resolution directive, BRRD II (Directive 2019/879), which implements the international TLAC standard in the EU. BRRD II was transposed into Spanish law by Royal Decree-Law 7/2021, of 27 April 2021.

Responsibility for determining MREL falls to the Single Resolution Board (SRB), pursuant to that set forth in Regulation (EU) 806/2014, also revised in 2019 and replaced by Regulation (EU) 2019/877. Thus, the SRB, after consulting with the competent authorities, including the ECB, shall establish MREL for each bank, taking into account aspects such as the size, funding model, risk profile and potential contagion effect for the financial system.

In May 2021, the SRB published the MREL Policy under the Banking Package, which integrates the regulatory changes of the aforesaid resolution framework reform. The new SRB requirements are based on balance sheet data as at December 2021 and set two binding MREL targets: the final MREL target to be binding on 1 January 2024 and an interim target to be met by 1 January 2022. The latter corresponds to an intermediate level that allows for a linear build-up by institutions of their MREL capacity. Therefore, its calibration depends on the institution's MREL capacity at the time of calibration and its final target.

On 10 January 2023, Banco Sabadell received a communication from the Bank of Spain regarding the decision made by the Single Resolution Board (SRB) concerning the minimum requirement for own funds and eligible liabilities (MREL) and the subordination requirement applicable on a consolidated basis.

The requirements that must be met as from 1 January 2024 are as follows:

- The minimum requirement for own funds and eligible liabilities (MREL) is 22.22% of the total risk exposure amount (TREA) and 6.36% of the leverage ratio exposure (LRE).
- The subordination requirement is 17.23% of the TREA and 6.36% of the LRE.

The decision does not introduce changes on the following intermediate requirements that must be met as from 1 January 2022:

- The MREL requirement is 21.05% of the TREA and 6.22% of the LRE.
- The subordination requirement is 14.45% of the TREA and 6.06% of the LRE.

The capital used by the Institution to meet the combined buffer requirement (CBR), comprising the capital conservation buffer, the systemic risk buffer and the counter-cyclical buffer, will not be eligible to meet its MREL and subordination requirements expressed in terms of the TREA.

Banco Sabadell already meets the requirements that apply from 1 January 2024 onwards, which are in line with Banco Sabadell's expectations and with its funding plans. In 2022, the Bank issued 1,463 million euros of MREL-eligible senior non-preferred debt and 750 million euros of senior preferred debt.

	MREL Requirement		Subordination Requirement	
	% TREA	% LRE	% TREA	% LRE
Requirement 1 January 2022	21.05%	6.22%	14.45%	6.06%
Requirement 1 January 2024	22.22%	6.36%	17.23%	6.36%
MREL 31 December 2022 (*)	23.41%	8.26%	18.81%	6.82%

(*) The RWAs percentage does not include capital used to meet the CBR (2.93% as at Dec 2022 and estimated at 3.11% for 2024).

Capital management

The management of capital resources is the result of the ongoing capital planning process. This process takes into account the evolution of the economic, regulatory and sectoral environment. It takes into account the expected capital consumption of different activities, under the various envisaged scenarios, and the market conditions that could determine the effectiveness of the various actions being considered for implementation. The process is enshrined within the Group's strategic objectives and aims to achieve an attractive return for shareholders, whilst also ensuring that its level of own funds is appropriate in terms of the inherent risks of banking activity.

As regards capital management, as a general policy, the Group aims to adjust its overall available capital to the incurred risks.

The Group follows the guidelines set out in CRD-V and associated regulations, as well as their successive updates, in order to establish own funds requirements that are inherent in the risks actually incurred by the Group, based on independently validated internal risk measurement models. To this end, the Group has been authorised by the supervisor to use the majority of its internal models to calculate regulatory capital requirements.

The Group carries out frequent backtesting exercises on its IRB models, at least once a year. These backtesting exercises are independently reviewed by the Internal Validation unit and reported for their monitoring to the internal governing bodies, such as the Technical Risk Committee and the Board Risk Committee (delegated Board committees). Additionally, the backtesting results that affect the risk parameters and the main conclusions drawn from these results, taking into account the criteria established by the EBA in its Disclosure Guidelines, are included in the annual Pillar III Disclosures report.

Banco Sabadell Group prepares an internal capital adequacy assessment process (ICAAP) on a consolidated basis continuously throughout the year, in order to carry out a full assessment of the risks taken by the Group and generate a relevant, updated, all-encompassing and prospective understanding of the adequacy of the levels of capital.

The ICAAP is developed under a solid governance framework, with high involvement from Senior Management. The Board of Directors is the highest body responsible for its review and approval.

Banco Sabadell Group develops the ICAAP from an all-encompassing perspective, so as to generate an assessment of the adequacy of the level of internal capital, taking into account the Group's structure and business model from different perspectives.

The ICAAP process is seen as a complementary tool to Basel Pillar 1 (regulatory capital), which first analyses the Group's business model within its economic, financial and regulatory environment, and its short- and medium-term sustainability and feasibility. The Group's business model involves the acceptance of risks and, therefore, the definition of a risk profile. As part of the ICAAP, an identification is made of the material risks derived from the Group's activities and a self-assessment is carried out of the inherent and residual risk entailed by such risks after considering the risk governance, management and control systems.

Based on the inventory of the Group's material risks and their management, a comprehensive quantitative assessment of the necessary capital based on internal approaches (economic capital) is established, the scope of which exceeds the risks covered by Pillar 1, integrating the models used by the Group (for example, borrower rating systems, credit ratings and scores) and other internal estimates appropriate to each type of risk.

In addition, the ICAAP includes forward-looking analyses using a 3-year time horizon (or even a 30-year time horizon in the case of scenarios designed to forecast climate risk). These analyses are carried out under a baseline economic scenario, but also under plausible but unlikely adverse scenarios (stress tests), which are relevant to the Group and, therefore, reflect adverse situations that may have a particular effect on the Group. The baseline forecast includes the Group's business and financial plans. These forecasts are carried out to verify whether the performance of the business, risk and income statement in the event of potential adverse scenarios could pose a risk to the Group's solvency based on the available own funds or the Group's compliance with its Risk Appetite Statement. As a result of these exercises, the Bank can detect weaknesses and propose, if necessary, action plans that mitigate the identified risks.

Forward-looking analyses under adverse scenarios are supplemented by reverse stress tests, which identify idiosyncratic characteristics of the Group that may pose a relevant risk to its solvency if they were to materialise.

The combination of the various solvency measures (static or dynamic and regulatory or economic), taking into account the inventory of risks affecting the Group and the main vulnerabilities detected, enables the Board of Directors, as the highest body responsible for the ICAAP, to obtain a conclusion on Group's solvency position.

The Group has implemented an analytical system of risk-adjusted return on capital (RAROC), which provides an assessment of the capital required and allows measuring the return obtained from the transaction and customer level down to the business unit level, enabling uniform comparisons to be made, as well as its inclusion in the transaction pricing process.

The level and quality of capital are Group RAS metrics and their management and control are governed by the Group's Risk Appetite Framework (RAF).

For more information on capital management, see the Pillar III Disclosures report, published annually, which is available on the Group's website (www.grupobancosabadell.com), in the section on Information for shareholders and investors / Financial information.

Eligible capital and capital ratios

As at 31 December 2022, the Group's eligible capital amounted to 13,587 million euros (14,501 million euros as at 31 December 2021), representing a surplus of 3,175 million euros (4,014 million euros as at 31 December 2021), as shown below:

Thousand euro			
	2022	2021	Year-on-year change (%)
Capital	703,371	703,371	—
Reserves (includes profit attributable to the Group, net of dividends)	12,838,901	12,519,248	2.55
Valuation and transitional adjustments	(544,155)	(148,352)	266.80
Deductions	(2,915,365)	(2,994,734)	(2.65)
CET1 capital	10,082,751	10,079,533	0.03
CET1 (%)	12.67	12.50	1.36
Preference shares, convertible bonds and deductions	1,650,000	2,400,000	(31.00)
Additional Tier 1 capital	1,650,000	2,400,000	(31.00)
AT1 (%)	2.07	2.98	(30.54)
Tier 1 capital	11,732,751	12,479,533	(5.98)
Tier 1 (%)	14.75	15.47	(4.65)
Tier 2 capital	1,855,001	2,021,270	(8.23)
Tier 2 (%)	2.33	2.51	(7.17)
Capital base	13,587,753	14,500,802	(6.30)
Minimum capital requirement	10,412,415	10,486,962	(0.71)
Capital surplus	3,175,338	4,013,840	(20.89)
Total capital ratio (%)	17.08	17.98	(5.01)
Risk weighted assets (RWAs)	79,553,809	80,645,593	(1.35)

Common Equity Tier 1 (CET1) capital accounts for 74.20% of eligible capital. Deductions are mainly comprised of intangible assets, goodwill and deferred tax assets. The impact of applying, as from June 2020 onwards, Regulation 2020/873 in the Covid-19 backdrop is deemed transitional. This regulation extends the transitional provisions designed to mitigate the impact of IFRS 9 for two years, allowing institutions to fully add back to their Common Equity Tier 1 capital any increase in new expected credit loss provisions that they recognise after 1 January 2020 for their financial assets that are not credit-impaired.

Tier 1 comprises, in addition to CET1 funds, items that largely make up Additional Tier 1 capital (12.14% of own funds), which are capital items comprised of preferred securities.

Tier 2 capital provides 13.65% of the total capital ratio and is made up largely of subordinated debt.

The voluntary early redemption of the full amount of preferred securities envisaged in the conditions of the AT1 Preferred Securities 1/2017 issue, whose value amounted to 750 million euros, took place in 2022.

In terms of risk-weighted assets, over the period two securitisations have been carried out: the traditional consumer loan securitisation Sabadell Consumo 2 executed on 8 July 2022 and the Boreas synthetic securitisation of project finance exposures executed on 28 September 2022. It is also worth highlighting the improved ratings of businesses, as a result of the improved financial situation and the improvements of house prices in the UK, both of which had a positive impact on risk-weighted assets. During the period, new PD, LGD and CCF calibrations were implemented for the businesses segments, the Foundation IRB approach began to be used to exposures to corporates and groups and the new rating models were implemented for project finance exposures. Furthermore, after receiving approval from the Supervisor, exposures to financial institutions, which in 2021 were calculated under the Foundation IRB approach, began to be calculated under the standardised approach. Lastly, in 2022, impacts linked to the completion of the IRB Repair Programme and due to materialise in the short/medium term have been front-loaded.

In fully-loaded terms, as at 31 December 2022, the Common Equity Tier 1 (CET1) ratio stood at 12.55% and the total capital ratio stood at 17.02%, both well above the regulatory minima.

The following table shows movements in the various regulatory capital components during 2022 and 2021:

Thousand euro	
CET1 balance as at 31 December 2020	9,911,107
Reserves (includes profit attributable to the Group, net of dividends)	241,508
Minority interests	(9,270)
Valuation adjustments	216,115
Deductions and transitory effects	(279,927)
CET1 balance as at 31 December 2021	10,079,533
Reserves (includes profit attributable to the Group, net of dividends)	319,654
Minority interests	—
Valuation adjustments	(273,616)
Deductions and transitory effects	(42,819)
CET1 balance as at 31 December 2022	10,082,751
Thousand euro	
Additional Tier 1 balance as at 31 December 2020	1,153,539
Eligible instruments	1,250,000
Minority interests	(3,539)
Additional Tier 1 balance as at 31 December 2021	2,400,000
Eligible instruments	(750,000)
Minority interests	—
Additional Tier 1 balance as at 31 December 2022	1,650,000
Thousand euro	
Tier 2 balance as at 31 December 2020	1,664,708
Eligible instruments	89,030
Credit risk adjustments	26,773
Minority interests	(4,719)
Deductions and transitory effects	245,478
Tier 2 balance as at 31 December 2021	2,021,270
Eligible instruments	(99,745)
Credit risk adjustments	(10,193)
Minority interests	—
Deductions and transitory effects	(56,330)
Tier 2 balance as at 31 December 2022	1,855,001

The table below shows the reconciliation of equity and regulatory capital as at 31 December 2022 and 2021:

Thousand euro		
	2022	2021
Shareholders' equity	13,840,723	13,356,905
Accumulated other comprehensive income	(650,645)	(385,604)
Minority interests	34,343	24,980
Total equity	13,224,421	12,996,281
Goodwill and intangibles	(2,144,909)	(2,227,640)
Dividends (*)	(317,281)	(168,809)
DTAs and thresholds for non-monetisable DTAs	(537,712)	(563,837)
Deductions	(124,898)	(117,503)
Other adjustments	(16,871)	161,041
Regulatory accounting adjustments	(3,141,671)	(2,916,749)
Common Equity Tier 1 capital	10,082,751	10,079,533
Additional Tier 1 capital	1,650,000	2,400,000
Tier 2 capital	1,855,001	2,021,270
Total regulatory capital	13,587,753	14,500,802

(*) Does not consider interim dividend booked

As at 31 December 2022 and 2021, there is no significant difference between the accounting scope of consolidation and the regulatory scope of consolidation.

Risk-weighted assets (RWAs) for the period stood at 79,554 million euros as at 31 December 2022, which represents a change of -1.35% relative to the previous period due to the variation in credit RWAs. It is also worth noting the improvement in the density of the portfolio due to the update and improved ratings of businesses, as a result of the improved financial situation and the improvements of house prices in the UK. In addition, two securitisations carried out in the period are particularly relevant: the conventional securitisation on consumer loans Sabadell Consumo 2 carried out on 8 July 2022 and the synthetic securitisation Boreas on project finance exposures carried out on 28 September 2022.

The breakdown of risk-weighted assets by type of risk, as at 31 December 2022 and 2021, is shown below:

Thousand euro				
	2022		2021	
	Amount	%	Amount	%
Credit risk (*)	70,387,473	88.48 %	72,134,688	89.45 %
Operational risk	8,160,674	10.26 %	7,931,371	9.83 %
Market risk	1,005,662	1.21 %	579,519	0.72 %
Total	79,553,809	100.00 %	80,645,578	100.00 %

(*) Includes counterparty credit risk, deferred tax assets and the impact on RWAs of applying additional prudential adjustments required by the supervisor (SSM). Certain impacts linked mainly to the completion of the IRB Repair programme, which the Institution has decided to frontload, are also included. Not taking into account the aforementioned supplements, the credit RWAs amount to 66,859 million euros.

The following table shows the reasons for the variation in credit RWAs occurring during 2022 and 2021:

Thousand euro		
	RWA	Capital requirements (*)
Balance as at 31 December 2020	66,696,247	5,335,700
Change in business volume	869,920	69,594
Asset quality	(764,498)	(61,160)
Changes in models	55,000	4,400
Methodology, parameters and policies	(510,161)	(40,813)
Acquisitions and disposals	(11,021)	(882)
Exchange rate	1,129,734	90,379
Other (**)	2,077,912	166,233
Balance as at 31 December 2021	69,543,133	5,563,451
Change in business volume	(769,481)	(61,558)
Asset quality	(3,006,475)	(240,518)
Changes in models	951,398	76,112
Methodology, parameters and policies	1,017,559	81,405
Acquisitions and disposals	(446,665)	(35,733)
Exchange rate	(430,845)	(34,468)
Other	—	—
Balance as at 31 December 2022	66,858,624	5,348,690

Excludes credit valuation adjustment (CVA) requirements and contributions to the default guarantee fund of CCPs. Also excludes "Other risk exposure amounts" and RWAs corresponding to securitisations.

(*) Calculated as 8% of RWAs.

(**) The increase in the "Other" category is due to the assignment, at a granular level, of a series of add-ons at TSB, which as at December 2020 were reported as "Other risk exposure amounts".

The table below shows risk-weighted assets for the most significant risk in terms of volume (credit risk), broken down by region, as at 31 December 2022 and 2021:

%		
	2022	2021
Spain	64.95 %	65.13 %
Rest of European Union	4.97 %	5.30 %
United Kingdom	18.24 %	18.47 %
Americas	11.08 %	9.98 %
Rest of the world	0.77 %	1.12 %
Total	100 %	100 %

Includes counterparty credit risk.

The leverage ratio aims to reinforce capital requirements by providing a supplementary measure that is not linked to the level of risk. Article 92 of the CRR-II regulation establishes that a minimum leverage ratio of 3% is required as from June 2021; this percentage is comfortably exceeded by the Group as at 31 December 2022.

The leverage ratio as at 31 December 2022 and 2021 is shown below:

Thousand euro		
	2022	2021
Tier 1 capital	11,732,751	12,479,533
Exposure	253,840,350	211,616,215
Leverage ratio	4.62 %	5.90 %

In 2018, following the entry into force of IFRS 9, the Group opted to apply the transitional arrangements set forth in Regulation (EU) 2017/2395.

During 2022, the leverage ratio decreased by 128 basis points compared to that as at 31 December 2021, mainly due to the voluntary early redemption envisaged in the conditions of the AT1 Preferred Securities 1/2017 issue, whose value amounted to 750 million euros, and to the end of the transitional period that allowed the exclusion of exposures of deposits held at central banks from the leverage ratio. This transitional period began to apply in September 2020 through Decision (EU) 2020/1306, which provided for validity until 27 June 2021. This validity period was subsequently extended until 31 March 2022 through Decision (EU) 2021/1074.

The following table shows the impact that the application of the transitional arrangements in force in 2022 has had on the various capital ratios (in phase-in terms) compared to the impact if the IFRS 9 rules had been applied in full (in fully-loaded terms):

Thousand euro		2022
Available capital		
Common Equity Tier 1 (CET1) capital		10,082,751
Common Equity Tier 1 (CET1) capital if the IFRS 9 or analogous ECL transitional arrangements had not been applied		9,985,006
Tier 1 (T1) capital		11,732,751
Tier 1 (T1) capital if the IFRS 9 or analogous ECL transitional arrangements had not been applied		11,635,006
Total capital		13,587,753
Total capital if the IFRS 9 or analogous ECL transitional arrangements had not been applied		13,546,337
Risk weighted assets		
Total risk weighted assets		79,553,809
Total risk weighted assets if the IFRS 9 or analogous ECL transitional arrangements had not been applied		79,568,639
Capital ratios		
Common Equity Tier 1 (CET1) capital (expressed as percentage of risk exposure amount)		12.67 %
Common Equity Tier 1 (CET1) capital (expressed as percentage of risk exposure amount) if the IFRS 9 or analogous ECL transitional arrangements had not been applied		12.55 %
Tier 1 (T1) capital (expressed as percentage of risk exposure amount)		14.75 %
Tier 1 (T1) capital (expressed as percentage of risk exposure amount) if the IFRS 9 or analogous ECL transitional arrangements had not been applied		14.62 %
Total capital (expressed as percentage of risk exposure amount)		17.08 %
Total capital (expressed as percentage of risk exposure amount) if the IFRS 9 or analogous ECL transitional arrangements had not been applied		17.02 %
Leverage ratio		
Total exposure measure corresponding to leverage ratio		253,840,350
Leverage ratio		4.62 %
Leverage ratio if the IFRS 9 or analogous ECL transitional arrangements had not been applied		4.59 %

The main impact arising from the application of these transitional arrangements has been the inclusion of 98 million euros in CET1, which partly mitigates the decrease in equity resulting from the entry into force of IFRS 9, due to the increase in accounting provisions. The impact generated a reduction in risk-weighted assets of 15 million euros.

For more information on capital ratios and the leverage ratio, their composition, details of parameters and their management, see the Pillar III Disclosures report, which is published annually and is available on the Group's website (www.grupobancosabadell.com), in the section on Information for shareholders and investors / Financial information.

Note 6 – Fair value of assets and liabilities

Financial assets and financial liabilities

The fair value of a financial asset or financial liability at a given date is understood as the amount at which it could be sold or transferred, respectively, as at that date, between two independent and knowledgeable parties acting freely and prudently, under market conditions. The most objective and commonly used reference for the fair value of a financial asset or financial liability is the price that would be paid in an organised, transparent and deep market (“quoted price” or “market price”).

When there is no market price for a particular financial asset or financial liability, the fair value is estimated from the values established for similar instruments in recent transactions or, alternatively, by using mathematical valuation models that have been suitably tested by the international financial community. When using these models, the particular characteristics of the financial asset or financial liability to be valued are taken into account, particularly the different types of risk that may be associated therewith. The above notwithstanding, the limitations inherent in the valuation models that have been developed and possible inaccuracies in the assumptions and parameters required by these models may result in the estimated fair value of a financial asset or financial liability not exactly matching the price at which the asset or liability could be delivered or settled on the valuation date.

The fair value of financial derivatives quoted on an active market is the daily quoted price.

In the case of instruments for which quoted prices cannot be determined, prices are estimated using internal models developed by the Bank, most of which take data based on observable market parameters as significant inputs. In the remaining cases, the models make use of other inputs which rely on internal assumptions based on generally accepted practices within the financial community.

For financial instruments, the fair values disclosed in the financial statements are classified according to the following fair value levels:

- Level 1: Fair values are obtained from the (unadjusted) prices quoted on active markets for that instrument.
- Level 2: Fair values are obtained from the prices being quoted on active markets for similar instruments, the prices of recent transactions, expected payment flows or other valuation techniques in which all significant inputs are directly or indirectly based on observable market data.
- Level 3: Fair values are obtained through valuation techniques in which some significant inputs are not based on observable market data.

Set out below are the main valuation methods, assumptions and inputs used when estimating the fair value of financial instruments classified in Levels 2 and 3, according to the type of financial instrument concerned:

Financial instruments Level 2	Valuation techniques	Main assumptions	Main inputs used
Debt securities	Net present value method	Calculation of the present value of financial instruments as the present value of future cash flows (discounted at market interest rates), taking into account: - An estimate of pre-payment rates - Issuers' credit risk	- Issuer credit spreads - Observable market interest rates
Equity instruments	Sector multiples (P/BV)	Based on the NACE code that best represents the company's primary activity, the price-to-book value (P/BV) ratio obtained from peers is applied	- NACEs - Quoted prices in organised markets
Simple derivatives (a)	Net present value method	Implicit curves calculated based on quoted market prices	- Observable yield curve - FX swaps and spot curve
Other derivatives (a)	Analytic/semi-analytic formulae	- For equity derivatives, FX or commodities: Black-Scholes model: assumes log normal distribution of underlying with volatility depending on term	- Forward structure of the underlying asset, given by market data (dividends, swap points, etc.). - Volatility surfaces of options.
		- For interest rate derivatives: Normal model and shifted Libor Market Model: allow perfect correlation of negative rates and forward rates in the yield curve term structure.	- Term structure of interest rates - Volatility surfaces of Libor rate options (caps) and swap rate options (swaptions)
	Monte Carlo simulations	For valuation of equity derivatives, FX or commodities: Black-Scholes model: assumes log normal distribution of underlying with volatility depending on term For calculation of CVA and DVA adjustments: Normal model and Black-Scholes model.	- Forward structure of the underlying asset, given by market data (dividends, swap points, etc.). - Volatility surfaces of options - Probability of default for calculation of CVA and DVA (b)
	Hybrid local volatility models - stochastic	- For FX derivatives: Tremor model: implicit volatility obtained through stochastic differential equations.	- Forward structure of the underlying asset, given by market data (dividends, swap points, etc.). - Volatility surfaces of options
	For credit derivatives: - Intensity models	These models assume a default probability structure resulting from term-based default intensity rates	- Credit Default Swaps (CDS) price quotes - Historic volatility of credit spreads

(a) Given the small net position of Banco Sabadell, the funding value adjustment (FVA) is estimated to have a non-material impact on the valuation of derivatives.

Financial instruments Level 3	Valuation techniques	Main assumptions	Main non-observable inputs
Debt securities	Net present value method	Calculation of the present value of financial instruments as the present value of future cash flows (discounted at market interest rates), taking into account in each case: - An estimate of pre-payment rates - Issuers' credit risk - Other estimates on variables that affect future flows: claims, losses, redemptions	- Estimated credit spreads of the issuer or a similar issuer - Rates of claims, losses and/or redemptions
Equity instruments	Discounted cash flow method	Calculation of the present value of future cash flows discounted at market interest rates adjusted for risk (CAPM method), taking into account: - An estimate of the company's projected cash flows - Sector risk of the company - Macroeconomic inputs	The entity's business plans - Risk premiums of the company's sector - Adjustment for systemic risk (Beta Parameter)
Derivatives (a)	For credit derivatives: - Intensity models	These models assume a default probability structure resulting from term-based default intensity rates	For credit derivatives: - Estimated credit spreads of the issuer or a similar issuer - Historic volatility of credit spreads

(a) Given the small net position of Banco Sabadell, the funding value adjustment (FVA) is estimated to have a non-material impact on the valuation of derivatives.

(b) To calculate CVA and DVA, levels of severity fixed at 60% have been used, which corresponds to the market standard for senior debt. Average future, positive and negative exposures have been estimated using market models, Libor for interest rates and the Black-Scholes model for FX, using market inputs. The probability of default of customers with no quoted debt instruments or CDS have been obtained using the IRB model and for Banco Sabadell those obtained from the CDS stock prices have been assigned.

Determination of the fair value of financial instruments

A comparison between the value at which the Group's main financial assets and financial liabilities are recognised on the accompanying consolidated balance sheets and their corresponding fair values is shown below:

Thousand euro

	Note	2022		2021	
		Carrying amount	Fair value	Carrying amount	Fair value
Assets:					
Cash, cash balances at central banks and other demand deposits	7	41,260,395	41,260,395	49,213,196	49,213,196
Financial assets held for trading	8,9,10	4,017,253	4,017,253	1,971,629	1,971,629
Non-trading financial assets mandatorily at fair value through profit or loss	8	77,421	77,421	79,559	79,559
Financial assets designated at fair value through profit or loss		—	—	—	—
Financial assets at fair value through other comprehensive income	9	5,802,264	5,802,264	6,869,637	6,869,637
Financial assets at amortised cost	8	185,045,452	178,139,213	178,869,317	184,223,595
Derivatives – Hedge accounting	12	3,072,091	3,072,091	525,382	525,382
Total assets		239,274,876	232,368,637	237,528,720	242,882,998

Thousand euro

	Note	2022		2021	
		Carrying amount	Fair value	Carrying amount	Fair value
Liabilities:					
Financial liabilities held for trading	10	3,598,483	3,598,483	1,379,898	1,379,898
Financial liabilities designated at fair value through profit or loss		—	—	—	—
Financial liabilities at amortised cost	18, 19, 20, 21	232,529,932	221,121,599	235,179,222	234,493,250
Derivatives – Hedge accounting	12	1,242,470	1,242,470	512,442	512,442
Total liabilities		237,370,885	225,962,552	237,071,562	236,385,590

Financial instruments at fair value

The following tables show the main financial instruments recognised at fair value in the accompanying consolidated balance sheets, broken down according to the valuation method used to estimate their fair value:

Thousand euro

	Note	2022			
		Level 1	Level 2	Level 3	Total
Assets:					
Financial assets held for trading		417,131	3,597,627	2,495	4,017,253
Derivatives	10	—	3,597,627	2,495	3,600,122
Equity instruments	9	—	—	—	—
Debt securities	8	417,131	—	—	417,131
Loans and advances – Customers		—	—	—	—
Non-trading financial assets mandatorily at fair value through profit or loss		14,861	10,428	52,132	77,421
Equity instruments		1,945	9,286	11,914	23,145
Debt securities	8	12,916	1,142	40,218	54,276
Loans and advances		—	—	—	—
Financial assets designated at fair value through profit or loss		—	—	—	—
Debt securities		—	—	—	—
Loans and advances – Credit institutions		—	—	—	—
Financial assets at fair value through other comprehensive income		5,557,280	142,327	102,657	5,802,264
Equity instruments	9	631	122,400	56,541	179,572
Debt securities	8	5,556,649	19,927	46,116	5,622,692
Loans and advances		—	—	—	—
Derivatives – Hedge accounting	12	—	3,062,111	9,980	3,072,091
Total assets		5,989,272	6,812,493	167,264	12,969,029

Thousand euro

	Note	2022			
		Level 1	Level 2	Level 3	Total
Liabilities:					
Financial liabilities held for trading		224,447	3,374,036	—	3,598,483
Derivatives	10	—	3,374,036	—	3,374,036
Short positions		224,447	—	—	224,447
Deposits with credit institutions		—	—	—	—
Financial liabilities designated at fair value through profit or loss		—	—	—	—
Derivatives – Hedge accounting	12	—	1,242,470	—	1,242,470
Total liabilities		224,447	4,616,506	—	4,840,953

Thousand euro

	Note	2021			Total
		Level 1	Level 2	Level 3	
Assets:					
Financial assets held for trading		592,631	1,378,998	—	1,971,629
Derivatives	10	—	1,378,998	—	1,378,998
Equity instruments	9	2,258	—	—	2,258
Debt securities	8	590,373	—	—	590,373
Loans and advances – Customers		—	—	—	—
Non-trading financial assets mandatorily at fair value through profit or loss		18,361	1,541	59,657	79,559
Equity instruments	9	14,544	38	—	14,582
Debt securities		3,817	1,503	59,657	64,977
Loans and advances		—	—	—	—
Financial assets designated at fair value through profit or loss		—	—	—	—
Debt securities		—	—	—	—
Loans and advances – Credit institutions		—	—	—	—
Financial assets at fair value through other comprehensive income		6,594,926	133,287	141,424	6,869,637
Equity instruments	9	2,402	106,378	75,766	184,546
Debt securities	8	6,592,524	26,909	65,658	6,685,091
Loans and advances		—	—	—	—
Derivatives – Hedge accounting	12	—	525,382	—	525,382
Total assets		7,205,918	2,039,208	201,081	9,446,207

Thousand euro

	Note	2021			Total
		Level 1	Level 2	Level 3	
Liabilities:					
Financial liabilities held for trading		56,662	1,323,236	—	1,379,898
Derivatives	10	—	1,323,236	—	1,323,236
Short positions		56,662	—	—	56,662
Deposits with credit institutions		—	—	—	—
Financial liabilities designated at fair value through profit or loss		—	—	—	—
Derivatives – Hedge accounting	12	—	512,442	—	512,442
Total liabilities		56,662	1,835,678	—	1,892,340

Derivatives with no credit support annexes (CSAs) include the Credit Valuation Adjustment (CVA) and Debit Valuation Adjustment (DVA) in their fair value, respectively. The fair value of these derivatives represents 5.31% of the total, and their adjustment for credit and debit risks represents 17.30% of their fair value as at 31 December 2022 (4.74% and 5.73%, respectively, as at 31 December 2021).

The movements in the balances of the financial assets and financial liabilities recognised at fair value and classified as Level 3, disclosed in the accompanying consolidated balance sheets, are shown below:

Thousand euro		
	Assets	Liabilities
Balance as at 31 December 2020	160,606	—
Valuation adjustments recognised in profit or loss (*)	4,231	—
Valuation adjustments not recognised in profit or loss	5,015	—
Purchases, sales and write-offs	(30,874)	—
Net additions/removals in Level 3	58,927	—
Exchange differences and other	3,176	—
Balance as at 31 December 2021	201,081	—
Valuation adjustments recognised in profit or loss (*)	3,662	—
Valuation adjustments not recognised in profit or loss	10,115	—
Purchases, sales and write-offs	(44,502)	—
Net additions/removals in Level 3	(4,957)	—
Exchange differences and other	1,865	—
Balance as at 31 December 2022	167,264	—

(*) Relates to securities retained on the balance sheet.

Details of financial instruments that were transferred to different valuation levels in 2022 are as follows:

	2022						
	From:	Level 1		Level 2		Level 3	
	To:	Level 2	Level 3	Level 1	Level 3	Level 1	Level 2
Assets:							
Financial assets held for trading	—	—	—	—	—	—	—
Non-trading financial assets mandatorily at fair value through profit or loss	—	—	—	—	—	—	—
Financial assets designated at fair value through profit or loss	—	—	—	—	—	—	—
Financial assets at fair value through other comprehensive income	—	—	—	429	4,465	920	—
Derivatives	—	—	—	—	—	—	—
Liabilities:							
Financial liabilities held for trading	—	—	—	—	—	—	—
Financial liabilities designated at fair value through profit or loss	—	—	—	—	—	—	—
Derivatives – Hedge accounting	—	—	—	—	—	—	—
Total	—	—	—	429	4,465	920	—

Details of financial instruments that were transferred to different valuation levels in 2021 are as follows:

Thousand euro

	2021						
	From:	Level 1		Level 2		Level 3	
	To:	Level 2	Level 3	Level 1	Level 3	Level 1	Level 2
Assets:							
Financial assets held for trading		—	—	—	—	—	—
Non-trading financial assets mandatorily at fair value through profit or loss		—	—	—	—	—	—
Financial assets designated at fair value through profit or loss		—	—	—	—	—	—
Financial assets at fair value through other comprehensive income		—	58,890	—	37	—	—
Derivatives		—	—	—	—	—	—
Liabilities:							
Financial liabilities held for trading		—	—	—	—	—	—
Financial liabilities designated at fair value through profit or loss		—	—	—	—	—	—
Derivatives – Hedge accounting		—	—	—	—	—	—
Total		—	58,890	—	37	—	—

Transfers from Level 3 to Level 1 in 2022 are due to the fact that the markets in which these instruments (senior bonds) are traded are now being considered to have an active market; therefore, their valuation was obtained from market prices.

Transfers from Level 1 to Level 3 in 2021 were due to the fact that the markets in which these instruments (mainly asset-backed securities) are traded were no longer considered to have an active market; therefore, their value was hence calculated using valuation techniques in which one of the main significant inputs (early redemption rate) was based on unobservable market data.

As at 31 December 2022 and 2021, the effect of replacing the main assumptions used in the valuation of Level 3 financial instruments with other reasonably possible assumptions, taking the highest value (most favourable assumption) or lowest value (least favourable assumption) of the range that is deemed likely, is not significant.

At year-end in both years, there were no derivatives using equity instruments as underlying assets or material interests in discretionary gains in any companies.

Financial instruments at amortised cost

The following tables show the fair value of the main financial instruments recognised at amortised cost in the accompanying consolidated balance sheets:

Thousand euro

	2022			
	Level 1	Level 2	Level 3	Total
Assets:				
Financial assets at amortised cost:				
Debt securities	19,264,376	778,098	207,034	20,249,508
Loans and advances	2,776,939	20,211,002	134,901,764	157,889,705
Total assets	22,041,315	20,989,100	135,108,798	178,139,213

Thousand euro

	2022			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Financial liabilities at amortised cost (*):				
Deposits	—	188,065,858	3,772,522	191,838,380
Debt securities issued	18,674,324	3,950,033	—	22,624,357
Total liabilities	18,674,324	192,015,891	3,772,522	214,462,737

(*) As at 31 December 2022, the Group had other financial liabilities amounting to 6,658,861 thousand euros.

Thousand euro

	2021			
	Level 1	Level 2	Level 3	Total
Assets:				
Financial assets at amortised cost				
Debt securities	14,559,083	716,151	67,830	15,343,063
Loans and advances	—	25,446,544	143,433,988	168,880,532
Total assets	14,559,083	26,162,695	143,501,818	184,223,595

Thousand euro

	2021			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Financial liabilities at amortised cost (*)				
Deposits	—	204,979,429	3,101,017	208,080,446
Debt securities issued	16,490,631	5,097,385	3,119	21,591,135
Total liabilities	16,490,631	210,076,814	3,104,136	229,671,581

(*) As at 31 December 2021, the Group had other financial liabilities amounting to 4,821,669 thousand euros.

The fair value of the headings “Financial assets at amortised cost” and “Financial liabilities at amortised cost” has been estimated using the discounted cash flow method, applying market interest rates at the end of each year, with the exception of debt securities traded on active markets, for which it has been estimated using year-end market prices.

The fair value of the heading “Cash, cash balances at central banks and other demand deposits” has been likened to its carrying amount, as these are mainly short-term balances.

Financial instruments at cost

As at the end of 2022 and 2021, there were no equity instruments valued at their cost of acquisition that could be considered significant.

Loans and financial liabilities at fair value through profit or loss

As at 31 December 2022 and 2021, there were no loans or financial liabilities recognised at fair value through profit or loss.

Non-financial assets

Real estate assets

As at 31 December 2022 and 2021, the net carrying values of real estate assets do not differ significantly from the fair values of these assets (see Notes 13, 15 and 17).

The selection criteria for valuation suppliers and the update of appraisals are defined in the section on “Guarantees”, in Note 1.3.4. to these consolidated annual financial statements.

Valuation techniques are generally used by all appraisal companies based on the type of each real estate asset.

As per regulatory requirements, in the valuation techniques used, the appraisal companies maximise the use of observable market data and other factors which would be taken into account by market operators when setting prices, endeavouring to keep the use of subjective considerations and unobservable or non-verifiable data to a minimum.

The main valuation methods used fall into the following measurement levels:

Level 2

- Comparison method: applicable to all kinds of properties provided that there is a representative market of comparable properties and that sufficient data is available relating to transactions that reflect the current market situation.
- Rental update method: applicable when the valued property generates or may generate rental income and there is a representative market of comparable data.

- **Statistical model:** this model adjusts the value of the assets based on the date of acquisition and their location, updating the value in accordance with price trends in the area concerned as from the date of purchase. To this end, it includes statistical information on price trends in all provinces, as provided by external appraisal firms, as well as demographic data from the Spanish Office for National Statistics (INE) to calculate sensitivity at a municipality level. The value obtained is in turn adjusted based on the construction progress (finished product, development in progress, plots or land under management) and use (residential, industrial, etc.) of the asset.

Level 3

- **Cost method:** applicable to determine the value of buildings being planned, under construction or undergoing renovations.
- **Residual method:** in the present macroeconomic climate, the dynamic calculation procedure is being used preferentially in new land valuations to the detriment of the static procedure, which is reserved for specific cases in which the envisaged timeframes for project completion are in line with the relevant regulations.

Depending on the type of asset, the methods used in the valuation of the Group's portfolio are the following:

- Completed works: valued in comparable terms, based on updates to income or the statistical model (Level 2).
- Works in progress: valued using the cost method as a sum of the land value and the value of the work carried out (Level 3).
- Land: valued using the residual method (Level 3).

Determination of the fair value of real estate assets

The following tables show the main real estate assets broken down by the valuation method used in their fair value estimate as at 31 December 2022 and 2021:

Thousand euro				
2022				
	Level 1	Level 2	Level 3	Total
Housing	—	672,441	—	672,441
Branches and offices, retail establishments and other real estate	—	943,251	—	943,251
Land and building plots	—	5,351	25,031	30,382
Work in progress	—	—	2,585	2,585
Total assets	—	1,621,043	27,616	1,648,659

Thousand euro				
2021				
	Level 1	Level 2	Level 3	Total
Housing	—	809,601	—	809,601
Branches and offices, retail establishments and other real estate	—	1,014,204	—	1,014,204
Land and building plots	—	—	30,440	30,440
Work in progress	—	—	3,966	3,966
Total assets	—	1,823,805	34,406	1,858,211

Significant unobservable variables used in valuations classed as Level 3 have not been developed by the Group but by the independent third party valuation companies that performed the appraisals. Given the widespread use of the appraisals, the valuation techniques of which are clearly set out in the regulation governing the valuation of properties, the unobservable variables used reflect the assumptions frequently used by all appraisal firms. In terms of proportional weight, unobservable variables represent almost all of the value of these appraisals.

The main unobservable variables used in the valuation of assets in accordance with the dynamic residual method are the future selling price, the estimated construction costs, the costs of development, the time required for land planning and development and the discount rate. The main unobservable variables used in accordance with the static residual method are construction costs, the costs of development and the profit for the developer.

The number of plots in the Group's possession is very fragmented, and they are very varied, both in terms of location and in terms of the stage of development of the urban infrastructure and the possibility of future development. For this reason, no quantitative information can be provided regarding the unobservable variables affecting the fair value of these types of assets.

Movements in the balances of real estate assets classified as Level 3 in 2022 and 2021 are shown below:

Thousand euro			
	Housing	Branches and offices, retail establishments and other real estate	Land, building plots and work in progress
Balance as at 31 December 2020	—	—	39,342
Purchases	—	—	11,360
Sales	—	—	(8,704)
Impairments recognised on income statement (*)	—	—	(6,502)
Net additions/removals in Level 3	—	—	(1,090)
Balance as at 31 December 2021	—	—	34,406
Purchases	—	—	329
Sales	—	—	(5,084)
Impairments recognised on income statement (*)	—	—	(1,796)
Net additions/removals in Level 3	—	—	(239)
Balance as at 31 December 2022	—	—	27,616

(*) Relates to assets retained on the balance sheet as at 31 December 2022 and 2021.

During 2022 and 2021, certain real estate assets have been transferred between the different valuation levels, due to the transformation of assets that were in the process of construction into finished products.

The following table shows a comparison between the value at which the Group's real estate assets were recognised under the headings "Non-current assets and disposal groups classified as held for sale" obtained through foreclosures, "Investment properties" and "Inventories" and their appraisal value, as at the end of 2022 and 2021:

Thousand euro									
	Note	2022				2021			
		Carrying amount (*)	Impairment	Net carrying amount	Appraisal value	Carrying amount (*)	Impairment	Net carrying amount	Appraisal value
Investment properties	15	383,975	(84,233)	299,742	354,375	450,644	(71,376)	379,268	468,641
Inventories	17	170,942	(77,107)	93,835	145,728	248,345	(105,632)	142,713	213,470
Non-current assets held for sale		721,078	(183,927)	537,151	854,546	788,711	(208,322)	580,389	913,787
Total		1,275,995	(345,267)	930,728	1,354,649	1,487,700	(385,330)	1,102,370	1,595,898

(*) Cost less accumulated depreciation.

The fair values of real estate assets valued by appraisal companies and included in the headings “Non-current assets and disposal groups classified as held for sale”, “Investment properties” and “Inventories” in 2022 are as follows:

Thousand euro			
Appraisal firm	Non-current assets held for sale	Investment properties	Inventories
Afes Técnicas de Tasación, S.A.	—	104	—
Alia Tasaciones, S.A.	23,384	21,291	6,984
CBRE Valuation Advisory, S.A.	121,537	1,211	10,107
Eurovaloraciones, S.A.	42,178	59,891	11,242
Gestión de Valoraciones y Tasaciones, S.A.	2,257	301	82
Gloval Valuation, S.A.U.	154,210	5,854	16,268
Ibertasa, S.A.	61	—	—
Sociedad de Tasación, S.A.	103,020	137,808	22,462
Tabimed Gestión de Proyectos, S.L.	412	—	—
Tasalia Sociedad de Tasación, S.A.	—	—	60
Tasiberica, S.A.	—	—	191
Tecnitasa Técnicos en Tasación, S.A	9,905	1,408	1,272
Tinsa Tasaciones Inmobiliarias, S.A.	25,054	53,668	4,724
UVE Valoraciones, S.A.	4,712	—	—
Valoraciones Mediterráneo, S.A.	50,214	17,927	20,175
Other	207	279	268
Total	537,151	299,742	93,835

The fair value of property, plant and equipment for own use does not differ significantly from its net carrying amount.

Note 7 – Cash, cash balances at central banks and other demand deposits

The composition of this asset heading on the consolidated balance sheets as at 31 December 2022 and 2021 is as follows:

Thousand euro		
	2022	2021
By nature:		
Cash	686,258	704,105
Cash balances at central banks	39,236,780	47,741,021
Other demand deposits	1,337,357	768,070
Total	41,260,395	49,213,196
By currency:		
In euro	33,644,881	42,059,700
In foreign currency	7,615,514	7,153,496
Total	41,260,395	49,213,196

Cash balances at central banks include balances held to comply with the central bank’s mandatory minimum reserve requirement. Throughout 2022 and 2021, Banco Sabadell has complied with minimum requirements set out in applicable regulations regarding this ratio.

Note 8 - Debt securities

Debt securities reported in the consolidated balance sheets as at 31 December 2022 and 2021 are broken down below:

Thousand euro	2022	2021
By heading:		
Financial assets held for trading	417,131	590,373
Non-trading financial assets mandatorily at fair value through profit or loss	54,276	64,977
Financial assets designated at fair value through profit or loss	—	—
Financial assets at fair value through other comprehensive income	5,622,692	6,685,091
Financial assets at amortised cost	21,452,820	15,190,212
Total	27,546,919	22,530,653
By nature:		
Central banks	—	—
General governments	27,099,465	21,361,299
Credit institutions	1,271,290	689,449
Other sectors	486,731	393,424
Stage 3 assets	73	73
Impairment allowances	(211)	—
Other valuation adjustments (interest, fees and commissions, other)	(1,310,429)	86,408
Total	27,546,919	22,530,653
By currency:		
In euro	23,210,490	17,030,481
In foreign currency	4,336,429	5,500,172
Total	27,546,919	22,530,653

In May 2021, the Group decided to sell debt instruments which had a carrying amount of 3,735 million euros and which were recognised on the consolidated balance sheet under the heading “Financial assets at amortised cost”, by arranging forward sale contracts that were settled in the third quarter of 2021. The results obtained from these disposals were recognised under the heading “Gains or (-) losses on derecognition of financial assets and liabilities not measured at fair value through profit or loss, net – Financial assets at amortised cost” of the consolidated income statement (see Note 30). These sales were carried out as part of a series of actions undertaken to improve the Group’s future profitability while preserving its solvency, including the restructuring announced in Spain in the third quarter of 2021 (see Note 33). The Group considered that these sales, while not speculative in nature, did not fit into any of the categories that the regulation considers to be consistent with the business model of “holding financial assets in order to collect their contractual cash flows” under which these assets are managed. Therefore, the Bank decided to refrain from classifying any debt securities it may purchase under the heading “Financial assets at amortised cost” on the consolidated balance sheet, until it once again meets the conditions to do so.

In March 2022, the Bank carried out an assessment to ascertain whether those conditions had been met. In particular, the assessment reviewed past sales from the debt securities portfolio recorded at amortised cost, and the reasons for those sales, as well as the prospects for future sales from that portfolio. Following that assessment, it was concluded that the right circumstances were in place to reactivate the “Holding financial assets in order to collect their contractual cash flows” business model in respect of those financial instruments, so that the allocation of purchased debt securities to that model was resumed as from the second quarter of 2022.

The breakdown of the debt securities classified based on their credit risk and the movement of impairment allowances associated with these instruments are included, together with those of other financial assets, in Note 11.

Details of debt instruments included under the “Financial assets at fair value through other comprehensive income” heading, as at 31 December 2022 and 2021, are shown below:

Thousand euro	2022	2021
Amortised cost	5,867,885	6,699,715
Fair value (*)	5,622,692	6,685,091
Accumulated losses recognised in equity	(298,718)	(88,999)
Accumulated capital gains recognised in equity	54,864	75,525
Value adjustments made for credit risk	(1,339)	(1,150)

(*) Includes net impairment losses in the consolidated income statements for 2022 and 2021, in the amount of -182 and 697 thousand euros, of which, -742 and -677 thousand euros correspond to allowances, and 560 and 1,374 thousand euros correspond to provision reversals, respectively (see Note 34).

Details of exposures held in public debt instruments included under the “Financial assets at fair value through other comprehensive income” heading, as at 31 December 2022 and 2021, are as follows:

Thousand euro	2022	2021
Amortised cost	5,472,721	6,466,128
Fair value	5,226,075	6,446,213
Accumulated losses recognised in equity	(291,636)	(88,156)
Accumulated capital gains recognised in equity	45,097	68,347
Value adjustments made for credit risk	(107)	(106)

Details of the “Financial assets at amortised cost” portfolio as at 31 December 2022 and 2021 are shown below:

Thousand euro	2022	2021
General governments	20,295,771	14,457,615
Credit institutions	970,492	647,363
Other sectors	186,768	85,234
Impairment allowances	(211)	—
Total	21,452,820	15,190,212

Note 9 – Equity instruments

Equity instruments reported in the consolidated balance sheets as at 31 December 2022 and 2021 are broken down as follows:

Thousand euro	2022	2021
By heading:		
Financial assets held for trading	—	2,258
Non-trading financial assets mandatorily at fair value through profit or loss	23,145	14,582
Financial assets at fair value through other comprehensive income	179,572	184,546
Total	202,717	201,386
By nature:		
Resident sector	176,474	165,405
Credit institutions	8,484	6,659
Other	167,990	158,746
Non-resident sector	15,034	18,548
Credit institutions	—	—
Other	15,034	18,548
Participations in investment vehicles	11,209	17,433
Total	202,717	201,386
By currency:		
In euro	202,189	199,778
In foreign currency	528	1,608
Total	202,717	201,386

As at 31 December 2022 and 2021, there were no investments in listed equity instruments for which their quoted market price has not been considered as a reference of their fair value.

In addition, as of the aforesaid dates, there were no Group investments in equity instruments included in the portfolio of “Financial assets at fair value through other comprehensive income” considered to be individually significant.

Details of equity instruments included under the “Financial assets at fair value through other comprehensive income” heading are as follows:

Thousand euro	2022	2021
Acquisition cost	241,468	257,714
Fair value	179,572	184,546
Accumulated capital losses recognised in equity at reporting date	(146,236)	(149,044)
Accumulated capital gains recognised in equity at reporting date	84,340	75,876
Transfers of gains or losses within equity during the year	(6,799)	(868)
Recognised dividends from investments held at the end of the year	2,609	1,239

Note 10 – Derivatives held for trading

The breakdown by type of risk of derivatives held for trading as at 31 December 2022 and 2021 is as follows:

Thousand euro	2022		2021	
	Assets	Liabilities	Assets	Liabilities
Securities risk	14,807	14,807	29,019	29,019
Interest rate risk	2,954,325	2,943,405	981,743	919,688
Foreign exchange risk	552,656	340,033	218,470	224,868
Other types of risk	78,334	75,791	149,766	149,661
Total	3,600,122	3,374,036	1,378,998	1,323,236
By currency:				
In euro	2,060,859	1,740,524	1,061,444	1,027,833
In foreign currency	1,539,263	1,633,512	317,554	295,403
Total	3,600,122	3,374,036	1,378,998	1,323,236

The fair values of derivatives held for trading, broken down by type of derivative instrument as at 31 December 2022 and 2021, are shown below:

Thousand euro	2022	2021
Assets		
Swaps, CCIRS, Call Money Swap	2,940,879	1,104,366
Currency options	126,794	37,819
Interest rate options	85,552	27,143
Index and securities options	14,807	29,019
Currency forwards	425,861	180,651
Fixed income forwards	6,229	—
Equity forwards	—	—
Interest rate forwards	—	—
Total derivatives on asset side held for trading	3,600,122	1,378,998
Liabilities		
Swaps, CCIRS, Call Money Swap	2,984,512	1,050,442
Currency options	126,486	42,520
Interest rate options	33,640	11,644
Index and securities options	14,807	36,282
Currency forwards	213,547	182,348
Fixed income forwards	1,044	—
Equity forwards	—	—
Interest rate forwards	—	—
Total derivatives on liability side held for trading	3,374,036	1,323,236

As at 31 December 2022, the Group holds embedded derivatives that have been separated from their host contracts and recognised under the heading “Financial liabilities held for trading – Derivatives” of the consolidated balance sheet in the amount of 278 thousand euros (7,683 thousand euros as at 31 December 2021). The host contracts of those embedded derivatives correspond to customer deposits and debt securities in issue and have been allocated to the portfolio of financial liabilities at amortised cost.

Note 11 – Loans and advances

Central banks and credit institutions

The breakdown of the headings “Loans and advances – Central banks” and “Loans and advances – Credit institutions” of the consolidated balance sheets as at 31 December 2022 and 2021 is as follows:

Thousand euro	2022	2021
By heading:		
Financial assets held for trading	—	—
Non-trading financial assets mandatorily at fair value through profit or loss	—	—
Financial assets designated at fair value through profit or loss	—	—
Financial assets at fair value through other comprehensive income	—	—
Financial assets at amortised cost	4,862,951	6,312,820
Total	4,862,951	6,312,820
By nature:		
Deposits with agreed maturity	1,055,449	1,165,623
Repos	3,255,069	4,938,372
Hybrid financial assets	—	—
Other	546,896	206,013
Stage 3 assets	—	1
Impairment allowances	(2,777)	(2,063)
Other valuation adjustments (interest, fees and commissions, other)	8,314	4,874
Total	4,862,951	6,312,820
By currency:		
In euro	4,112,460	5,964,809
In foreign currency	750,491	348,011
Total	4,862,951	6,312,820

Customers

The breakdown of the heading “Loans and advances – Customers” (General governments and other sectors) of the consolidated balance sheets as at 31 December 2022 and 2021 is as follows:

Thousand euro	2022	2021
By heading:		
Financial assets held for trading	—	—
Non-trading financial assets mandatorily at fair value through profit or loss	—	—
Financial assets designated at fair value through profit or loss	—	—
Financial assets at fair value through other comprehensive income	—	—
Financial assets at amortised cost	158,729,681	157,366,285
Total	158,729,681	157,366,285
By nature:		
Overdrafts, etc.	3,369,675	2,875,764
Commercial loans	7,489,183	6,049,554
Finance leases	2,226,514	2,106,263
Secured loans	92,751,597	94,313,424
Other term loans	50,293,284	49,567,028
Stage 3 assets	5,460,665	5,698,077
Impairment allowances	(3,020,279)	(3,302,033)
Other valuation adjustments (interest, fees and commissions, other) (*)	159,042	58,208
Total	158,729,681	157,366,285
By sector:		
General governments	10,072,272	9,401,011
Other sectors	146,057,981	145,511,022
Stage 3 assets	5,460,665	5,698,077
Impairment allowances	(3,020,279)	(3,302,033)
Other valuation adjustments (interest, fees and commissions, other) (*)	159,042	58,208
Total	158,729,681	157,366,285
By currency:		
In euro	102,483,739	101,211,811
In foreign currency	56,245,942	56,154,474
Total	158,729,681	157,366,285
By geographical area:		
Spain	98,957,073	98,017,676
Rest of European Union	4,680,628	4,534,782
United Kingdom	46,088,800	47,126,912
Americas	10,556,298	9,284,318
Rest of the world	1,467,161	1,704,629
Impairment allowances	(3,020,279)	(3,302,032)
Total	158,729,681	157,366,285

(*) Other valuation adjustments of financial assets classed as stage 3 amount to 29,222 thousand euros as at 31 December 2022 and 30,443 thousand euros as at 31 December 2021.

The “Loans and advances” heading on the consolidated balance sheets includes certain assets pledged in funding operations, i.e. assets pledged as collateral or guarantees with respect to certain liabilities. For further information, see the “Credit risk” section of Note 4.

Finance leases

Certain information concerning finance leases carried out by the Group in which it acts as lessor is set out below:

Thousand euro	2022	2021
Finance leases		
Total gross investment	2,410,412	2,318,186
Impairment allowances	(98,827)	(97,017)
Interest income	51,607	49,667

As at 31 December 2022 and 2021, the reconciliation of undiscounted payments received on leases against the net investment in the leases is as follows:

Thousand euro	2022	2021
Undiscounted lease payments received	2,255,402	2,141,325
Residual value	155,010	176,861
Gross investment in the lease	2,410,412	2,318,186
Unearned financial income	(183,898)	(152,922)
Net investment in the lease	2,226,514	2,165,264

The table below shows a breakdown by term of the minimum undiscounted future amounts receivable by the Group during the period of mandatory compliance (assuming that no extensions or existing purchase options will be exercised) as set out in the finance lease contracts:

Thousand euro	2022	2021
Up to 1 year	502,389	583,536
1-2 years	528,719	439,266
2-3 years	398,780	340,963
3-4 years	264,057	233,268
4-5 years	171,803	154,164
More than 5 years	389,654	390,128
Total	2,255,402	2,141,325

Past-due financial assets

The balance of "Loans and advances – Customers" past-due and pending collection not classified as stage 3 as at 31 December 2022 amounts to 298,466 thousand euros (346,159 thousand euros as at 31 December 2021). Of this total, over 74% of the balance as at 31 December 2022 (75% of the balance as at 31 December 2021) was no more than one month past due.

Financial assets classified on the basis of their credit risk

The breakdown of the gross carrying amounts, excluding valuation adjustments, of financial assets classified on the basis of their credit risk as at 31 December 2022 and 2021 is as follows:

Thousand euro		
Stage 1	31/12/2022	31/12/2021
Debt securities	28,808,314	22,444,172
Loans and advances	147,334,819	148,895,098
Customers	142,483,973	142,607,101
Central banks and Credit institutions	4,850,846	6,287,997
Total stage 1	176,143,133	171,339,270
By sector:		
General governments	37,166,529	30,758,253
Central banks and Credit institutions	6,122,136	6,977,447
Other private sectors	132,854,468	133,603,570
Total stage 1	176,143,133	171,339,270
Stage 2		
Debt securities	49,173	—
Loans and advances	13,652,848	12,326,943
Customers	13,646,280	12,304,932
Central banks and Credit institutions	6,568	22,011
Total stage 2	13,702,021	12,326,943
By sector:		
General governments	5,207	4,057
Central banks and Credit institutions	6,568	22,010
Other private sectors	13,690,246	12,300,876
Total stage 2	13,702,021	12,326,943
Stage 3		
Debt securities	73	73
Loans and advances	5,460,665	5,698,078
Customers	5,460,665	5,698,077
Central banks and Credit institutions	—	1
Total stage 3	5,460,738	5,698,151
By sector:		
General governments	8,122	9,632
Central banks and Credit institutions	—	1
Other private sectors	5,452,615	5,688,518
Total stage 3	5,460,738	5,698,151
Total stages	195,305,892	189,364,364

Movements of gross values, excluding valuation adjustments, of assets subject to impairment by the Group during the years ended 31 December 2022 and 2021 were as follows:

Thousand euro

	Stage 1	Stage 2	Stage 3	Of which: purchased credit-impaired	Total
Balance as at 31 December 2020	167,548,321	11,280,620	5,319,947	174,204	184,148,888
Transfers between stages	(3,796,767)	2,205,398	1,591,369	—	—
Stage 1	5,440,672	(5,345,852)	(94,820)	—	—
Stage 2	(8,899,067)	9,238,131	(339,064)	—	—
Stage 3	(338,372)	(1,686,881)	2,025,253	—	—
Increases	54,828,535	917,933	508,382	4,800	56,254,850
Decreases	(49,465,456)	(2,370,468)	(1,283,738)	(29,655)	(53,119,662)
Transfers to write-offs	(683)	(1,449)	(474,686)	—	(476,818)
Adjustments for exchange differences	2,225,320	294,909	36,877	10,417	2,557,106
Balance as at 31 December 2021	171,339,270	12,326,943	5,698,151	159,766	189,364,364
Transfers between stages	(5,077,901)	3,536,810	1,541,091	—	—
Stage 1	7,237,830	(7,067,385)	(170,445)	—	—
Stage 2	(11,912,792)	12,560,731	(647,939)	—	—
Stage 3	(402,939)	(1,956,536)	2,359,475	—	—
Increases	64,002,931	1,245,295	447,319	9,473	65,695,545
Decreases	(52,904,809)	(3,217,206)	(1,778,439)	(39,602)	(57,900,454)
Transfers to write-offs	(319)	(817)	(419,658)	881	(420,794)
Adjustments for exchange differences	(1,216,039)	(189,004)	(27,726)	(7,334)	(1,432,769)
Balance as at 31 December 2022	176,143,133	13,702,021	5,460,738	123,184	195,305,892

The breakdown of assets classified as stage 3 by type of guarantee as at 31 December 2022 and 2021 is as follows:

Thousand euro

	31/12/2022	31/12/2021
Secured with a mortgage (*)	2,347,550	2,708,483
Of which: Stage 3 financial assets with guarantees covering all of the risk	1,571,003	1,617,399
Other collateral (**)	339,516	288,025
Of which: Stage 3 financial assets with guarantees covering all of the risk	166,371	190,379
Other	2,773,672	2,701,643
Total	5,460,738	5,698,151

(*) Assets secured with a mortgage with an outstanding exposure below 100% of their valuation amount.

(**) Includes the rest of assets secured with collateral.

The breakdown by geographical area of the balance of assets classified as stage 3 as at 31 December 2022 and 2021 is as follows:

Thousand euro

	31/12/2022	31/12/2021
Spain	4,216,505	4,846,743
Rest of European Union	456,072	45,538
United Kingdom	593,793	679,817
Americas	165,292	96,950
Rest of the world	29,076	29,103
Total	5,460,738	5,698,151

Movements in impaired financial assets derecognised from the asset side of the balance sheet because their recovery was deemed remote during 2022 and 2021 are as follows:

Thousand euro	
Balance as at 31 December 2020	5,191,132
Additions	903,346
Use of accumulated impairment balance	451,678
Directly recognised on income statement	35,855
Contractually payable interests	151,956
Other items	263,857
Disposals	(195,527)
Collections of principal in cash from counterparties	(63,553)
Collections of interest in cash from counterparties	(1,817)
Debt forgiveness	(17,847)
Expiry of statute-of-limitations period	—
Forbearance	—
Sales	(108,972)
Foreclosure of tangible assets	(2,510)
Other items	(828)
Exchange differences	30,891
Balance as at 31 December 2021	5,929,842
Additions	579,122
Use of accumulated impairment balance	399,682
Directly recognised on income statement	21,112
Contractually payable interests	155,795
Other items	2,533
Disposals	(645,432)
Collections of principal in cash from counterparties	(51,936)
Collections of interest in cash from counterparties	(2,188)
Debt forgiveness	(22,771)
Expiry of statute-of-limitations period	—
Forbearance	—
Sales	(468,369)
Foreclosure of tangible assets	(857)
Other items	(99,311)
Exchange differences	(15,583)
Balance as at 31 December 2022	5,847,949

Allowances

The values of financial asset impairment allowances under the different headings on the asset side, classified according to their risk, as at 31 December 2022 and 2021 are as follows:

Thousand euro		
Stage 1	2022	2021
Debt securities	211	—
Loans and advances	347,269	377,703
Central banks and Credit institutions	2,773	2,041
Customers	344,496	375,662
Total stage 1	347,480	377,703
Stage 2		
Debt securities	—	—
Loans and advances	479,941	494,047
Central banks and Credit institutions	4	22
Customers	479,937	494,025
Total stage 2	479,941	494,047
Stage 3		
Debt securities	—	—
Loans and advances	2,195,845	2,432,345
Central banks and Credit institutions	—	—
Customers	2,195,845	2,432,345
Total stage 3	2,195,845	2,432,345
Total stages	3,023,266	3,304,096

Detailed movements in impairment allowances allocated to cover credit risk during 2022 and 2021 are as follows:

Thousand euro						
	Individually measured		Collectively measured			Total
	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	
Balance as at 31 December 2020	11,540	590,283	448,092	453,527	1,579,591	3,083,032
Movements reflected in impairment gains/(losses) (*)	(7,060)	114,141	(86,142)	223,992	608,267	853,198
Increases due to origination	—	—	259,110	1,400	76	260,586
Changes due to credit risk variance	(14,852)	159,904	(270,812)	177,536	571,293	623,069
Changes in calculation approach	—	—	—	—	—	—
Other movements	7,792	(45,763)	(74,440)	45,056	36,898	(30,457)
Movements not reflected in impairment gains/(losses)	(1,885)	(139,793)	(10,598)	(197,849)	(310,485)	(660,610)
Transfers between stages	(1,516)	28,135	4,263	(176,866)	145,984	—
Stage 1	—	2,388	167,249	(143,558)	(26,079)	—
Stage 2	8,907	11,211	(150,882)	165,464	(34,699)	1
Stage 3	(10,423)	14,536	(12,104)	(198,772)	206,763	—
Utilisation of allocated provisions	(368)	(167,929)	(14,795)	(20,944)	(427,654)	(631,690)
Other movements (**)	—	—	(66)	(39)	(28,816)	(28,921)
Adjustments for exchange differences	—	(16,169)	26,352	11,768	6,525	28,476
Balance as at 31 December 2021	2,595	548,461	377,703	491,438	1,883,898	3,304,096
Scope additions / exclusions						
Movements reflected in impairment gains/(losses) (*)	2,256	65,735	42,051	136,575	512,023	758,640
Increases due to origination	—	—	267,330	—	—	267,330
Changes due to credit risk variance	4,841	88,109	(68,080)	158,783	521,049	704,702
Changes in calculation approach	—	—	—	—	—	—
Other movements	(2,585)	(22,374)	(157,199)	(22,208)	(9,026)	(213,392)
Movements not reflected in impairment gains/(losses)	4,830	(60,100)	(72,352)	(153,318)	(749,124)	(1,030,064)
Transfers between stages	4,830	6,202	(57,503)	(142,731)	189,202	—
Stage 1	(171)	(246)	98,181	(80,660)	(17,104)	—
Stage 2	9,782	(5,805)	(139,268)	209,346	(74,055)	—
Stage 3	(4,781)	12,253	(16,416)	(271,417)	280,361	—
Utilisation of allocated provisions	—	(91,556)	(39)	(82)	(922,192)	(1,013,869)
Other movements (**)	—	25,254	(14,810)	(10,505)	(16,134)	(16,195)
Adjustments for exchange differences	29	902	78	(4,463)	(5,951)	(9,405)
Balance as at 31 December 2022	9,710	554,998	347,480	470,232	1,640,846	3,023,266

(*) This figure, corresponding to the amortisation charged to results on impaired financial assets derecognised from the asset side of the balance sheet and the recovery of write-offs, has been recognised with a balancing entry under the heading 'Impairment or (-) reversal of impairment on financial assets not measured at fair value through profit or loss and net modification losses or (-) gains' (see Note 34).

(**) Corresponds to credit loss allowances transferred to non-current assets held for sale (see Note 13).

The breakdown by geographical area of the balance of impairment allowances as at 31 December 2022 and 2021 is as follows:

Thousand euro		
	2022	2021
Spain	2,489,789	2,746,076
Rest of European Union	121,016	120,486
United Kingdom	253,629	252,181
Americas	145,458	170,454
Rest of the world	13,374	14,899
Total	3,023,266	3,304,096

Sensitivity analysis of the key variables of macroeconomic scenarios

An analysis of the sensitivity of the expected loss of the Group and of the main regions and its impact by stage on impairment allowances in the event of a change, *ceteris paribus*, from the actual macroeconomic environment, relative to the most probable baseline macroeconomic scenario envisaged in the Group's business plan, is set out below. The results of this analysis are shown below:

Group					
Key explanatory macroeconomic variables	Change in the variable (*)	Impact on stage 1	Impact on stage 2	Impact on stage 3	Total impact
GDP growth deviation	- 100 bp	2.9%	5.1%	1.7%	2.3%
	+ 100 bp	-2.3%	-4.7%	-1.6%	-2.2%
Unemployment rate deviation	+ 100 bp	1.5%	4.2%	0.6%	1.2%
	- 100 bp	-0.8%	-2.6%	-0.5%	-0.9%
House price growth deviation	- 100 bp	1.3%	1.8%	0.6%	0.9%
	+ 100 bp	-0.7%	-1.6%	-0.6%	-0.8%
Spain					
Key explanatory macroeconomic variables	Change in the variable (*)	Impact on stage 1	Impact on stage 2	Impact on stage 3	Total impact
GDP growth deviation	- 100 bp	3.4%	6.6%	1.7%	2.5%
	+ 100 bp	-2.8%	-6.0%	-1.7%	-2.3%
Unemployment rate deviation	+ 100 bp	1.2%	1.6%	0.4%	0.7%
	- 100 bp	-0.5%	-1.2%	-0.4%	-0.5%
House price growth deviation	- 100 bp	1.5%	2.2%	0.6%	0.9%
	+ 100 bp	-0.8%	-2.0%	-0.6%	-0.8%
United Kingdom					
Key explanatory macroeconomic variables	Change in the variable (*)	Impact on stage 1	Impact on stage 2	Impact on stage 3	Total impact
Unemployment rate deviation (**)	+ 100 bp	2.9%	12.7%	3.9%	7.3%
	- 100 bp	-2.5%	-7.3%	-2.7%	-4.5%
House price growth deviation	- 100 bp	0.2%	0.1%	0.3%	0.2%
	+ 100 bp	-0.2%	-0.1%	-0.3%	-0.2%

(*) Changes to macroeconomic variables are applied in absolute terms.

(**) In the scenario of a change to the UK employment rate, a standard deviation of +/- 100 bps represents the relative standard deviation of the macroeconomic variable 3 times higher than in Spain.

Note 12 – Derivatives - hedge accounting

Hedging management

The main hedges arranged by the Group are described below:

Interest rate risk hedge

Based on the balance sheet position and the market situation and outlooks, interest rate risk mitigation strategies are proposed and agreed upon to adapt this position to the one desired by the Group. With this aim in mind, Banco Sabadell Group establishes interest rate hedging strategies for positions that are not included in the trading book and, to that end, derivative instruments are used, whether fair value or cash flow hedging instruments, and a distinction is made between them depending on the items hedged:

- Macro-hedges: hedges intended to mitigate the risk of balance sheet components.
- Micro-hedges: hedges intended to mitigate the risk of a particular asset or liability.

When a transaction is designated as a hedging operation, it is classified as such from the outset of the transaction or the inception of the instruments included in the hedge, and a document is prepared which covers the hedging strategy, defining it in management and accounting terms, and setting out its governance. The aforesaid document clearly identifies the item or items hedged and the hedging instrument, the risk that it seeks to hedge and the criteria or methodologies followed by the Group to evaluate its effectiveness.

The Group operates with the following types of hedges intended to mitigate structural interest rate risk:

- Fair value hedges: hedges against the exposure to changes in the fair value of assets and liabilities recognised on the balance sheet, or against the analogous exposure of a specific selection of such assets and liabilities, that can be attributed to interest rate risk. These are used to keep a stable economic value of equity.

The main types of balance sheet items hedged are:

- Fixed-rate loans included in the lending portfolio.
- Debt securities included in the portfolio of “Financial assets at fair value through other comprehensive income” and the portfolio of “Financial assets at amortised cost”.
- Fixed-rate liabilities, including fixed-term deposits and the Institution’s funding operations in the capital markets.

Banco Sabadell generally uses macro-hedging for balance sheet items, both assets and liabilities, while TSB uses macro-hedging for fixed-rate loans or deposits and micro-hedging for debt securities or the Bank’s funding operations in the capital markets, for which they arrange derivative contracts, typically for a nominal amount identical to the item hedged and with the same financial features.

If the hedge relates to assets, the Group enters into a fixed-for-floating swap, whereas if the macro-hedge relates to liabilities, it enters into a floating-to-fixed interest rate swap. These derivatives can be traded in cash or as forwards. The hedged risk is the interest rate risk arising from a potential change in the risk-free interest rate that gives rise to changes in the value of the hedged balance sheet items. As such, the hedge will not cover any risk inherent in the hedged items other than the risk of a change in the risk-free interest rate.

In order to assess the effectiveness of the hedge from the beginning, a backtesting exercise is carried out which compares the accumulated monthly variance in the fair value of the hedged item against the accumulated monthly variance in the fair value of the hedging derivative. Hedge effectiveness is also assessed on a forward-looking basis, verifying that future changes in the fair value of the hedged balance sheet items are offset by future changes in the fair value of the derivative.

- Cash flows: hedging against the exposure to changes in cash flows arising from a particular risk associated with a previously recognised asset or liability, or a forecast transaction that is highly likely to materialise and which could affect the results for the year. They are used to reduce net interest income volatility.

The main types of balance sheet items hedged are:

- Floating rate mortgage loans indexed to the mortgage Euribor.
- Floating rate liabilities indexed to the 3-month Euribor.

Banco Sabadell generally uses macro-hedging for balance sheet items, both assets and liabilities, while TSB also uses micro-hedging for floating-rate issues of its own-name securities, for which they arrange derivative contracts, typically for a nominal amount identical to the item hedged and with the same financial features.

If the hedge relates to assets, the Group enters into a floating-to-fixed interest rate swap, whereas if the macro-hedge relates to liabilities, it enters into a fixed-for-floating swap. These derivatives can be traded in cash or as forwards. The hedged risk is the interest rate risk associated with the effect that a potential change in the benchmark interest rate could have on the future interest accrued on hedged balance sheet items. The credit spread and risk premium which, together with the benchmark index, make up the contractual interest rate applicable to the hedged balance sheet items is expressly excluded from the hedge.

In order to assess the effectiveness of the hedge from the beginning, a backtesting exercise is carried out which compares the accumulated variance in the fair value of the hedged item against the accumulated variance in the fair value of the hedging derivative. Hedge effectiveness is also assessed on a forward-looking basis, verifying that the expected cash flows on the hedged items are still highly likely to materialise.

Possible causes of partial or total ineffectiveness include changes in the sufficiency of the portfolio of hedged balance sheet items or differences in their contractual characteristics in relation to hedging derivatives.

Every month, the Group calculates the interest rate risk metrics and establishes hedging strategies in accordance with the established risk appetite framework. Hedges are therefore managed, establishing hedges or discontinuing them, as required, on the basis of the evolution of the balance sheet items described previously within the management and control framework defined by the Group through its policies and procedures.

Hedging of net investments in foreign operations

The positions of subsidiaries and foreign branches implicitly entail exposure to exchange rate risk, which is managed by creating hedges through the use of forward contracts and options.

The maturities of these instruments are periodically renewed on the basis of prudential and forward-looking criteria.

2022 hedging disclosures

The nominal values and the fair values of the hedging instruments as at 31 December 2022 and 2021, broken down by risk category and type of hedge, are as follows:

	2022			2021		
	Nominal	Assets	Liabilities	Nominal	Assets	Liabilities
Microhedges:						
<u>Fair value hedges</u>	8,353,601	831,005	207,837	7,583,852	168,282	92,692
Foreign exchange risk	—	—	—	—	—	—
<i>Of liability-side transactions</i>	—	—	—	—	—	—
<i>Of permanent investments</i>	—	—	—	—	—	—
<i>Of non-monetary items</i>	—	—	—	—	—	—
Interest rate risk	4,121,267	790,860	32,908	4,293,666	105,455	25,189
<i>Of liability-side transactions (A)</i>	65,304	—	5,532	32,359	309	879
<i>Of asset-side transactions (B)</i>	4,055,963	790,860	27,376	4,261,307	105,146	24,310
Equity risk	4,232,334	40,145	174,929	3,290,186	62,827	67,503
<i>Of liability-side transactions (A)</i>	4,232,334	40,145	174,929	3,290,186	62,827	67,503
<u>Cash flow hedges</u>	5,153,957	172,117	134,543	3,553,777	20,071	44,935
Foreign exchange risk	—	—	—	—	—	—
<i>Of non-monetary items</i>	—	—	—	—	—	—
Interest rate risk	3,915,860	162,137	3,875	2,756,394	13,923	9,041
<i>Of future transactions (C)</i>	332,674	11,466	1,733	238,016	2,686	625
<i>Of liability-side transactions (A)</i>	1,155,712	147,454	1,201	376,708	11,136	6,756
<i>Of securitisation transactions (D)</i>	2,427,474	3,217	941	2,141,670	101	1,660
<i>Other</i>	—	—	—	—	—	—
Equity risk	63,980	—	640	23,383	—	187
<i>Of liability-side transactions (E)</i>	63,980	—	640	23,383	—	187
Other risks	1,174,117	9,980	130,028	774,000	6,148	35,707
<i>Of inflation-linked bonds (F)</i>	1,174,000	—	130,028	774,000	6,148	35,707
<i>Of future transactions (C)</i>	117	9,980	—	—	—	—
<u>Hedge of net investment in foreign operations</u>	1,217,579	31,352	—	932,919	71	18,733
Foreign exchange risk (G)	1,217,579	31,352	—	932,919	71	18,733
Macrohedges:						
<u>Fair value hedges</u>	39,183,746	2,037,523	898,400	35,581,142	336,958	356,082
Interest rate risk	39,183,746	2,037,523	898,400	35,581,142	336,958	356,082
<i>For funding operations (H)</i>	15,428,947	14,607	882,905	13,460,963	116,215	106,676
<i>For lending operations (I)</i>	23,754,799	2,022,916	15,495	22,120,179	220,743	249,406
<u>Cash flow hedges</u>	2,050,000	94	1,690	—	—	—
Interest rate risk	2,050,000	94	1,690	—	—	—
<i>Of liability-side transactions</i>	—	—	—	—	—	—
<i>Of asset-side transactions (J)</i>	2,050,000	94	1,690	—	—	—
Total	55,958,883	3,072,091	1,242,470	47,651,690	525,382	512,442
By currency:						
In euro	28,752,613	1,303,596	935,274	20,381,698	231,943	353,202
In foreign currency	27,206,270	1,768,495	307,196	27,269,992	293,439	159,240
Total	55,958,883	3,072,091	1,242,470	47,651,690	525,382	512,442

The types of hedges according to their composition that are identified in the table are as follows:

- A. Micro-hedges of interest rate risk on the Institution's funding operations in capital markets and transactions involving term deposits opened by customers, recognised under the heading "Financial liabilities at amortised cost".
- B. Micro-hedges of transactions involving customer loans, recognised under the heading "Financial assets at amortised cost" and those involving debt securities under the headings "Financial assets at fair value through other comprehensive income" and "Financial assets at amortised cost".

- C. Micro-hedges of future transactions. The Institution designates as a hedging item those derivative contracts that will be settled for their gross amount through the transfer of the underlying asset (generally, fixed-income securities) according to the contract price.
- D. Micro-hedging operations carried out by the Group's securitisation funds.
- E. Micro-hedges of transactions involving term deposits arranged by customers and which are currently being sold.
- F. Micro-hedges of interest rates on inflation-linked bonds, recognised under the heading "Financial assets at amortised cost". The Group has arranged financial swaps to hedge future changes in cash flows that will be settled by inflation-linked bonds (ILBs).
- G. Hedges against foreign exchange risk on permanent investments currently cover 333 million pounds sterling and 9,253 million Mexican pesos corresponding to interests held in Group entities (213 million pounds sterling and 10,003 million Mexican pesos as at 31 December 2021) and 425 million US dollars corresponding to interests held in foreign branches (280 million US dollars as at 31 December 2021). All of these hedges are carried out through currency forwards.
- H. Macro-hedges of the Institution's funding operations in capital markets, transactions involving term deposits and demand deposits arranged by customers and recognised under the heading "Financial liabilities at amortised cost".
- I. Macro-hedges of debt securities classified under the headings "Financial assets at fair value through other comprehensive income" and "Financial assets at amortised cost", and of fixed-rate mortgage loans granted to customers, recognised under the heading "Financial assets at amortised cost".
- J. Macro-hedges of floating rate mortgage loans granted to customers recognised under the heading "Financial assets at amortised cost". The average rate of interest rate swaps used for this hedge was 3.59% as at 31 December 2022. This last hedge was not in effect as at 31 December 2021.

The maturity profiles of the hedging instruments used by the Group as at 31 December 2022 and 2021 are shown below:

Thousand euro

	2022					
	Nominal					
	Up to 1 month	1 to 3 months	3 to 12 months	1 and 5 years	More than 5 years	Total
Foreign exchange risk	460,156	737,282	20,141	—	—	1,217,579
Interest rate risk	1,114,907	1,535,196	6,092,608	22,276,713	18,251,449	49,270,873
Equity risk	60,038	90,741	408,348	3,539,198	197,989	4,296,314
Other risks	—	—	449,000	200,000	525,117	1,174,117
Total	1,635,101	2,363,219	6,970,097	26,015,911	18,974,555	55,958,883

Thousand euro

	2021					
	Nominal					
	Up to 1 month	1 to 3 months	3 to 12 months	1 and 5 years	More than 5 years	Total
Foreign exchange risk	304,396	610,373	18,150	—	—	932,919
Interest rate risk	242,999	238,016	6,871,995	19,164,433	16,113,758	42,631,201
Equity risk	2,501	376,528	463,911	2,192,832	277,797	3,313,569
Other risks	—	—	—	449,000	325,000	774,000
Total	549,896	1,224,917	7,354,056	21,806,265	16,716,555	47,651,689

In 2022 and 2021, there were no reclassifications from equity to the consolidated income statement due to cash flow hedges and hedges of net investments in foreign operations for transactions that were ultimately not executed.

The following table shows the accounting information of items covered by the fair value micro-hedges arranged by the Group:

Thousand euro

	2022				
	Carrying amount of hedged item		Accumulated fair value adjustments in the hedged item		Accumulated amount of adjustments in hedged items for which hedge accounting no longer applies
	Assets	Liabilities	Assets	Liabilities	
Micro-hedges:					
<u>Fair value hedges</u>					
Foreign exchange risk	—	—	—	—	—
Interest rate risk	3,783,282	322,472	(538,313)	(40,517)	(76)
Equity risk	—	2,040,966	—	(92,318)	—
Total	3,783,282	2,363,438	(538,313)	(132,835)	(76)

Thousand euro

	2021				
	Carrying amount of hedged item		Accumulated fair value adjustments in the hedged item		Accumulated amount of adjustments in hedged items for which hedge accounting no longer applies
	Assets	Liabilities	Assets	Liabilities	
Micro-hedges:					
<u>Fair value hedges</u>					
Foreign exchange risk	—	—	—	—	—
Interest rate risk	5,384,640	356,924	(65,713)	(9,377)	3,206
Equity risk	—	1,708,590	—	14,149	(7)
Total	5,384,640	2,065,514	(65,713)	4,772	3,199

In terms of fair value macro-hedges, the carrying amount of the hedged items recognised in assets and liabilities for 2022 amounted to 78,804,701 thousand euros and 52,078,774 thousand euros, respectively (29,343,668 thousand euros and 60,195,513 thousand euros in 2021, respectively). Similarly, fair value adjustments of the hedged items amounted to -1,545,607 thousand euros and -959,106 thousand euros as at 31 December 2022, respectively (-3,963 thousand euros and 19,472 thousand euros as at 31 December 2021).

In relation to fair value hedges, the losses and gains recognised in 2022 and 2021 arising from both hedging instruments and hedged items are detailed hereafter:

Thousand euro

	2022		2021	
	Hedging instruments	Hedged items	Hedging instruments	Hedged items
Micro-hedges	596,080	(599,425)	33,932	(38,524)
Fixed-rate assets	735,627	(739,915)	89,231	(94,757)
Capital markets and fixed-rate liabilities	(107,478)	108,411	(18,498)	19,386
Assets denominated in foreign currency	(32,069)	32,079	(36,801)	36,847
Macro-hedges	1,126,218	(1,104,218)	297,263	(293,854)
Capital markets and fixed-rate liabilities	(982,993)	990,659	(318,769)	340,540
Fixed-rate assets	2,109,211	(2,094,877)	616,032	(634,394)
Total	1,722,298	(1,703,643)	331,195	(332,378)

In cash flow hedges, the amounts recognised in the consolidated statement of equity during the year and the amounts derecognised from consolidated equity and included in profit and loss during the year are indicated in the consolidated statement of total changes in equity.

Hedge ineffectiveness in the results for 2022 related to cash flow hedges amounted to losses of 804 thousand euros (losses of 3,668 thousand euros in 2021).

As at 31 December 2022, the Group holds embedded derivatives that have been separated from their host contracts and recognised under the headings “Derivatives – Hedge accounting” on the asset side and on the liabilities side of the consolidated balance sheet in the amount of 33,586 thousand euros and 46,917 thousand euros, respectively (43,707 and 22,683 thousand euros, respectively, as at 31 December 2021). The host contracts of those embedded derivatives correspond to customer deposits and debt securities in issue and have been allocated to the portfolio of financial liabilities at amortised cost.

Note 13 – Non-current assets and disposal groups classified as held for sale

The composition of this heading in the consolidated balance sheets as at 31 December 2022 and 2021 was as follows:

Thousand euro	2022	2021
Assets	951,792	998,210
Loans and advances	10,337	67
Customers	10,337	67
Equity instruments	159,748	159,853
Real estate exposure	777,108	838,290
Tangible assets for own use	56,030	44,945
Foreclosed assets	721,078	793,345
Leased out under operating leases	—	—
Rest of other assets	4,599	—
Impairment allowances	(213,479)	(220,175)
Non-current assets and disposal groups classified as held for sale	738,313	778,035

Tangible assets for own use relate mainly to commercial premises.

Regarding real estate assets obtained through foreclosures, 93.7% of the balance corresponds to residential properties, 5.8% to industrial properties and 0.5% to agricultural assets.

The average term during which assets remained within the category of “Non-current assets and assets and liabilities included in disposal groups classified as held for sale – Foreclosed assets” was 53 months in 2022 (43 months in 2021). The policies concerning the sale or disposal by other means of these assets are set out in Note 4.4.2.1.

The percentage of foreclosed assets sold with financing granted to the buyer in 2022 was 4.9% (in 2021 it was 4.1%). On the date of sale, these properties had a gross asset value of 5.7 million euros in 2022 (9.6 million euros in 2021).

In 2021, the Group recognised its 20% stake in the capital of the associate company Promontoria Challenger I, S.A., an entity controlled by Cerberus, into which the Group transferred a large portion of its real estate exposure in 2019, as a non-current asset held for sale.

Movements in “Non-current assets and disposal groups classified as held for sale” during 2022 and 2021 were as follows:

Thousand euro

	Note	Non-current assets held for sale
Cost:		
Balances as at 31 December 2020		1,269,690
Additions		104,087
Disposals		(495,649)
Transfer of credit losses (*)	11	(28,921)
Other transfers/reclassifications		149,003
Balances as at 31 December 2021		998,210
Additions		63,908
Disposals		(114,227)
Transfer of credit losses (*)	11	(16,195)
Other transfers/reclassifications		20,096
Balances as at 31 December 2022		951,792
Impairment allowances:		
Balances as at 31 December 2020		294,150
Impairment through profit or loss	37	71,148
Reversal of impairment through profit or loss	37	(53,236)
Utilisations		(88,494)
Other transfers/reclassifications		(3,393)
Balances as at 31 December 2021		220,175
Impairment through profit or loss	37	48,966
Reversal of impairment through profit or loss	37	(45,542)
Utilisations		(26,170)
Other transfers/reclassifications		16,050
Balances as at 31 December 2022		213,479
Net balances as at 31 December 2021		778,035
Net balances as at 31 December 2022		738,313

(*) Allowance arising from provisions allocated to cover credit risk.

Details of the net carrying amount of transfers shown in the table above are as follows:

Thousand euro

	Note	2022	2021
Loans and advances		10,153	—
Tangible assets	15	(5,941)	(17,099)
Inventories		—	17,605
Equity interests		—	159,853
Other		(166)	(7,963)
Total		4,046	152,396

Note 14 – Investments in joint ventures and associates

Movements in this heading of the consolidated balance sheets as at 31 December 2022 and 2021 are as follows:

Thousand euro	
Balance as at 31 December 2020	779,859
Profit/(loss) for the year	100,280
Acquisition or capital increase (*)	3,912
Sale or dissolution	(2,279)
Dividends	(60,824)
Transfer	(160,429)
Impairment, allowances, translation differences and other	(21,737)
Balance as at 31 December 2021	638,782
Profit/(loss) for the year	122,167
Acquisition or capital increase (*)	1,747
Sale or dissolution	(49,972)
Dividends	(151,818)
Impairment, allowances, translation differences and other	(45,661)
Balance as at 31 December 2022	515,245

(*) See consolidated cash flow statement.

The section of the cash flow statement “Cash flows from investing activities – Collections – Investments in joint ventures and associates” shows 210,300 thousand euros, of which 49,972 thousand euros correspond to sales or dissolutions, 151,818 thousand euros to dividends charged and 8,510 thousand euros to derecognitions and settlements included in the breakdown shown in Schedule I. Furthermore, the section “Cash flows from investing activities – Payments – Investments in joint ventures and associates” of this statement shows 1,747 thousand euros, which correspond to the acquisitions and capital increases carried out during 2022.

The main investee companies included for the first time in the balance sheet and those no longer in the balance sheet in 2022 y 2021 are indicated in Schedule I.

As at 31 December 2022 and 2021, no support agreements or other type of significant contractual commitment had been provided by the Bank or its subsidiaries to associates.

The reconciliation between the Group’s investment in investees and the balance recorded under the heading “Investments in joint ventures and associates” is as follows:

Thousand euro		
	2022	2021
Group investment in associates (Schedule I)	220,505	267,469
Contributions due to retained earnings	349,187	391,492
Value adjustments	(54,447)	(20,179)
Total	515,245	638,782

Set out below are the most relevant financial data for the associate, BanSabadell Vida, S.A., as at 31 December 2022 and 2021, through which the Bank extends its customer offering via the distribution of insurance products through its branch network:

	BanSabadell Vida (*)	
	2022	2021
Total assets	8,808,926	10,418,907
Of which: financial investments	7,802,671	9,455,504
Total liabilities	8,209,481	9,745,468
Of which: technical provisions	8,561,133	8,929,810
Profit/(loss) of Vida's technical account	125,764	115,465
Of which: premiums earned during the year	1,053,473	1,239,765
Of which: claims paid during the year	(1,276,160)	(1,227,205)
Of which: technical financial yield	155,337	156,927

(*) Figures taken from BanSabadell Vida accounts without taking into consideration consolidation adjustments nor the Group's percentage holding.

As at 31 December 2022 and 2021, the carrying amount of the investment in BanSabadell Vida, S.A. amounted to 266,155 thousand euros and 289,861 thousand euros, respectively. Furthermore, as at these dates, the aggregate carrying amount of investments in associates not considered individually significant was of 249,090 thousand euros and 348,921 thousand euros, respectively.

Note 15 – Tangible assets

The composition of this heading in the consolidated balance sheets as at 31 December 2022 and 2021 is as follows:

	2022				2021			
	Cost	Depreciation	Impairment	Net amount	Cost	Depreciation	Impairment	Net amount
Property, plant and equipment	4,082,057	(1,754,760)	(45,248)	2,282,049	4,173,480	(1,706,114)	(69,876)	2,397,490
For own use:	4,061,108	(1,743,155)	(45,248)	2,272,705	4,168,101	(1,703,527)	(69,876)	2,394,698
Computer equipment and related facilities	727,049	(483,483)	—	243,566	710,316	(471,866)	—	238,450
Furniture, vehicles and other facilities	956,696	(572,885)	—	383,811	1,005,308	(598,167)	—	407,141
Buildings	2,258,790	(675,671)	(45,248)	1,537,871	2,309,743	(619,881)	(66,328)	1,623,534
Work in progress	31,501	—	—	31,501	63,495	(6,013)	(3,548)	53,934
Other	87,072	(11,116)	—	75,956	79,239	(7,600)	—	71,639
Leased out under operating leases	20,949	(11,605)	—	9,344	5,379	(2,587)	—	2,792
Investment properties	438,398	(54,423)	(84,233)	299,742	504,952	(54,308)	(71,376)	379,268
Buildings	438,004	(54,423)	(83,922)	299,659	504,558	(54,308)	(71,067)	379,183
Rural property, plots and sites	394	—	(311)	83	394	—	(309)	85
Total	4,520,455	(1,809,183)	(129,481)	2,581,791	4,678,432	(1,760,422)	(141,252)	2,776,758

Movements in the balance under this heading during 2022 and 2021 were as follows:

Thousand euro						
		Own use - Buildings, work in progress and other	Own use - Computer equipment, furniture and related facilities	Investment properties	Leased out under operating leases	Total
Cost:						
	Note					
Balances as at 31 December 2020		2,481,133	1,797,048	429,367	358,749	5,066,298
Additions (*)		222,489	113,553	7,331	—	343,373
Disposals		(237,770)	(202,541)	(22,589)	(353,979)	(816,879)
Transfers		(46,197)	(296)	90,843	—	44,350
Exchange rate		32,819	7,861	—	610	41,290
Balances as at 31 December 2021		2,452,478	1,715,625	504,952	5,380	4,678,432
Additions		99,878	123,020	190	15,852	238,940
Disposals		(79,904)	(156,271)	(111,219)	—	(347,394)
Transfers		(68,553)	6,077	44,477	—	(17,999)
Exchange rate		(26,536)	(4,704)	—	(283)	(31,523)
Balances as at 31 December 2022		2,377,363	1,683,747	438,400	20,949	4,520,456
Accumulated depreciation:						
Balances as at 31 December 2020		597,746	1,084,290	38,610	85,456	1,806,102
Additions		142,693	142,888	10,572	5	296,158
Disposals		(115,494)	(160,490)	(2,167)	(83,184)	(361,335)
Transfers		(5,754)	(1,105)	7,293	—	434
Exchange rate		14,303	4,451	—	310	19,064
Balances as at 31 December 2021		633,494	1,070,034	54,308	2,587	1,760,423
Additions		129,684	137,613	9,616	9,514	286,427
Disposals		(56,639)	(149,642)	(11,937)	—	(218,218)
Transfers		(10,436)	1,387	2,436	—	(6,613)
Exchange rate		(9,317)	(3,023)	—	(496)	(12,836)
Balances as at 31 December 2022		686,786	1,056,369	54,423	11,605	1,809,183
Impairment losses:						
Balances as at 31 December 2020		17,144	—	42,665	8	59,816
Impairment through profit or loss	35	58,580	—	36,180	—	94,760
Reversal of impairment through profit or loss	35	(211)	—	(29,066)	—	(29,277)
Utilisations		(10,472)	—	(385)	(8)	(10,865)
Transfers		4,836	—	21,981	—	26,817
Balances as at 31 December 2021		69,877	—	71,375	—	141,251
Impairment through profit or loss	35	2,078	—	58,163	—	60,241
Reversal of impairment through profit or loss	35	(162)	—	(22,981)	—	(23,143)
Utilisations		(4,596)	—	(34,407)	—	(39,003)
Transfers		(21,948)	—	12,084	—	(9,864)
Balances as at 31 December 2022		45,249	—	84,234	—	129,482
Net balances as at 31 December 2021		1,749,108	645,591	379,268	2,793	2,776,758
Net balances as at 31 December 2022		1,645,329	627,378	299,742	9,344	2,581,791

(*) Items reported in 'Own use - Buildings, work in progress and other' in 2021 included 117,747 thousand euros of revaluations and new right-of-use assets corresponding to leased properties in which the Group acted as lessee.

Of the net carrying amount of "Transfers" shown in the previous table for 2022, -1,522 thousand euros, -7,463 thousand euros correspond to reclassifications to the heading "Inventories" (see Note 17), and 5,941 thousand euros to reclassifications of assets from or to the heading "Non-current assets and disposal groups classified as held for sale". In 2021, the net carrying amount of "Transfers" that amounted to 17,099 thousand euros corresponded in full to reclassification of assets from or to the heading "Non-current assets and disposal groups classified as held for sale" (see Note 13).

Specific information relating to tangible assets as at 31 December 2022 and 2021 is shown hereafter:

Thousand euro	2022	2021
Gross value of tangible assets for own use in use and fully depreciated	440,137	481,244
Net carrying amount of tangible assets of foreign operations	369,759	401,094

Lease contracts in which the Group acts as lessee

As at 31 December 2022, the cost of property, plant and equipment for own use includes right-of-use assets corresponding to leased tangible assets in which the Group acts as lessee, in the amount of 1,293,944 thousand euros, which have accumulated depreciation of 396,041 thousand euros and are impaired in the amount of 38,657 thousand euros as at the aforesaid date (1,341,931 thousand euros as at 31 December 2021, which had accumulated depreciation of 324,916 thousand euros and were impaired in the amount of 36,666 thousand euros as at that date).

The cost recognised in the consolidated income statement for 2022 for the depreciation and impairment of right-of-use assets corresponding to leased tangible assets in which the Group acts as lessee amounted to 96,017 thousand euros and 1,991 thousand euros, respectively (103,155 thousand euros and 36,666 thousand euros, respectively, in 2021).

Information is set out below concerning the lease contracts in which the Group acts as lessee:

Thousand euro	2022	2021
Interest expense on lease liabilities	(15,347)	(17,481)
Expense related to short-term low-value leases (*)	(11,592)	(11,537)
Total lease payments in cash (**)	110,950	110,934

(*) Recognised in the "Administrative expenses" heading, in the item on "Of property, plant and equipment" (see Note 33).

(**) Payments of the principal and interest components of the lease liability are recognised as cash flows from financing activities in the Group's consolidated cash flow statement.

The future cash outflows to which the Group may potentially be exposed as lessee and which are not included under lease liabilities are not significant.

Minimum future payments over the non-cancellable period for lease contracts in effect as at 31 December 2022 are indicated below:

Thousand euro	2022	2021
Undiscounted lease payments receivable		
Up to 1 month	1,348	875
1 to 3 months	25,356	25,417
3 to 12 months	76,513	75,769
1 to 5 years	352,018	352,190
More than 5 years	511,547	569,317

Sale and leaseback transactions

Between 2009 and 2012, the Group completed transactions for the sale of properties and simultaneously entered into a lease contract, for the same properties, with the buyers (maintenance, insurance and taxes to be borne by the Bank). The main characteristics of the most significant lease contracts in effect as at the end of 2022 are as follows:

Operating lease contracts	No. properties sold	No. contracts with purchase option	No. contracts without purchase option	Mandatory term
2009	63	26	37	10 to 20 years
2010	379	378	1	10 to 25 years
2011 (acquisition B.Guipuzcoano)	40	30	10	8 to 20 years
2012 (acquisition Banco CAM)	12	12	—	10 to 25 years
2012	4	4	—	15 years

Specific information in connection with this set of lease contracts as at 31 December 2022 and 2021 is given below:

Thousand euro	2022	2021
Undiscounted lease payments receivable		
Up to 1 month	130	120
1 to 3 months	11,167	10,630
3 to 12 months	34,392	32,702
1 to 5 years	178,154	169,022
More than 5 years	367,262	389,324

In 2022, no significant results were recorded for sale and leaseback transactions. In 2021, gains from sale and leaseback transactions amounted to 25,281 thousand euros and were recognised under the heading "Gains or (-) losses on derecognition of non-financial assets, net" of the consolidated income statement.

Contracts in which the Group acts as lessor

The lease contracts entered into by the Group in which it acts as lessor are mainly operating leases.

The Group implements strategies to reduce risks related to the rights held over the underlying assets. For example, the lease contracts include clauses which stipulate a minimum non-cancellable lease term, a deposit which the lessor may retain as compensation if the asset sustains excessive wear during the lease term, and additional guarantees or sureties to limit losses in the event of non-payment.

With regard to the tangible assets leased out under operating leases, the bulk of the operating lease operations corresponded to vehicle leasing and were carried out through the subsidiary BanSabadell Renting, S.L.U. As indicated in Note 2, this subsidiary was sold during 2021 to a non-Group third party.

As regards the investment properties item, the rental income from these investment properties and the direct costs associated with the investment properties that produced rental income during 2022 amounted to 23,474 thousand euros and 9,768 thousand euros, respectively. Direct costs associated with investment properties that did not produce rental income were not significant in the context of the consolidated annual financial statements.

Note 16 – Intangible assets

The composition of this heading in the consolidated balance sheets as at 31 December 2022 and 2021 was as follows:

Thousand euro	2022	2021
Goodwill:	1,026,810	1,026,457
Banco Urquijo	473,837	473,837
Grupo Banco Guipuzcoano	285,345	285,345
From acquisition of Banco BMN Penedés assets	245,364	245,364
Other	22,264	21,911
Other intangible assets:	1,457,352	1,554,964
With a finite useful life:	1,457,352	1,554,964
Private Banking Business, Miami	4,925	8,444
Contractual relations with TSB customers and brand	39,783	84,589
Computer software	1,411,516	1,460,744
Other	1,128	1,187
Total	2,484,162	2,581,421

Goodwill

As set forth in the regulatory framework of reference, Banco Sabadell carried out an analysis in 2022 to evaluate the existence of any potential impairment of its goodwill.

The main transactions that generated goodwill were the acquisition of Banco Urquijo in 2006, of Banco Guipuzcoano in 2010 and of certain assets of BMN-Penedès in 2013.

Banco Sabadell Group has been monitoring the Group's total goodwill across the ensemble of Cash-Generating Units (CGUs) that make up the Banking Business Spain operating segment. In addition, the Group considers that the United Kingdom operating segment is a CGU.

The value in use of the Banking Business Spain operating segment is used to determine its recoverable amount. The valuation method used in this analysis was that of discounting future net distributable profit associated with the activity carried out by the Banking Business Spain operating segment until 2027, plus an estimated terminal value.

The projections used to determine the recoverable amount are those set out in the financial projections approved by the Board of Directors. Those projections are based on sound and well-founded assumptions, which represent management's best estimates of overall upcoming economic conditions. To determine the key variables (basically net interest income, fees and commissions, expenses, cost of risk and solvency levels) that underpin the Financial Projections, management has used microeconomic variables, such as the existing balance sheet structure, market positioning and strategic decisions adopted, and macroeconomic variables, such as the expected evolution of GDP and the forecast evolution of interest rates and unemployment. The macroeconomic variables used for the baseline macroeconomic scenario, described in Note 1, were estimated by the Group's Research Division.

The approach used to determine the values of assumptions is based on the projections and on past experience. These values are compared against external information sources, if available.

In 2022, to calculate the terminal value, Spain's nominal GDP in 2027 was taken as reference, using a growth rate in perpetuity of 1.9% (2.0% in 2021), which does not exceed the long-term average growth rate of the market in which the operating segment is active. The discount rate used was 10.4% (9.3% in 2021), determined using the Capital Asset Pricing Model (CAPM); it therefore comprises a risk-free rate (10-year Spanish bond) plus a risk premium which reflects the inherent risk of the operating segment being valued.

The recoverable amount obtained is higher than the carrying amount; therefore, there has been no impairment. The individual recoverable amount for each CGU at the end of 2022 and 2021, before allocating goodwill to the CGUs as a group, was above its carrying amount; therefore, the Group did not recognise any impairment at the CGU level during the aforesaid years.

The interest rate hikes by central banks and the new monetary policy environment have led to an increase in the discount rate used to estimate the recoverable amount of CGUs, both in Spain and in the UK. However, the estimated positive effect on the cash flows generated by the businesses exceeds the impact of the increase in the discount rate, so that, overall, interest rate hikes had a positive impact on the recoverable amount.

Additionally, the Group has carried out a sensitivity test, making reasonable adjustments to the main assumptions used to calculate the recoverable amount.

This test consisted of adjusting, individually, the following assumptions:

- Discount rate +/- 0.5%.
- Growth rate in perpetuity +/- 0.5%.
- Minimum capital requirement +/-0.5%.
- NIM/ATAs in perpetuity +/- 5bps.
- Cost of risk in perpetuity +/- 10bps.

The sensitivity test does not alter the conclusions drawn from the impairment test. In all scenarios defined in that analysis, the recoverable amount obtained is greater than the carrying amount.

In accordance with the specifications of the restated text of the Corporation Tax Law, the goodwill generated is not tax-deductible.

Other intangible assets

Miami Private Banking business

Intangible assets associated with the acquisition in 2008 of the Private Banking business in Miami include the value of contractual rights arising from customer relationships taken over from this business, mainly short-term lending and deposits. These assets are amortised over a period of between 10 and 15 years from their creation.

Contractual relations with TSB customers and brand

The intangible assets associated with the acquisition of TSB include the value of the contractual rights arising from relationships with customers taken over from TSB for demand deposits (core deposits), the initial estimate of which amounted to 353,620 thousand euros. This asset is amortised over 8 years. The valuation of these intangible assets was carried out by calculating the value in use based on the income approach (discounted cash flows) with the multi-period excess earnings technique. To determine whether there is any evidence of impairment, the balance of deposits currently in TSB linked to existing customers at the time of its acquisition by the Bank has been compared against the estimated balance that such customers would have at the end of 2022, forecast at the time of the initial valuation. Based on this comparison, a conclusion can be drawn that there is no evidence of any impairment. The carrying amount of contractual relationships with TSB customers amounted to 17,727 thousand euros as at 31 December 2022 (56,135 thousand euros as at 31 December 2021).

The value of the exclusive right of use of the TSB brand was also estimated at an initial amount of 73,328 thousand euros. The value attributable to this asset was determined through the replacement cost method, consisting of establishing the cost of rebuilding or acquiring an exact replica of the asset in question. This asset is amortised over 12 years. The assessment of the recoverable amount of the TSB CGU included an implicit analysis of the brand and concluded that there is no impairment. The carrying amount of the TSB brand amounted to 22,056 thousand euros as at 31 December 2022 (28,454 thousand euros as at 31 December 2021).

Computer software

Computer software costs include mainly the capitalised costs of developing the Group's computer software and the cost of purchasing software licences.

R&D expenditure in 2022 and 2021 was not significant.

Movements

Movements in goodwill in 2022 and 2021 were as follows:

Thousand euro			
	Goodwill	Impairment	Total
Balance as at 31 December 2020	1,026,105	—	1,026,105
Additions	352	—	352
Disposals	—	—	—
Balance as at 31 December 2021	1,026,457	—	1,026,457
Additions	353	—	353
Disposals	—	—	—
Balance as at 31 December 2022	1,026,810	—	1,026,810

Movements in other intangible assets in 2022 and 2021 were as follows:

Thousand euro										
	Cost			Amortisation			Impairment			Total
	Developed internally	Other	Total	Developed internally	Other	Total	Developed internally	Other	Total	
Balance as at 31 December 2020	2,250,521	964,486	3,215,007	(915,893)	(727,111)	(1,643,004)	—	(2,025)	(2,025)	1,559,978
Additions	236,049	40,092	276,141	(166,853)	(63,502)	(230,355)	(1,570)	—	(1,570) (*)	44,216
Disposals	(63,144)	(172,010)	(235,154)	13,823	155,133	168,956	1,570	2,025	3,595	(62,603)
Other	(22,713)	12	(22,701)	5,937	(3)	5,934	—	—	—	(16,767)
Exchange differences	12,898	29,967	42,865	(2,554)	(20,171)	(22,725)	—	—	—	20,140
Balance as at 31 December 2021	2,413,611	862,547	3,276,158	(1,065,540)	(655,654)	(1,721,194)	—	—	—	1,554,964
Additions	187,533	7,105	194,638	(195,655)	(63,009)	(258,664)	—	—	—	(64,026)
Disposals	(27,296)	(83,657)	(110,953)	6,299	77,859	84,158	—	—	—	(26,795)
Other	(6,554)	5,168	(1,386)	(14,115)	(28)	(14,143)	—	—	—	(15,529)
Exchange differences	6,511	(16,611)	(10,100)	2,693	16,145	18,838	—	—	—	8,738
Balance as at 31 December 2022	2,573,805	774,552	3,348,357	(1,266,318)	(624,687)	(1,891,005)	—	—	—	1,457,352

(*) See Note 35.

The gross value of other intangible assets that were in use and had been fully amortised as at 31 December 2022 and 2021 amounted to 1,078,836 thousand euros and 1,141,823 thousand euros, respectively.

Note 17 – Other assets and liabilities

The “Other assets” heading on the consolidated balance sheets as at 31 December 2022 and 2021 breaks down as follows:

Thousand euro			
	Note	2022	2021
Insurance contracts linked to pensions	22	89,729	116,453
Inventories	6	93,835	142,713
Rest of other assets		296,116	360,549
Total		479,680	619,715

The “Rest of other assets” item includes mainly prepaid expenses, the accrual of customer fees and commissions and transactions in progress pending settlement.

Movements in inventories in 2022 and 2021 were as follows:

Thousand euro					
	Note	Land	Buildings under construction	Completed buildings	Total
Balance as at 31 December 2020		9,824	1,786	182,653	194,264
Additions		7,920	255	58,727	66,902
Disposals		(6,006)	(300)	(55,628)	(61,934)
Impairment through profit or loss	35	(4,997)	(381)	(51,763)	(57,141)
Reversal of impairment through profit or loss	35	1,608	156	16,463	18,227
Other transfers	13	60	—	(17,665)	(17,605)
Balance as at 31 December 2021		8,409	1,516	132,787	142,713
Additions		802	3,661	8,946	13,409
Disposals		(2,279)	(558)	(42,895)	(45,732)
Impairment through profit or loss	35	(2,459)	(173)	(33,519)	(36,151)
Reversal of impairment through profit or loss	35	996	71	11,066	12,133
Other transfers	15	—	(3,645)	11,108	7,463
Balance as at 31 December 2022		5,469	872	87,493	93,835

As at 31 December 2022 and 2021, the amount of inventories associated with debt secured with mortgages is 11,318 thousand euros and 14,626 thousand euros, respectively.

The composition of the “Other liabilities” heading as at 31 December 2022 and 2021 is as follows:

Thousand euro			
		31/12/2022	31/12/2021
Other accrual/deferral		577,298	626,157
Rest of other liabilities		294,810	142,057
Total		872,108	768,214

The “Rest of other liabilities” item mainly includes transactions in progress pending settlement.

Note 18 – Deposits of central banks and credit institutions

The breakdown of the balance of deposits of central banks and credit institutions in the consolidated balance sheets as at 31 December 2022 and 2021 is as follows:

Thousand euro			
		2022	2021
By heading:			
Financial liabilities at amortised cost		39,217,078	47,067,145
Total		39,217,078	47,067,145
By nature:			
Demand deposits		378,442	534,995
Deposits with agreed maturity		30,936,695	41,468,444
Repurchase agreements		8,118,516	5,398,905
Other accounts		125,378	114,975
Valuation adjustments		(341,953)	(450,174)
Total		39,217,078	47,067,145
By currency:			
In euro		31,390,222	38,458,261
In foreign currency		7,826,856	8,608,884
Total		39,217,078	47,067,145

Note 19 – Customer deposits

The balance of customer deposits on the consolidated balance sheets as at 31 December 2022 and 2021 breaks down as follows:

Thousand euro	2022	2021
By heading:		
Financial liabilities at amortised cost	164,076,445	162,239,453
Total	164,076,445	162,239,453
By nature:		
Demand deposits	147,539,675	147,268,436
Deposits with agreed maturity	14,066,824	13,131,887
Fixed term	11,985,933	11,205,749
Non-marketable covered bonds and bonds issued	418,835	1,111,603
Other	1,662,056	814,535
Hybrid financial liabilities (see Notes 10 and 12)	2,074,477	1,680,942
Repurchase agreements	404,866	60,312
Other valuation adjustments (interest, fees and commissions, other)	(9,397)	97,876
Total	164,076,445	162,239,453
By sector:		
General governments	8,499,245	7,905,699
Other sectors	155,586,597	154,235,878
Other valuation adjustments (interest, fees and commissions, other)	(9,397)	97,876
Total	164,076,445	162,239,453
By currency:		
In euro	114,063,466	111,119,866
In foreign currency	50,012,979	51,119,587
Total	164,076,445	162,239,453

Note 20 – Debt securities in issue

The composition of this heading in the consolidated balance sheets as at 31 December 2022 and 2021, by type of issuance, is as follows:

Thousand euro	2022	2021
Straight bonds/debentures	7,990,800	7,079,915
Straight bonds	7,949,500	7,022,715
Structured bonds	41,300	57,200
Commercial paper	871,896	426,094
Mortgage covered bonds	7,563,000	6,540,400
TSB covered bonds	1,409,356	2,082,640
Asset-backed securities	1,202,846	671,317
Subordinated marketable debt securities	3,450,000	4,200,000
Subordinated liabilities	1,800,000	1,800,000
Preferred securities	1,650,000	2,400,000
Valuation and other adjustments	89,651	50,589
Total	22,577,549	21,050,955

Schedule IV shows details of the outstanding issues as at 2022 and 2021 year-end.

The remuneration for preferred securities that are contingently convertible into ordinary shares amounted to 110,374 thousand euros in 2022 (100,593 thousand euros in 2021) and is recognised under the heading “Other reserves” of consolidated equity.

Note 21 – Other financial liabilities

The composition of this heading in the consolidated balance sheets as at 31 December 2022 and 2021 is as follows:

Thousand euro	2022	2021
By heading:		
Financial liabilities at amortised cost	6,658,861	4,821,669
Total	6,658,861	4,821,669
By nature:		
Debentures payable	364,207	356,465
Guarantee deposits received	8,992	11,261
Clearing houses	1,032,869	672,355
Collection accounts	3,322,141	2,214,033
Lease liabilities	969,477	1,037,265
Other financial liabilities	961,175	530,290
Total	6,658,861	4,821,669
By currency:		
In euro	4,913,626	4,294,286
In foreign currency	1,745,235	527,383
Total	6,658,861	4,821,669

The following table shows information relating to the average time taken to pay suppliers (days payable outstanding), as required by Additional Provision Three of Law 15/2010, taking into account the amendments introduced by Law 18/2022, of 28 September, on the creation and growth of companies:

	2022	2021
Average payment period and supplier payment ratios (in days)		
Average time taken to pay suppliers	28.74	27.30
Ratio of transactions paid (*)	28.72	27.30
Ratio of transactions payable (**)	50.03	17.06
Payments made and pending at year-end (in thousand euro)		
Total payments made	1,131,038	957,417
Total payments outstanding	1,131	127
Payments made in < 60 days (in thousand euro) (***)		
Monetary volume of paid invoices	1,011,940	882,574
Percentage of total amount of payments to suppliers	89	92
Number of invoices paid in < 60 days (***)		
Number of invoices paid	141,339	152,338
Percentage of total number of invoices	92	92

The calculations above only take into account transactions undertaken by the Group's main Spanish entities, which represent 98.75% of total invoicing.

(*) The ratio of paid transactions is equal to the sum of the amount of each paid transaction multiplied by the number of days elapsed since the date of receipt of the invoice until its payment, divided by the total amount of payments made.

(**) The ratio of transactions payable is equal to the sum of the amount of each transaction payable multiplied by the number of days elapsed since the date of receipt of the invoice until the last day of the period, divided by the total amount of pending payments.

(***) Corresponds to invoices paid within the maximum period established in regulations on late payment.

Note 22 – Provisions and contingent liabilities

Movements during 2022 and 2021 under the “Provisions” heading are shown below:

Thousand euro

	Pensions and other post employment defined benefit obligations	Other long term employee benefits	Pending legal issues and tax litigation	Commitments and guarantees given	Other provisions	Total
Balance as at 31 December 2020	99,690	3,971	114,097	195,879	569,875	983,512
Scope additions / exclusions	—	—	—	—	(788)	(788)
Interest and similar expenses - pension commitments	1,010	4	—	—	—	1,014
Allowances charged to income statement - staff expenses (*)	2,859	6	—	—	280,390	283,255
Allowances not charged to income statement	—	—	—	—	—	—
Allowances charged to income statement - provisions	1,305	17	39,608	(9,046)	55,682	87,566
Allocation of provisions	39	—	41,093	197,837	57,363	296,332
Reversal of provisions	—	—	(1,485)	(206,882)	(1,681)	(210,048)
Actuarial losses / (gains)	1,266	17	—	—	—	1,283
Exchange differences	344	—	—	1,629	9,349	11,322
Utilisations:	(8,043)	(1,417)	(76,857)	—	(123,363)	(209,680)
Contributions by the sponsor	281	—	—	—	—	281
Pension payments	(8,324)	(1,417)	—	—	—	(9,741)
Other	—	—	(76,857)	—	(123,363)	(200,220)
Other movements	(11,145)	(1,931)	—	2,129	(259,116)	(270,063)
Balance as at 31 December 2021	86,020	650	76,848	190,591	532,029	886,138
Scope additions / exclusions	—	—	—	—	—	—
Interest and similar expenses - pension commitments	1,958	4	—	—	—	1,962
Allowances charged to income statement - staff expenses (*)	1,152	5	—	—	(2,790)	(1,633)
Allowances not charged to income statement	—	—	—	—	—	—
Allowances charged to income statement - provisions	228	(32)	45,211	(14,258)	65,672	96,821
Allocation of provisions	84	—	47,619	191,058	65,672	304,433
Reversal of provisions	—	—	(2,408)	(205,316)	—	(207,724)
Actuarial losses / (gains)	144	(32)	—	—	—	112
Exchange differences	688	—	—	(305)	(6,645)	(6,262)
Utilisations:	(7,562)	(457)	(32,209)	—	(172,876)	(213,104)
Net contributions by the sponsor	612	—	—	—	—	612
Pension payments	(8,174)	(457)	—	—	—	(8,631)
Other	—	—	(32,209)	—	(172,876)	(205,085)
Other movements	(19,100)	—	—	795	(101,108)	(119,413)
Balance as at 31 December 2022	63,384	170	89,850	176,823	314,282	644,509

(*) See Note 33.

The headings “Pensions and other post employment defined benefit obligations” and “Other long term employee benefits” include the amount of provisions for the coverage of post-employment remuneration and commitments undertaken with early retirees and similar commitments.

The heading “Commitments and guarantees given” includes the amount of provisions for the coverage of commitments given and contingent risks arising from financial guarantees or other types of contracts.

During the usual course of business, the Group is exposed to fiscal, legal and regulatory contingencies, among others. All significant contingencies are analysed on a regular basis, with the collaboration of third party experts when necessary and, where appropriate, provisions are recognised under the headings “Pending legal issues and tax litigation” and “Other provisions”. As at 31 December 2022 and 2021, these headings mainly include:

- Provisions for legal contingencies amounting to 23 million euros as at 31 December 2022 (28 million euros as at 31 December 2021).
- Other provisions for legal contingencies in Spain arising from customer claims in connection with certain general terms and conditions of agreements amounting to 179 million euros (171 million euros as at 31 December 2021). The most significant provision relates to the possible reimbursement of amounts received as a result of the application of mortgage floor clauses, whether as a result of the hypothetical voiding by the courts of law of floor clauses or whether due to the implementation of Royal Decree-Law 1/2017, of 20 January, on measures to protect consumers regarding floor clauses, for the amount of 99 million euros as at 31 December 2022 (114 million euros as at 31 December 2021). In a highly adverse scenario of potential additional claims being filed, both through the procedures established by the Institution, in accordance with that set forth in the aforesaid Royal Decree, and through court proceedings applying the percentages set forth in the current agreement, the maximum contingency would amount to 114 million euros.

With regard to this provision, the Bank considers its floor clauses to be transparent and clear to customers, and in general, these have not been definitively voided with a final ruling. On 12 November 2018, Section 28 of the Civil Division of the Provincial Court of Madrid issued a ruling in which it partially supported the appeal brought forth by Banco de Sabadell, S.A. against the ruling issued by the Commercial Court no. 11 of Madrid on the invalidity of the restrictive interest rate clauses, considering that some of the clauses established by Banco de Sabadell, S.A. are transparent and valid in their entirety. With regard to the rest of the clauses, the Bank still considers that it has legal arguments which should be reviewed in the legal appeal which the Institution presented to the Supreme Court, with regard to the ruling made by the Provincial Court of Madrid. This appeal has been suspended by the Supreme Court, which has referred the matter to the Court of Justice of the European Union for a preliminary ruling.

The remaining provisions mainly relate to customer claims in connection with the repayment of mortgage arrangement fees, developer deposit funds and revolving card interest, with the provision set aside amounting to 80 million euros as at 31 December 2022 (57 million euros as at 31 December 2021).

- Provisions to cover the anticipated costs relating to restructuring plans in Spain announced in previous years and pending final implementation amounting to 56 million euros as at 31 December 2022 (274 million euros as at 31 December 2021) – see Note 33.
- Provisions allocated to provide compensation to certain TSB customers in arrears who received financial support that could have been detrimental to them during the 2013-2020 period. The estimated potential cost of compensation payable, which includes compensatory interest and associated operational costs, amounted to 78 million euros as at 31 December 2022 (65 million euros as at 31 December 2021).
- Provisions to cover the anticipated costs relating to restructuring plans in TSB announced in previous years and pending final implementation amounting to 13 million euros as at 31 December 2022 (28 million euros as at 31 December 2021).

The final disbursement amount and the payment schedule are uncertain due to the difficulties inherent in estimating the factors used to determine the amount of the provisions set aside.

Pensions and similar obligations

The origins of liabilities recognised in respect of post-employment benefits and other similar long-term obligations on the Group's balance sheet are shown below:

Thousand euro	2022	2021	2020	2019	2018
Obligations arising from pension and similar commitments	565,046	739,456	819,789	803,905	768,695
Fair value of plan assets	(501,492)	(652,786)	(716,128)	(697,621)	(667,835)
Net liability recognised on balance sheet	63,554	86,670	103,661	106,284	100,860

The return on the Banco Sabadell pension plan was -13.88% and that of the E.P.S.V. was 0.22% in 2022 (4.25% and 2.67%, respectively, in 2021).

Movements during 2022 and 2021 in obligations due to pensions and similar commitments and the fair value of the plan assets are as follows:

Thousand euro	Obligations arising from pension and similar commitments	Fair value of plan assets	Net liability recognised on balance sheet
Balance as at 31 December 2020	819,789	716,128	103,661
Interest costs	4,503	—	4,503
Interest income	—	3,489	(3,489)
Normal cost in year	1,951	—	1,951
Past service cost	914	—	914
Benefits paid	(47,979)	(38,238)	(9,741)
Settlements, curtailments and terminations	(13,352)	(14,618)	1,266
Net contributions by the Institution	—	(181)	181
Actuarial gains or losses from changes in demographic assumptions	—	—	—
Actuarial gains or losses from changes in financial assumptions	(43,340)	—	(43,340)
Actuarial gains or losses from experience	1,369	—	1,369
Return on plan assets excluding interest income	—	(30,845)	30,845
Other movements	15,601	17,051	(1,450)
Balance as at 31 December 2021	739,456	652,786	86,670
Interest costs	12,800	—	12,800
Interest income	—	10,838	(10,838)
Normal cost in year	1,631	—	1,631
Past service cost	(474)	—	(474)
Benefits paid	(47,415)	(38,784)	(8,631)
Settlements, curtailments and terminations	(3,832)	(3,976)	144
Net contributions by the Institution	—	(644)	644
Actuarial gains or losses from changes in demographic assumptions	(1,126)	—	(1,126)
Actuarial gains or losses from changes in financial assumptions	(143,190)	—	(143,190)
Actuarial gains or losses from experience	(4,208)	—	(4,208)
Return on plan assets excluding interest income	—	(131,322)	131,322
Other movements	10,715	12,594	(1,879)
Exchange differences	689	—	689
Balance as at 31 December 2022	565,046	501,492	63,554

The breakdown of Group pension obligations and similar obligations as at 31 December 2022 and 2021, based on the financing vehicle, coverage and the interest rate applied in their calculation, is given below:

Thousand euro			
		2022	
Financing vehicle	Coverage	Amount	Interest rate
Pension plans		270,917	
Insurance policies with related parties	Matched	26,279	3.25 %
Insurance policies with unrelated parties	Matched	244,638	3.25 %
Insurance contracts		288,417	
Insurance policies with related parties	Matched	60,555	3.25 %
Insurance policies with unrelated parties	Matched	227,862	3.25 %
Internal funds	Without cover	5,712	3.25 %
Total obligations		565,046	
Thousand euro			
		2021	
Financing vehicle	Coverage	Amount	Interest rate
Pension plans		358,922	
Insurance policies with related parties	Matched	33,404	1.00 %
Insurance policies with unrelated parties	Matched	325,518	1.00 %
Insurance contracts		372,859	
Insurance policies with related parties	Matched	78,285	1.00 %
Insurance policies with unrelated parties	Matched	294,574	1.00 %
Internal funds	Without cover	7,675	1.00 %
Total obligations		739,456	

The value of the obligations covered by matched insurance policies as at 31 December 2022 amounted to 559,334 thousand euros (731,781 thousand euros as at 31 December 2021); therefore, in 98.99% of its obligations (98.96% as at 31 December 2021) there is no mortality risk (mortality tables) or profitability risk (interest rate) for the Group. Therefore, the evolution of interest rates in 2022 has not had an impact on the Institution's payment capacity to cope with its pension obligations.

The sensitivity analysis for the actuarial assumptions of the technical interest rate and the rate of salary increase shown in Note 1.3.17 to these consolidated annual financial statements, as at 31 December 2022 and 2021, illustrates how the obligation and the cost of the services during the current year would have been affected by changes deemed reasonably likely to occur as at that date.

%	2022	2021
Sensitivity analysis	Percentage change	
Interest rate		
Interest rate -50 basis points:		
Assumption	2.75 %	0.50 %
Change in obligation	5.19 %	5.87 %
Change in current service cost	11.60 %	11.59 %
Interest rate +50 basis points:		
Assumption	3.75 %	1.50 %
Change in obligation	(4.47)%	(5.36)%
Change in current service cost	(10.13)%	(10.33)%
Rate of salary increase		
Rate of salary increase -50 basis points:		
Assumption	2.50 %	2.50 %
Change in obligation	(0.01)%	(0.06)%
Change in current service cost	(3.49)%	(3.27)%
Rate of salary increase +50 basis points:		
Assumption	3.50 %	3.50 %
Change in obligation	0.01 %	0.06 %
Change in current service cost	3.88 %	3.92 %

The estimate of probable present values, as at 31 December 2022, of benefits payable for the next ten years, is set out below:

Thousand euro	Years										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Future pension benefit payments	8,572	8,142	8,033	7,616	7,521	8,512	8,216	7,910	7,595	7,274	79,391

The fair value of assets linked to pensions recognised on the consolidated balance sheet amounted to 89,729 thousand euros as at 31 December 2022 (116,453 thousand euros as at 31 December 2021) – see Note 17.

The main categories of the plan's assets as at 31 December 2022 and 2021 are indicated hereafter:

%	2022	2021
Mutual funds	2.90 %	2.08 %
Deposits and guarantees	0.42 %	0.14 %
Other (non-linked insurance policies)	96.68 %	97.78 %
Total	100 %	100 %

There are no financial instruments issued by the Bank included in the fair value of the plan's assets as at 31 December 2022 and 2021.

Note 23 – Shareholders' equity

The breakdown of the balance of shareholders' equity on the consolidated balance sheets as at 31 December 2022 and 2021 is the following:

Thousand euro	2022	2021
Capital	703,371	703,371
Share premium	7,899,227	7,899,227
Other equity	21,548	19,108
Retained earnings	5,859,520	5,441,185
Other reserves	(1,365,777)	(1,201,701)
(-) Treasury shares	(23,767)	(34,523)
Profit or loss attributable to owners of the parent	858,642	530,238
(-) Interim dividends	(112,040)	—
Total	13,840,724	13,356,905

Capital

The Bank's share capital as at 31 December 2022 and 2021 stood at 703,370,587.63 euros, represented by 5,626,964,701 registered shares with a par value of 0.125 euros each. All shares are fully paid-up and are numbered in sequential order from 1 through 5,626,964,701, inclusive.

The Bank's shares are listed on the Madrid, Barcelona, Bilbao and Valencia stock exchanges and on Spain's electronic market (Mercado Continuo) managed by Sociedad de Bolsas, S.A.

None of the other subsidiary companies included in the scope of consolidation are listed on the stock exchange.

The rights conferred to the equity instruments are those regulated by the Capital Companies Act. During the Annual General Meeting, shareholders may exercise a percentage of votes equivalent to the percentage of the share capital in their possession. The Articles of Association do not contain any provision for additional loyalty voting rights.

There were no changes in the Bank's share capital in 2022 and 2021.

Significant investments in the Bank's capital

As required by Articles 23 and 32 of Royal Decree 1362/2007, of 19 October, implementing the Securities Market Law 24/1988, of 28 July, on transparency requirements relating to information on issuers whose securities have been admitted to trading on an official secondary market or on any other European Union regulated market, the following table gives details of significant investments in the share capital of Banco Sabadell as at 31 December 2022:

Direct owner of the shareholding	% of voting rights assigned to shares	% of voting rights through financial instruments	Total % of voting rights	Indirect owner of the shareholding
Various subsidiaries of BlackRock Inc.	3.23%	1.38%	4.61%	Blackrock Inc.
Funds and accounts advised or sub-advised by Dimensional Fund Advisors LP or its subsidiaries	3.01%	—%	3.01%	Dimensional Fund Advisors LP
Fintech Europe S.A.R.L.	3.45%	—%	3.45%	David Martínez Guzmán
Sanders Capital LLC	3.47%	—%	3.47%	Lewis A. Sanders and clients of Sanders Capital LLC who delegate their voting rights to others

The sources for the information provided are communications sent by shareholders to the National Securities Market Commission (CNMV) or directly to the Institution.

Retained earnings and Other reserves

The balance of these headings of the consolidated balance sheets as at 31 December 2022 and 2021 breaks down as follows:

Thousand euro	2022	2021
Restricted reserves:	222,820	206,665
Statutory reserve	140,674	140,674
Reserves for treasury shares pledged as security	68,470	52,315
Reserves for investments in the Canary Islands	10,561	10,561
Reserve for redenomination of share capital	113	113
Capital redemption reserve	3,002	3,002
Unrestricted reserves	4,107,070	3,797,366
Reserves of entities accounted for using the equity method	163,853	235,453
Total	4,493,743	4,239,484

Information on the reserves for each of the consolidated companies is indicated in Schedule I.

Other equity

This heading includes share-based remuneration pending settlement which, as at 31 December 2022 and 2021, amounted to 21,548 thousand euros and 19,108 thousand euros, respectively.

Business involving own equity instruments

The movements of the parent company's shares acquired by the Bank are as follows:

	No. of shares	Nominal value (in thousand euro)	Average price (in euro)	% Shareholding
Balance as at 31 December 2020	48,560,867	6,070.11	0.77	0.86
Purchases	115,224,411	14,403.05	0.56	2.05
Sales	123,106,070	15,388.26	0.55	2.19
Balance as at 31 December 2021	40,679,208	5,084.90	0.85	0.72
Purchases	115,797,928	14,474.74	0.75	2.06
Sales	131,704,453	16,463.06	0.77	2.34
Balance as at 31 December 2022	24,772,683	3,096.58	0.96	0.44

Net gains and losses arising from transactions involving own equity instruments have been included under the heading "Shareholders' equity – Other reserves" on the consolidated balance sheet, and they are shown in the statement of changes in equity, in the row corresponding to the sale or cancellation of treasury shares.

As at 31 December 2022, TSB holds 60,517 Banco Sabadell shares (233,658 as at 31 December 2021), with a cost of 46 thousand euros (104 thousand euros as at 31 December 2021), which are recorded as treasury shares on the consolidated balance sheet.

As at 31 December 2022, the number of shares of the Bank pledged as collateral for transactions was 77,735,661 with a nominal value of 9,717 thousand euros (88,399,047 shares with a nominal value of 11,450 thousand euros as at 31 December 2021).

The number of Banco de Sabadell, S.A. equity instruments owned by third parties, yet managed by the different companies of the Group, amounts to 3,607,904 and 17,183,167 securities as at 31 December 2022 and 2021, respectively. Their nominal value as at the aforesaid dates amounts to 383 thousand euros and 2,148 thousand euros, respectively. In both years, 100% of the securities corresponded to Banco Sabadell shares.

Note 24 – Accumulated other comprehensive income

The composition of this heading of consolidated equity as at 31 December 2022 and 2021 is as follows:

Thousand euro	2022	2021
Items that will not be reclassified to profit or loss	(29,125)	(41,758)
Actuarial gains or (-) losses on defined benefit pension plans	(1,969)	917
Non-current assets and disposal groups classified as held for sale	—	—
Share of other recognised income and expense of investments in joint ventures and associates	—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income	(27,156)	(42,675)
Hedge ineffectiveness of fair value hedges for equity instruments measured at fair value through other comprehensive income	—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income [hedged item]	—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income [hedging instrument]	—	—
Fair value changes of financial liabilities at fair value through profit or loss attributable to changes in their credit risk	—	—
Items that may be reclassified to profit or loss	(621,522)	(343,846)
Hedge of net investments in foreign operations [effective portion] (*)	119,348	157,741
Foreign currency translation	(476,030)	(481,266)
Hedging derivatives. Cash flow hedges [effective portion] (**)	(64,224)	(30,163)
Amount deriving from outstanding operations	(93,562)	(67,193)
Amount deriving from discontinued operations	29,338	37,030
Fair value changes of debt instruments measured at fair value through other comprehensive income	(180,199)	(11,724)
Hedging instruments [not designated elements]	—	—
Non-current assets and disposal groups classified as held for sale	—	—
Share of other recognised income and expense of investments in joint ventures and associates	(20,417)	21,566
Total	(650,647)	(385,604)

(*) The value of the hedge of net investments in foreign operations is fully obtained from outstanding transactions (see Note 12).

(**) Cash flow hedges mainly mitigate interest rate risk and other risks (see Note 12).

The breakdown of the items in the statement of recognised income and expenses as at 31 December 2022 and 2021, indicating their gross and net of tax effect amounts, is as follows:

	2022			2021		
	Gross value	Tax effect	Net	Gross value	Tax effect	Net
Items that will not be reclassified to profit or loss	12,991	(358)	12,633	20,611	2,050	22,661
Actuarial gains or (-) losses on defined benefit pension plans	(4,123)	1,237	(2,886)	2,299	(689)	1,610
Non-current assets and disposal groups classified as held for sale	—	—	—	—	—	—
Share of other recognised income and expense of investments in joint ventures and associates	—	—	—	—	—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income	17,114	(1,595)	15,519	18,312	2,739	21,051
Hedge ineffectiveness of fair value hedges for equity instruments measured at fair value through other comprehensive income	—	—	—	—	—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income [hedged item]	—	—	—	—	—	—
Fair value changes of equity instruments measured at fair value through other comprehensive income [hedging instrument]	—	—	—	—	—	—
Fair value changes of financial liabilities at fair value through profit or loss attributable to changes in their credit risk	—	—	—	—	—	—
Items that may be reclassified to profit or loss	(357,716)	80,040	(277,676)	78,796	35,988	114,784
Hedge of net investments in foreign operations [effective portion]	(38,393)	—	(38,393)	(54,100)	—	(54,100)
Foreign currency translation	5,238	—	5,238	255,804	—	255,804
Hedging derivatives. Cash flow hedges reserve [effective portion]	(52,125)	18,064	(34,061)	(103,229)	33,269	(69,960)
Fair value changes of debt instruments measured at fair value through other comprehensive income	(230,451)	61,976	(168,475)	(14,112)	2,719	(11,393)
Hedging instruments [not designated elements]	—	—	—	—	—	—
Non-current assets and disposal groups classified as held for sale	—	—	—	—	—	—
Share of other recognised income and expense of investments in joint ventures and associates	(41,985)	—	(41,985)	(5,567)	—	(5,567)
Total	(344,725)	79,682	(265,043)	99,407	38,038	137,445

Note 25 – Minority interests (non-controlling interests)

The companies comprising this consolidated equity heading as at 31 December 2022 and 2021 are the following:

Thousand euro

	2022			2021		
	% Minority interests	Amount	Of which: Profit/ (loss) attributed	% Minority interests	Amount	Of which: Profit/ (loss) attributed
BancSabadell d'Andorra, S.A.	—	—	—	—	—	4,700
Aurica Coinvestment, S.L.	38.24 %	33,553	10,009	38.24 %	24,190	4,129
Other	—	791	739	—	790	(360)
Total		34,344	10,748		24,980	8,469

The movements in the balance of this heading in 2022 and 2021 were as follows:

Thousand euro

Balances as at 31 December 2020	71,634
Valuation adjustments	(541)
Other	(46,113)
Scope additions / exclusions (*)	(52,502)
Percentage shareholding and other	(2,080)
Profit or loss for the year	8,469
Balances as at 31 December 2021	24,980
Valuation adjustments	—
Other	9,364
Scope additions / exclusions	—
Percentage shareholding and other	(1,384)
Profit or loss for the year	10,748
Balances as at 31 December 2022	34,344

(*) Corresponds, fundamentally, to disposal of stake held in BancSabadell d'Andorra (see Note 2).

The dividends distributed to minority shareholders of Group entities in 2022 amounted to 646 thousand euros and have been distributed by Aurica Coinvestment, S.L. In 2021, they amounted to 2,118 thousand euros: 1,472 thousand euros to BancSabadell d'Andorra, S.A. and 646 thousand euros to Aurica Coinvestment, S.L.

Note 26 – Off-balance sheet exposures

The breakdown of this heading for the years ended 31 December 2022 and 2021 is the following:

Thousand euro			
Commitments and guarantees given	Note	2022	2021
Loan commitments given		27,460,615	28,403,146
<i>Of which, amount classified as stage 2</i>		1,407,538	1,310,996
<i>Of which, amount classified as stage 3</i>		82,078	84,768
Drawable by third parties		27,460,615	28,403,145
By credit institutions		43	295
By general governments		1,019,180	1,062,490
By other resident sectors		15,815,706	15,553,771
By non-residents		10,625,686	11,786,590
Provisions recognised on liabilities side of the balance sheet	22	71,698	68,136
Financial guarantees given (*)		2,086,993	2,034,143
<i>Of which, amount classified as stage 2</i>		254,090	143,686
<i>Of which, amount classified as stage 3</i>		58,197	116,373
Provisions recognised on liabilities side of the balance sheet (**)	22	26,817	42,417
Other commitments given		9,674,382	7,384,863
<i>Of which, amount classified as stage 2</i>		434,869	473,436
<i>Of which, amount classified as stage 3</i>		265,507	358,184
Other guarantees given		6,916,058	7,234,081
Assets earmarked for third-party obligations		—	—
Irrevocable letters of credit		722,640	967,766
Additional settlement guarantee		25,000	25,000
Other guarantees and sureties given		6,168,418	6,241,315
Other contingent risks		—	—
Other commitments given		2,758,324	150,782
Financial asset forward purchase commitments		2,639,536	—
Conventional financial asset purchase contracts		—	50,116
Capital subscribed but not paid up		19	19
Underwriting and subscription commitments		—	—
Other loan commitments given		118,769	100,647
Provisions recognised on liabilities side of the balance sheet	22	78,308	80,038
Total		39,221,990	37,822,152

(*) Includes 122,500 and 68,837 thousand euro as of 31 December 2022 and 2021, respectively, corresponding to financial guarantees given in connection with construction and real estate development.

(**) Includes 4,305 and 6,512 thousand euro as of 31 December 2022 and 2021, respectively, in connection with construction and real estate development.

Total commitments drawable by third parties as at 31 December 2022 include home equity loan commitments amounting to 4,566,727 thousand euros (5,778,794 thousand euros as at 31 December 2021). As regards other commitments, in the majority of cases there are other types of guarantees which are in line with the Group's risk management policy.

Financial guarantees and other commitments given classed as stage 3

The movement of the balance of financial guarantees and other commitments given classed as stage 3 during 2022 and 2021 was the following:

Thousand euro	
Balances as at 31 December 2020	456,941
Additions	94,214
Disposals	(76,598)
Balances as at 31 December 2021	474,557
Additions	90,909
Disposals	(241,762)
Balances as at 31 December 2022	323,704

The breakdown by geographical area of the balance of financial guarantees and other commitments given classed as stage 3 as at 31 December 2022 and 2021 is as follows:

Thousand euro		
	2022	2021
Spain	321,296	469,444
Rest of European Union	439	439
United Kingdom	8	4
Americas	14	2,808
Rest of the world	1,947	1,862
Total	323,704	474,557

Credit risk allowances corresponding to financial guarantees and other commitments given as at 31 December 2022 and 2021, broken down by the method used to determine such allowances, are as follows:

Thousand euro		
	2022	2021
Specific individually measured allowances:	79,564	86,050
Stage 2	3,753	424
Stage 3	75,811	85,626
Specific collectively measured allowances:	25,560	36,405
Stage 1	4,833	6,317
Stage 2	7,098	5,229
Stage 3	13,234	24,141
Others	395	718
Total	105,124	122,455

The movement of this coverage during 2022 and 2021, together with the coverage of other loan commitments given is shown in Note 22.

Note 27 – Off-balance sheet customer funds

Off-balance sheet customer funds managed by the Group, those sold but not under management and the financial instruments deposited by third parties as at 31 December 2022 and 2021 are shown below:

Thousand euro		
	2022	2021
Managed by the Group:	4,234,635	5,160,075
Investment firms and funds	702,580	1,364,922
Asset management	3,532,055	3,795,153
Sold by the Group:	34,257,725	36,517,746
Mutual Funds	21,878,344	23,228,405
Pension funds	3,182,486	3,524,786
Insurance	9,196,895	9,764,555
Financial instruments deposited by third parties	43,286,158	47,881,913
Total	81,778,518	89,559,734

Note 28 – Interest income and expenses

These headings in the consolidated income statement include interest accrued during the year on all financial assets and liabilities the yield of which, implicit or explicit, is obtained by applying the effective interest rate approach, irrespective of whether they are measured at fair value or otherwise, and using product adjustments due to accounting hedges.

The majority of interest income is generated by the Group's financial assets measured either at amortised cost or at fair value through other comprehensive income.

The breakdown of net interest income for the years ended 31 December 2022 and 2021 is the following:

Thousand euro	2022	2021
Interest income		
Loans and advances	4,252,331	3,531,780
Central banks	252,274	23,705
Credit institutions	72,999	31,304
Customers	3,927,058	3,476,771
Debt securities (*)	288,540	215,458
Stage 3 assets	21,840	30,271
Correction of income from hedging operations	151,473	(37,039)
Other interest (**)	274,419	407,079
Total	4,988,603	4,147,549
Interest expense		
Deposits	(585,695)	(274,684)
Central banks	(99,658)	(5,035)
Credit institutions	(83,742)	(28,365)
Customers	(402,295)	(241,284)
Debt securities issued	(302,023)	(247,818)
Correction of expenses on hedging operations	(147,708)	16,065
Other interest (***)	(154,451)	(215,656)
Total	(1,189,877)	(722,093)

(*) Includes 20,903 thousand euros in 2022 and 7,987 thousand euros in 2021 corresponding to interest on financial assets at fair value through profit or loss (trading book).

(**) Includes positive returns from liability products.

(***) Includes negative returns on asset products.

The average annual interest rate during 2022 and 2021 of the following balance sheet headings is shown below:

%	2022	2021
Assets		
Cash, cash balances at central banks and other demand deposits	0.39	(0.26)
Debt securities	1.11	0.62
Loans and advances		
Customers	2.51	2.31
Liabilities		
Deposits		
Central banks and Credit institutions	0.02	0.71
Customers	(0.19)	(0.09)
Debt securities issued	(1.42)	(1.17)

Positive (negative) figures correspond to income (expenses) for the Group.

Note 29 – Fee and commission income and expenses

Income and expenses arising from fees and commissions on financial assets and liabilities and the provision of services are as follows:

Thousand euro	2022	2021
Fees from risk transactions	282,500	270,392
Asset-side transactions	180,403	168,717
Sureties and other guarantees	102,097	101,675
Service fees	869,794	839,528
Payment cards	256,492	222,539
Payment orders	82,935	74,196
Securities	53,145	66,848
Sight accounts	286,471	293,245
Other	190,751	182,700
Asset management and marketing fees	337,914	357,621
Mutual funds	122,218	121,734
Sale of pension funds and insurance products	193,833	198,338
Asset management	21,863	37,549
Total	1,490,208	1,467,541
Memorandum item		
Fee and commission income	1,742,311	1,661,610
Fee and commission expenses	(252,103)	(194,069)
Fees and commissions (net)	1,490,208	1,467,541

Note 30 – Gains or (-) losses on financial assets and liabilities (net) and exchange differences (net)

“Gains or (-) losses on financial assets and liabilities, net” groups together a series of headings from the consolidated income statement for the years ended 31 December 2022 and 2021, which are shown below:

Thousand euro	2022	2021
By heading:		
Gains or (-) losses on derecognition of financial assets and liabilities not measured at fair value through profit or loss, net	13,227	340,985
Financial assets at fair value through other comprehensive income	22,752	15,412
Financial assets at amortised cost	(9,190)	323,840
Financial liabilities at amortised cost	(335)	1,733
Gains or (-) losses on financial assets and liabilities held for trading, net	204,691	(183,555)
Gains or (-) losses on non-trading financial assets mandatorily at fair value through profit or loss, net	(4,157)	4,466
Gains or (-) losses on financial assets and liabilities designated at fair value through profit or loss, net	—	—
Gains or (-) losses from hedge accounting, net	17,851	(4,851)
Total	231,612	157,045
By type of financial instrument:		
Net gain/(loss) on debt securities	16,131	346,978
Net gain/(loss) on other equity instruments	(877)	2,396
Net gain/(loss) on derivatives	225,548	(192,370)
Net gain/(loss) on other items (*)	(9,190)	41
Total	231,612	157,045

(*) Mainly includes gains/(losses) on the sale of various loan portfolios sold during the year.

The breakdown of the heading “Exchange differences [gain or (-) loss], net” of the consolidated income statement for the years ended 31 December 2022 and 2021 is shown below:

Thousand euro	2022	2021
Exchange differences [gain or (-) loss], net	(127,971)	187,174

During 2022, the Group has carried out sales of certain debt securities which it held in its portfolio of financial assets at fair value through other comprehensive income, generating profits of 22,752 thousand euros (15,412 thousand euros in 2021). 100% of these profits comes from the sale of debt securities held with general governments (4,127 thousand euros in 2021).

In addition, in 2021, the Group sold certain debt securities held in the portfolio of financial assets at amortised cost in order to fortify the Group’s solvency as part of a series of actions taken to improve future profitability and the quality of its balance sheet in response to the economic crisis triggered by Covid-19 (see Notes 8 and 33).

The “Net gain/(loss) on derivatives” heading includes, among other things, the change in the fair value of derivatives used to hedge against the foreign exchange risk of debit and credit balances denominated in foreign currencies. The results obtained from these derivatives are recognised under the heading “Gains or (-) losses on financial assets and liabilities held for trading, net” of the consolidated income statement, while the exchange differences generated by debit and credit balances denominated in foreign currencies hedged with these derivatives are recognised under the heading “Exchange differences [gain or (-) loss], net” of the consolidated income statement.

Note 31 – Other operating income

The composition of this heading of the consolidated income statement for the years ended 31 December 2022 and 2021 is as follows:

Thousand euro	2022	2021
Income from use of investment properties (*)	23,474	25,785
Sales and other income from the provision of non-financial services	11,522	11,382
Other operating income	86,558	117,565
Total	121,554	154,732

(*) The amounts relate mainly to income from operating leases in which the Group acts as lessor.

The income recognised in “Other operating income” basically corresponds to income from Group entities engaging in non-financial activities (mostly operating leases). The reduction in the balance recorded in this heading for 2022 is mainly due to the fall in income from the vehicle leasing activity following the sale of the BanSabadell Renting, S.L.U. subsidiary, which took place in the second half of 2021, which was partially offset by the income from the insurance policies referred to in Note 32.

Note 32 – Other operating expenses

The composition of this heading of the consolidated income statement for the years ended 31 December 2022 and 2021 is as follows:

Thousand euro	2022	2021
Contribution to deposit guarantee schemes	(129,157)	(128,883)
Banco Sabadell	(113,832)	(116,341)
TSB	(540)	(879)
BS IBM Mexico	(14,785)	(11,663)
Contribution to resolution fund	(100,151)	(87,977)
Other items	(229,559)	(250,502)
Total	(458,867)	(467,362)

“Other items” includes expenses corresponding to Tax on Deposits of Credit Institutions, amounting to 34,894 thousand euros in 2022 (33,438 thousand euros in 2021), as well as expenses associated with non-financial activities (mostly operating leases). The balance of this heading decreased due to, among other reasons, the fall in expenses of the vehicle leasing business, following the sale of BanSabadell Renting, S.L.U. in 2021 (See Note 31). Furthermore, on 16 December 2022, the TSB subsidiary reached an agreement with the British regulators regarding the outcome of the investigation into the causes and circumstances that led to the incidents that took place after its IT migration in 2018. This agreement involved a payment from TSB for 48.65 million pounds sterling (approximately, 57 million euros) to the British regulators, which was recorded under this heading, and an estimated impact on capital of 6 basis points on a consolidated basis. However, it is estimated that the insurance policies arranged by the Group will enable this amount and the impact on capital to be offset. In 2022, income amounting to 45 million euros corresponding to compensation arising from the aforesaid arranged insurance policies was recognised under the heading “Other operating income” of the consolidated income statement for 2022 (see Note 31).

Note 33 – Administrative expenses

This heading of the consolidated income statement includes expenses incurred by the Group corresponding to staff and other general administrative expenses.

Staff expenses

The staff expenses recognised in the consolidated income statement for the years ended 31 December 2022 and 2021 are as follows:

Thousand euro			
	Nota	2022	2021
Payrolls and bonuses for active staff		(1,050,441)	(1,098,835)
Social Security payments		(212,576)	(231,357)
Contributions to defined benefit pension plans	22	(1,157)	(2,865)
Contributions to defined contribution pension plans		(61,560)	(70,132)
Other staff expenses		(65,874)	(373,608)
<i>Of which: restructuring plans in Spain and United Kingdom</i>		—	(298,272)
Total		(1,391,608)	(1,776,797)

In October 2021, the Bank reached an agreement with all trade union sections involved in the negotiating committee representing workers, under the framework of a collective redundancy procedure in Spain, which affected 1,603 employees (496 in 2021 and 1,107 during the first half of 2022). This agreement involved an expenditure of 274,301 thousand euros, which was funded with income from the sale of debt instruments recognised in the amortised cost portfolio (see Notes 8, 22 and 30).

As at 31 December 2022 and 2021, the breakdown of the average workforce for all companies within the Group by category and sex is as follows:

Average number of employees	2022			2021		
	Men	Women	Total	Men	Women	Total
	Senior management	479	208	687	494	190
Middle management	1,947	1,381	3,328	2,227	1,363	3,590
Specialist staff	5,307	7,222	12,529	6,024	8,153	14,177
Administrative staff	707	1,817	2,524	739	2,137	2,876
Total	8,440	10,628	19,068	9,484	11,843	21,327

The breakdown of the Group’s average workforce by category as at 31 December 2022 and 2021 with a disability of 33% or more is as follows:

Average number of employees		
	2022	2021
Senior management	10	9
Middle management	27	33
Specialist staff	207	238
Administrative staff	78	109
Total	322	389

As at 31 December 2022 and 2021, the breakdown of the Group's workforce by category and sex is as follows:

Number of employees	2022			2021		
	Men	Women	Total	Men	Women	Total
	Senior management	460	208	668	515	214
Middle management	1,944	1,381	3,325	1,988	1,281	3,269
Specialist staff	5,298	7,194	12,492	5,663	7,766	13,429
Administrative staff	683	1,727	2,410	724	1,919	2,643
Total	8,385	10,510	18,895	8,890	11,180	20,070

Of the total workforce as at 31 December 2022, 309 had some form of recognised disability (344 as at 31 December 2021).

Long-term share-based complementary incentive scheme

Pursuant to the Remuneration Policy, the latest version of which was approved by the Board of Directors at its meeting of 16 December 2021, at the proposal of the Board Remuneration Committee, members of the Group's Identified Staff, with the exception of non-executive directors, were allocated long-term remuneration through the schemes in effect during 2022, as described below:

Share-based complementary incentive scheme

TSB's Share Incentive Plan (SIP) provides its employees with the opportunity to own shares in Banco Sabadell and grants, where applicable, shares to certain senior employees as part of their hiring arrangements.

Long-term remuneration scheme

The Board of Directors, in its meeting of 20 December 2018, at the proposal of the Board Remuneration Committee, approved Long-Term Remuneration for 2019-2021, aimed at members of the Group's Identified Staff with allocated variable remuneration, with the exception of management staff who are assigned to TSB Banking Group Plc or its subsidiaries, which consisted of the allocation of a certain amount to each beneficiary, which was determined based on a monetary amount corresponding to a percentage of each beneficiary's fixed remuneration. The incentive was paid 55% in shares of the Bank (using the weighted average price of the last 20 trading sessions of December 2019 to calculate the number of shares) and 45% in cash. The incentive vesting period started on 1 January 2019 and ended on 31 December 2021, and consisted of two sub-periods:

- Individual annual targets measurement period: this is the period from 1 January 2019 to 31 December 2019, in which the annual targets of each beneficiary (composed of Group targets, management targets and individual targets) established to determine the "Adjusted Target" were measured, which was subject to the Risk Correction Factor, with capital (CET1) and liquidity (Liquidity Coverage Ratio) indicators.
- Group multi-year targets measurement period: this is the period from 1 January 2019 to 31 December 2021, in which multi-year Group targets were measured for the purpose of determining the final incentive, which was also subject to the Risk Correction Factor. The Group's multi-year targets were related to the following indicators: total shareholder return (25%), the Group's liquidity coverage ratio (25%), the CET1 capital indicator (25%) and the Group's return on risk-adjusted capital (RoRAC) (25%). The results were 0% relative to total shareholder return, 100% relative to the Group's liquidity coverage ratio, 100% relative to the CET1 capital ratio and 0% relative to the Group's return on risk-adjusted capital (RoRAC). Based on the above, a final pay-out of 50% of the target was determined for management staff who had been allocated to receive this incentive.

In addition to meeting the annual and multi-year targets described above, payment of the incentive is subject to the requirements set out in the General Terms and Conditions of the 2019-2021 Long-Term Remuneration Scheme. As at 31 December 2022, 2,150 thousand euros are pending payment.

Furthermore, the Board of Directors, in its meeting of 19 December 2019, at the proposal of the Board Remuneration Committee, approved Long-Term Remuneration for 2020-2022, aimed at members of the Group's Identified Staff with allocated variable remuneration, with the exception of management staff who are assigned to TSB Banking Group Plc or its subsidiaries, which consists of the allocation of a certain amount to each beneficiary, which is determined based on a monetary amount corresponding to a percentage of each beneficiary's fixed remuneration. The incentive will be paid 55% in shares of the Bank (using the weighted average price of the last 20 trading sessions of December 2020 to calculate the number of shares) and 45% in cash. The incentive vesting period started on 1 January 2020 and ended on 31 December 2022, and consisted of two sub-periods:

- Individual annual targets measurement period: this is the period from 1 January 2020 to 31 December 2020, in which the annual targets of each beneficiary (composed of Group targets, management targets and individual targets) established to determine the "Adjusted Target" were measured, which was subject to the Risk Correction Factor, with capital (CET1) and liquidity (Liquidity Coverage Ratio) indicators.
- Group multi-year targets measurement period: this is the period from 1 January 2020 to 31 December 2022, in which multi-year Group targets were measured for the purpose of determining the final incentive, which was also subject to the Risk Correction Factor. The Group's multi-year targets were related to the following indicators: total shareholder return (25%), the Group's liquidity coverage ratio (25%), the CET1 capital indicator (25%) and the Group's return on risk-adjusted capital (RoRAC) (25%). The results were 50% relative to total shareholder return, 100% relative to the Group's liquidity coverage ratio, 100% relative to the CET1 capital ratio and 100% relative to the Group's return on risk-adjusted capital (RoRAC). Based on the above, a final pay-out of 87.5% of the target was determined for management staff who had been allocated to receive this incentive.

In addition to meeting the annual and multi-year targets described above, payment of the incentive is subject to the requirements set out in the General Terms and Conditions of the 2020-2022 Long-Term Remuneration Scheme.

Furthermore, the Board of Directors, in its meeting of 17 December 2020, at the proposal of the Board Remuneration Committee, approved Long-Term Remuneration for 2021-2023, aimed at members of the Group's Identified Staff with allocated variable remuneration, with the exception of management staff who are assigned to TSB Banking Group Plc or its subsidiaries, which consists of the allocation of a certain amount to each beneficiary, which is determined based on a monetary amount corresponding to a percentage of each beneficiary's fixed remuneration. The incentive will be paid 55% in shares of the Bank (using the weighted average price of the last 20 trading sessions of December 2021 to calculate the number of shares) and 45% in cash. The incentive vesting period started on 1 January 2021 and ends on 31 December 2023, and comprises two sub-periods:

- Individual annual targets measurement period: this is the period from 1 January 2021 to 31 December 2021, in which the annual targets of each beneficiary (composed of Group targets, management targets and individual targets) established to determine the "Adjusted Target" were measured, which was subject to the Risk Correction Factor, with capital (CET1) and liquidity (Liquidity Coverage Ratio) indicators.
- Group multi-year targets measurement period: this is the period from 1 January 2021 to 31 December 2023, in which multi-year Group targets were measured for the purpose of determining the final incentive, which was also subject to the Risk Correction Factor. The Group's multi-year targets relate to the following indicators: total shareholder return (25%), the Group's liquidity coverage ratio (25%), the CET1 capital indicator (25%) and the Group's return on risk-adjusted capital (RoRAC) (25%).

In addition to meeting the annual and multi-year targets described above, payment of the incentive will be subject to the requirements set out in the General Terms and Conditions of the Long-Term Remuneration 2021-2023.

Finally, the Board of Directors, in its meeting of 16 December 2021, at the proposal of the Board Remuneration Committee, approved Long-Term Remuneration for 2022-2024, aimed at members of the Group's Identified Staff with allocated variable remuneration, with the exception of management staff who are assigned to TSB Banking Group Plc or its subsidiaries, which consists of the allocation of a certain amount to each beneficiary, which is determined based on a monetary amount corresponding to a percentage of each beneficiary's fixed remuneration. The incentive will be paid 55% in shares of the Bank (using the weighted average price of the last 20 trading sessions of December 2022 to calculate the number of shares) and 45% in cash. The incentive vesting period started on 1 January 2022 and ends on 31 December 2024, and comprises two sub-periods:

- Individual annual targets measurement period: this is the period from 1 January 2022 to 31 December 2022, in which the annual targets of each beneficiary (composed of Group targets, management targets and individual targets) established to determine the "Adjusted Target" were measured, which was subject to the Risk Correction Factor, with capital (CET1) and liquidity (Liquidity Coverage Ratio) indicators.
- Group multi-year targets measurement period: this is the period from 1 January 2022 to 31 December 2024, in which multi-year Group targets were measured for the purpose of determining the final incentive, which was also subject to the Risk Correction Factor. The Group's multi-year targets relate to the following indicators: total shareholder return (25%), the Group's liquidity coverage ratio (25%), the CET1 capital indicator (25%) and the Group's return on risk-adjusted capital (RoRAC) (25%).

In addition to meeting the annual and multi-year targets described above, payment of the incentive will be subject to the requirements set out in the General Terms and Conditions of the Long-Term Remuneration 2022-2024.

As regards the staff expenses associated with share-based incentive schemes (see Note 1.3.15), the balancing entry for such expenses is recognised in equity in the case of stock options settled with shares (see consolidated statement of total changes in equity – share-based payments), while those settled with cash are recognised in the "Other liabilities" heading of the consolidated balance sheet.

Expenditure recognised in relation to incentive schemes and long-term remuneration granted to employees in 2022 and 2021 is shown below:

Thousand euro	2022	2021
Settled in shares	4,923	3,962
Settled in cash	693	1,390
Total	5,616	5,352

Other administrative expenses

The composition of this heading in the consolidated income statement for the years 2022 and 2021 was as follows:

Thousand euro	2022	2021
Property, plant and equipment	(70,614)	(85,358)
Information technology	(391,562)	(415,128)
Communication	(30,231)	(30,929)
Publicity	(71,601)	(79,452)
Subcontracted administrative services	(112,898)	(113,068)
Contributions and taxes	(114,185)	(130,340)
Technical reports	(26,094)	(32,357)
Security services and fund transfers	(18,375)	(16,899)
Entertainment expenses and staff travel expenses	(9,600)	(4,537)
Membership fees	(5,602)	(5,278)
Other expenses	(95,045)	(90,747)
Total	(945,807)	(1,004,093)

Audit firm fees

The fees received by KPMG Auditores, S.L. in the years ended 31 December 2022 and 2021 for audit and other services were as follows:

Thousand euro	2022	2021
Audit services (*)	2,540	2,495
Of which: Audit of the Bank's annual and interim accounts	2,100	2,049
Of which: Audit of the annual accounts of foreign branches (**)	27	25
Of which: Audit of the annual accounts of subsidiaries	413	421
Audit-related services	281	283
Total	2,821	2,778

(*) Including fees corresponding to the year's audit, irrespective of the date on which that audit was completed.

(**) Corresponding to the branch located in London.

The fees received by other companies forming part of the KPMG network in the years ended 31 December 2022 and 2021 for audit and other services were as follows:

Thousand euro	2022	2021
Audit services (*)	6,861	6,493
Of which: Audit of the annual accounts of foreign branches	343	302
Of which: Audit of the annual accounts of Group subsidiaries	6,518	6,191
Audit-related services	192	219
Other services	383	257
Of which: Other	383	257
Total	7,436	6,969

(*) Including fees corresponding to the year's audit, irrespective of the date on which that audit was completed.

The main items included under "Audit-related services" correspond to fees related to reports that the auditors are required to produce under the applicable regulations, the issuance of comfort letters and other assurance reports required. Furthermore, "Other services" mainly includes fees related to reviews of the Pillar III Disclosures report and the Non-Financial Disclosures report provided by other companies of the KPMG network.

Finally, the Group engaged auditors other than KPMG to carry out the audits of foreign branches and other Group subsidiaries. Audit and other services provided by those companies amounted to 51 thousand euros and 9 thousand euros in the year ended 31 December 2022, respectively (61 and 5 thousand euros in the year ended 31 December 2021).

All services provided by the auditors and companies forming part of their network comply with the requirements for external auditor independence set forth in the Spanish Audit Law and do not, in any case, include work that is unrelated to auditing.

Other information

The cost-to-income ratio as at 2022 year-end (staff and general expenses/gross income) stood at 45.12% (55.33% in 2021).

Information about the Group's branches and offices is given below:

Number of branches and offices	2022	2021
Branches and offices	1,461	1,593
Spain	1,210	1,270
Outside Spain	251	323

Note 34 – Impairment or (-) reversal of impairment on financial assets not measured at fair value through profit or loss and modification losses or (-) gains, net

The composition of this heading of the consolidated income statement for the years ended 31 December 2022 and 2021 is as follows:

Thousand euro			
	Note	2022	2021
Financial assets at fair value through other comprehensive income		(182)	697
Debt securities	8	(182)	697
Other equity instruments		—	—
Financial assets at amortised cost	11	(839,397)	(960,204)
Debt securities		(190)	73
Loans and advances		(839,207)	(960,277)
Total		(839,579)	(959,507)

Note 35 – Impairment or (-) reversal of impairment on non-financial assets

The composition of this heading of the consolidated income statement for the years ended 31 December 2022 and 2021 is as follows:

Thousand euro			
	Note	2022	2021
Property, plant and equipment for own use	15	(1,916)	(58,369)
Investment properties	15	(35,182)	(7,114)
Goodwill and other intangible assets	16	—	(1,570)
Inventories	17	(24,018)	(38,914)
Total		(61,116)	(105,967)

Impairment on property, plant and equipment for own use recognised in 2021 was mainly due to the termination of commercial activity at premises belonging to the Group's branch network.

The total allowance for the impairment of investment properties in 2022 and 2021 was calculated based on Level 2 valuations (see Note 6). The fair value of impaired assets amounted to 293,266 thousand euros and 381,261 thousand euros in 2022 and 2021, respectively.

Of the total inventory impairment allowances for 2022 and 2021, 1,564 thousand euros and 20,659 thousand euros were allocated based on Level 2 valuations, respectively, and 22,454 thousand euros and 18,255 thousand euros based on Level 3 valuations, respectively. The fair value of impaired assets amounted to 90,614 thousand euros and 138,216 thousand euros at 2022 and 2021 year-end, respectively.

Note 36 – Gains or (-) losses on derecognition of non-financial assets, net

The composition of this heading of the consolidated income statement for the years ended 31 December 2022 and 2021 is as follows:

Thousand euro		
	2022	2021
Property, plant and equipment	3,261	(320)
Investment properties	3,072	145
Intangible assets	(35,132)	(36,936)
Interests (*)	11,449	14,575
Other items	(19)	93,657
Total	(17,369)	71,121

(*) See Schedule I – Exclusions from the scope of consolidation

The "Other items" heading included 84 million euros in 2021 corresponding to profit recognised on the sale of the institutional depository business to BP2S (see Note 2).

The sale of tangible assets under finance leases in which the Group acts as the lessor did not have a material impact on the 2022 and 2021 consolidated income statements.

Note 37 – Profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations

The composition of this heading of the consolidated income statement for the years ended 31 December 2022 and 2021 is as follows:

Thousand euro			
	Note	2022	2021
Property, plant and equipment		(25,693)	(63,475)
Gains/losses on sales		(22,269)	(45,563)
Impairment/Reversal	13	(3,424)	(17,912)
Investment properties		—	789
Interests (*)		(1,829)	40,172
Other items		(279)	15,126
Total		(27,801)	(7,388)

(*) See Schedule I - Companies no longer consolidated.

The impairment of non-current assets held for sale excludes income from the increase in fair value less selling costs.

The total allowance for the impairment of non-current assets held for sale in 2022 and 2021 was calculated based on Level 2 valuations (see Note 6). The fair value of impaired assets amounted to 585,758 thousand euros and 452,743 thousand euros at 2022 and 2021 year-end, respectively.

Note 38 – Segment reporting

Segmentation criteria

This section gives information regarding earnings and other indicators of the Group's business units.

For 2022, the criteria that Banco Sabadell Group uses to report on results for each segment are:

- Three regions: Banking Business Spain, United Kingdom and Mexico. Banking Business Spain includes the foreign branches and the representative offices.
- Each business unit is allocated capital equivalent to 12% of its risk-weighted assets and the surplus of own funds is allocated to Banking Business Spain.

In terms of the other criteria applied, segment information is first structured with a breakdown by geographical area and then broken down based on the customers to which each segment is aimed.

The information presented is based on the individual accounting records of each Group company, after all consolidation disposals and adjustments have been made.

Each business unit bears its own direct costs, calculated on the basis of general accounting.

Details of profit attributable to the Group and other key figures for each business unit for the years 2022 and 2021 are shown in the table below, along with a reconciliation of the totals shown in the table with those shown in the consolidated Group accounts:

	2022 (*)			
	Banking Business Spain	Banking Business UK	Banking Business Mexico	Total Group
Net interest income	2,499	1,151	149	3,799
Fees and commissions (net)	1,344	134	12	1,490
Core revenue	3,843	1,284	162	5,289
Net trading income and exchange differences	95	6	3	104
Equity-accounted income and dividends	125	—	—	125
Other operating income/expense	(225)	(95)	(17)	(337)
Gross income	3,837	1,195	148	5,180
Operating expenses and depreciation and amortisation	(1,887)	(909)	(86)	(2,883)
Pre-provisions income	1,951	285	62	2,298
Provisions and impairments	(920)	(104)	(9)	(1,032)
Capital gains on asset sales and other revenue	(9)	1	(14,041)	(23)
Profit/(loss) before tax	1,021	182	39	1,243
Corporation tax	(270)	(95)	(8)	(373)
Profit or loss attributed to minority interests	11	—	—	11
Profit attributable to the Group	740	87	31	859
ROTE (net return on tangible equity attributable to the Group)	8.7%	4.2%	6.6%	7.8%
Cost-to-income (general administrative expenses / gross income)	40.3%	63.0%	48.7%	45.1%
NPL ratio	4.2%	1.3%	2.3%	3.4%
Stage 3 exposure coverage ratio (**)	56.2%	42.3%	70.1%	55.0%
Employees	12,991	5,482	422	18,895
Domestic and foreign branches and offices	1,226	220	15	1,461

(*) Exchange rates used in the income statement: GBP 0.8532 (average), MXN 21.0739 (average), USD 1.0538 (average) and MAD 11.1232 (average).

(**) Considering total provisions for losses on transactions in stage 3.

	2022 (*)			
	Banking Business Spain	Banking Business UK	Banking Business Mexico	Total Group
Assets	189,545	55,810	6,025	251,380
Gross performing loans to customers	108,889	43,110	4,131	156,130
Non-performing real estate assets (net)	713	—	—	713
Liabilities	179,402	53,316	5,437	238,155
On-balance sheet customer funds	120,118	40,931	3,090	164,140
Wholesale funding in capital markets	19,444	2,537	—	21,981
Allocated equity	10,143	2,494	587	13,224
Off-balance sheet customer funds	38,492	—	—	38,492

(*) Exchange rates used in the balance sheet: GBP 0.8869, MXN 20.856, USD 1.066 and MAD 11.1558.

Million euro

	2021 (*)			Total Group
	Banking Business Spain	Banking Business UK	Banking Business Mexico	
Net interest income	2,302	1,011	113	3,425
Fees and commissions (net)	1,336	121	11	1,468
Core revenue	3,638	1,132	123	4,893
Net trading income and exchange differences	342	2	—	344
Equity-accounted income and dividends	102	—	—	102
Other operating income/expense	(269)	(33)	(10)	(313)
Gross income	3,812	1,101	114	5,026
Operating expenses and depreciation and amortisation	(2,276)	(942)	(89)	(3,307)
Pre-provisions income	1,536	159	24	1,719
Provisions and impairments	(1,193)	—	(32)	(1,225)
Capital gains on asset sales and other revenue	135	(9)	(0.011)	126
Profit/(loss) before tax	478	150	(8)	620
Corporation tax	(58)	(32)	9	(81)
Profit or loss attributed to minority interests	8	—	—	8
Profit attributable to the Group	412	118	1	530
ROTE (net return on tangible equity attributable to the Group)	4.0%	5.0%	-1.0%	4.0%
Cost-to-income (general administrative expenses / gross income)	50.2%	71.3%	71.1%	55.3%
NPL ratio	4.6%	1.4%	1.0%	3.7%
Stage 3 exposure coverage ratio (**)	57.6%	38.1%	265.7%	56.3%
Employees	13,855	5,762	453	20,070
Domestic and foreign branches and offices	1,288	290	15	1,593

(*) Exchange rates used in the income statement: GBP 0.8594 (average), MXN 23.9687 (average), USD 1.1865 (average) and MAD 10.4982 (average).

(**) Considering total provisions for losses on transactions in stage 3.

Million euro

	2021 (*)			Total Group
	Banking Business Spain	Banking Business UK	Banking Business Mexico	
Assets	191,162	55,657	5,128	251,947
Gross performing loans to customers	107,089	44,050	3,773	154,912
Non-performing real estate assets (net)	842	—	—	842
Liabilities	181,389	53,012	4,550	238,950
On-balance sheet customer funds	116,788	42,779	2,453	162,020
Wholesale funding in capital markets	18,090	2,975	—	21,065
Allocated equity	9,773	2,645	578	12,996
Off-balance sheet customer funds	41,678	—	—	41,678

(*) Exchange rates used in the balance sheet: GBP 0.8403, MXN 23.1438, USD 1.1326 and MAD 10.518.

The Group's average total assets as at 31 December 2022 amounted to 257,691,764 thousand euros (245,313,451 thousand euros as at 31 December 2021).

The types of products and services from which ordinary income is derived are described below for each business unit:

– Banking Business Spain:

Groups together the Retail Banking, Business Banking and Corporate Banking business units, where individuals and businesses are managed under the same branch network:

- Retail Banking: offers financial products and services to individuals for personal use. These include investment products and medium- and long-term finance, such as consumer loans, mortgages and leasing or rental services, as well as short-term finance. Funds come mainly from customers' deposits and sight accounts, savings insurance, mutual funds and pension plans. The main services also include payment methods such as cards and insurance combined with consumer loans and mortgages. High value-added products and services are also offered to Private Banking customers.
- Business Banking: offers financial products and services to companies and self-employed persons. These include investment and financing products, such as working capital products, loans and medium- and long-term financing. It also offers customised structured finance and capital market solutions, as well as specialised advice for businesses. Funds mainly come from customers' deposits and sight accounts and mutual funds. The main services also include collection/payment methods such as cards and PoS terminals, as well as import and export services.
- Corporate Banking (CIB) offers specialised lending services together with a comprehensive offering of solutions, ranging from transaction banking services to more complex and tailored solutions relating to the fields of lending and cash management, as well as import and export activities, among others.

– Banking Business United Kingdom:

The TSB franchise includes business conducted in the United Kingdom, which includes current and savings accounts, loans, credit cards and mortgages.

– Banking Business Mexico:

Offers corporate banking and commercial banking financial services.

Details of income from ordinary activities and the pre-tax profit/(loss) generated by each business unit, are set out below for the years 2022 and 2021:

Thousand euro				
SEGMENTS	Consolidated			
	Income from ordinary activities (*)		Profit/(loss) before tax	
	2022	2021	2022	2021
Banking Business Spain	5,036,309	4,680,955	1,021,395	477,976
Banking Business UK	1,627,943	1,200,385	182,452	150,144
Banking Business Mexico	422,437	240,858	38,799	(8,131)
Total	7,086,689	6,122,198	1,242,646	619,989

(*) Includes the following headings from the consolidated income statements: "Interest income", "Dividend income", "Fee and commission income", "Gains or (-) losses on financial assets and liabilities, net" and "Other operating income".

The table below shows the balance of net interest income and net fees and commissions income generated by each business unit as a percentage of the total for 2022 and 2021:

%

2022					
Breakdown net interest income and net fees and commissions					
	Customer loans		Customer deposits		Income from services (*)
	% of average balance	% of total yield	% of average balance	% of total cost	% of total balance
SEGMENTS					
Banking Business Spain	69.7 %	63.0 %	73.2 %	54.2 %	90.2 %
Banking Business UK	27.6 %	28.9 %	24.9 %	24.6 %	9.0 %
Banking Business Mexico	2.7 %	8.0 %	1.9 %	21.2 %	0.8 %
Total	100 %	100 %	100 %	100 %	100 %

(*) Segment percentage of total net fees and commissions.

%

2021					
Breakdown net interest income and net fees and commissions					
	Customer loans		Customer deposits		Income from services (*)
	% of average balance	% of total yield	% of average balance	% of total cost	% of total balance
SEGMENTS					
Banking Business Spain	69.1 %	69.1 %	71.5 %	80.0 %	91.0 %
Banking Business UK	28.5 %	25.5 %	26.4 %	6.1 %	8.2 %
Banking Business Mexico	2.4 %	5.4 %	2.1 %	13.9 %	0.8 %
Total	100 %	100 %	100 %	100 %	100 %

(*) Segment percentage of total net fees and commissions.

Furthermore, a breakdown by geographical area of the “Interest income” heading of the 2022 and 2021 income statements is shown below:

Thousand euro

Geographical area	Breakdown of interest income by geographical area			
	Standalone		Consolidated	
	2022	2021	2022	2021
Domestic market	2,874,905	2,601,517	2,869,020	2,625,364
International market	268,772	221,413	2,119,583	1,522,185
European Union	44,755	42,689	44,755	42,689
Eurozone	44,755	42,689	44,755	42,689
Non-Eurozone	—	—	—	—
Other	224,017	178,724	2,074,828	1,479,496
Total	3,143,677	2,822,930	4,988,603	4,147,549

Section 4 of the Consolidated Directors’ Report gives a more detailed assessment of each of these business units.

Note 39 – Tax situation (income tax relating to continuing operations)

Consolidated tax group

Banco de Sabadell, S.A. is the parent company of a consolidated tax group for corporation tax purposes, in Spain, comprising all the Spanish companies in which the Bank holds an interest that meet the requirements of the Spanish Corporation Tax Law.

The other companies in the accounting group, both those that are Spanish and those not resident in Spain, are taxed in accordance with the tax regulations applicable to them.

Reconciliation

The reconciliation between the Group's corporation tax expense calculated by applying the general tax rate and the expense recognised for this corporation tax in the consolidated income statements is as follows:

Thousand euro	2022	2021
Profit or loss before tax	1,242,646	619,989
Corporation tax, applying national tax rate (30%)	(372,794)	(185,997)
Reconciliation:		
Gains/(losses) on sale of equity instruments (exempt)	(1,239)	3,432
Remuneration of preferred securities	33,112	30,178
Profit/(loss) of entities accounted for using the equity method	38,125	29,079
Difference in effective tax rate on companies outside Spain (*) (**)	(15,447)	33,594
Generated deductions/Non-deductible expenses	(22,640)	1,489
Other	(32,373)	6,943
(Tax expense or (-) income related to profit from continuing operations)	(373,256)	(81,282)

(*) Calculated applying the difference between the current tax rate for the Group in Spain (30%) and the effective tax rate applied to the Group's profit/(loss) in each jurisdiction.

(**) In 2022, the corporation tax surcharge on the banking sector in the United Kingdom was reduced from 8% to 3%, which resulted in a deferred tax asset reduction of 14.8 million euros, recognised with a balancing entry in higher Corporation Tax expense. In 2021, UK corporation tax on companies was changed, from 19% to 25%, which resulted in a deferred tax asset increase of 17.9 million euros, recognised with a balancing entry in lower Corporation Tax expense.

The tax rate in effect calculated as the ratio of corporation tax expense to the pre-tax profit/(loss) amounted to 30.04% and 13.11% in 2022 and 2021, respectively.

Taxable income – increases and decreases

The increases and decreases in taxable income are analysed in the following table on the basis of whether they arose from temporary or permanent differences:

Thousand euro	2022	2021
Permanent difference	205,979	53,479
Timing difference arising during the year	298,710	349,070
Timing difference arising in previous years	33,704	51,643
Increases	538,393	454,192
Permanent difference	(328,741)	(375,237)
Timing difference arising during the year	—	—
Timing difference arising in previous years	(177,698)	(235,012)
Decreases	(506,439)	(610,249)

Deferred tax assets and liabilities

Under current tax and accounting regulations, certain temporary differences should be taken into account when quantifying the relevant tax expense related to profit from continuing operations.

In 2013, Spain made a provision (Royal Decree-Law 14/2013) for tax assets generated by allowances for the impairment of loans and other assets arising from the potential insolvency of debtors not related to the relevant taxable person, as well as those corresponding to contributions or provisions in respect of social welfare systems and, where appropriate, early retirement schemes, to be afforded the status of assets guaranteed by the Spanish State (hereinafter, "monetisable tax assets").

Monetisable tax assets can be converted into credit enforceable against the Spanish Tax Authority in cases where the taxable person incurs accounting losses or the institution is liquidated or legally declared insolvent. Similarly, they can be exchanged for public debt securities, once the 18-year term has elapsed, calculated from the last day of the tax period in which these assets were recognised in the accounting records. To retain the State guarantee, in order to keep their status as monetisable tax assets, deferred tax assets generated before 2016 are subject to an annual capital contribution of 1.5% of the deferred tax assets that meet the legal requirements.

Movements of deferred tax assets and liabilities during 2022 and 2021 are shown below:

Thousand euro

Deferred tax assets	Monetisable	Non-monetisable	Tax credits for losses carried forward	Deductions not applied	Total
Balances as at 31 December 2020	5,058,732	1,066,199	483,831	35,975	6,644,737
(Debit) or credit recorded in the income statement	(17,762)	87,183	(13,141)	(6,657)	49,623
(Debit) or credit recorded in equity	—	2,535	—	—	2,535
Exchange differences and other movements	1,422	150	8,136	924	10,632
Balances as at 31 December 2021	5,042,392	1,156,067	478,826	30,242	6,707,527
(Debit) or credit recorded in the income statement	(47,661)	6,607	(87,366)	(16,385)	(144,805)
(Debit) or credit recorded in equity	—	85,337	—	—	85,337
Exchange differences and other movements	1,147	(5,096)	(771)	1,168	(3,552)
Balances as at 31 December 2022	4,995,878	1,242,915	390,689	15,025	6,644,507

Thousand euro

Deferred tax liabilities	Total
Balances as at 31 December 2020	166,518
(Debit) or credit recorded in the income statement	(14,728)
(Debit) or credit recorded in equity	(30,411)
Exchange differences and other movements	2,386
Balances as at 31 December 2021	123,765
(Debit) or credit recorded in the income statement	(10,914)
(Debit) or credit recorded in equity	—
Exchange differences and other movements	867
Balances as at 31 December 2022	113,718

The sources of the deferred tax assets and liabilities recognised in the consolidated balance sheets as at 31 December 2022 and 2021 are as follows:

Thousand euro

Deferred tax assets	2022	2021
Monetisable	4,995,878	5,042,392
Due to credit impairment	3,323,114	3,355,733
Due to real estate asset impairment	1,547,338	1,560,908
Due to pension funds	125,426	125,751
Non-monetisable	1,242,915	1,156,067
Tax credits for losses carried forward	390,689	478,826
Deductions not applied	15,025	30,242
Total	6,644,507	6,707,527
Deferred tax liabilities	2022	2021
Property restatements	54,197	55,838
Adjustments to value of wholesale debt issuances arising in business combinations	7,472	12,916
Other financial asset value adjustments	1,455	1,475
Other	50,593	53,536
Total	113,717	123,765

The breakdown by country of deferred tax assets and liabilities is as follows:

Thousand euro

Country	2022		2021	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Spain	6,417,930	104,530	6,461,238	111,904
United Kingdom	82,955	9,187	155,795	11,861
United States	62,754	—	23,781	—
Mexico	70,198	—	60,260	—
Other	10,670	—	6,453	—
Total	6,644,507	113,717	6,707,527	123,765

As indicated in Note 1.3.20, according to the information available as at year-end, and the projections taken from the Group's business plan for the coming years, the Group estimates that it will be able to generate sufficient taxable income to offset tax loss carry-forwards within a period of six years and non-monetisable tax assets when these can be deducted on the basis of current tax regulations within a period of 10 years.

In addition, the Group performs a sensitivity analysis of the most significant variables used in the deferred tax asset recovery analysis, taking into consideration reasonable changes to the key assumptions on which the projected results of each entity or fiscal group are based and the estimated reversal of temporary differences. With respect to Spain, the variables included are those used in the sensitivity analysis of the calculation of the recoverable amount of goodwill (see Note 16). The conclusions arising from that analysis are not significantly different from those reached without stressing the significant variables.

On 29 December 2021, the government published Law 22/2021, which sets forth the minimum tax rate for corporation tax in Spain, calculated for financial institutions, as 18% of the taxable base (provided this is positive), as from 2022. The change introduced by this tax regulation does not modify the recoverability period for the Group's deferred tax assets.

Monetisable tax assets are guaranteed by the State; therefore, their recoverability does not depend on the generation of future tax benefits.

As at 31 December 2022, the Group had deferred tax assets for tax loss carry-forwards and unused deductions of 50.7 million euros not recognised in the balance sheet (generated in financial years prior to the integration of the company giving rise to them into the Spanish tax group). The maximum time limit for applying unused deductions is 2025, while there is no time limit for the application of tax loss carry-forwards.

Years subject to tax inspection

As at 31 December 2022, corporation tax for the consolidated tax group in Spain is open to review for 2015 and subsequent years. In relation to value added tax (VAT) corresponding to entities forming part of the VAT group in Spain, 2016 and subsequent periods are open to review.

The review of all taxes not verified and not required in accordance with the corresponding tax regulations is still pending for other Group entities that are not taxed within the consolidated tax group or the VAT group in Spain.

Procedures

On 11 January 2022, the State Agency for Tax Administration (AEAT by its Spanish acronym) gave notice to Banco Sabadell, as the parent company of the consolidated tax group, of the commencement of verification and investigation procedures in relation to the items and periods listed below:

Entity	Item	Period
Banco de Sabadell, S.A. (parent company of the consolidated tax group 16/91)	Value added tax	January 2018 to December 2019
Banco de Sabadell, S.A. (parent company of the VAT group 2008/74)	Withholding/payment on account on earnings from professional/work/economic activities	January 2018 to December 2019
Banco de Sabadell, S.A.	Withholding/payment on account on earnings from movable capital	January 2018 to December 2019
Banco de Sabadell, S.A.	Tax on Deposits of Credit Institutions	2017 to 2019
Banco de Sabadell, S.A.	Income tax	2015 to 2019

In addition, in July 2022, a notification was sent of the broadening of the scope of the verification and investigation procedures in respect of the capital contribution due to the conversion of deferred tax assets into credit enforceable against the Spanish Tax Authority for the years 2016 to 2019.

As at 31 December 2022, the Income Tax (*Impuesto sobre la Renta*, or ISR) corresponding to the Mexican subsidiary, Banco Sabadell, S.A. Institución de Banca Múltiple, for the financial year 2018 is currently undergoing an investigation by the Mexican tax authorities (*Servicio de Administración Tributaria*, or SAT); the process is currently at the documentation submission stage.

Ongoing disputes

As at 31 December 2022, the main ongoing tax dispute corresponds to an appeal for judicial review before the Spanish National Court in relation to the rebuttal of the settlement of the disputed VAT assessment for Banco Sabadell between 2008-2010 for an amount of tax due of 1,831 thousand euros (2,337 thousand euros in total including late-payment interest), after a tax settlement was issued in execution of a decision made by the Central Tax Appeal Board partially upholding the claim.

The dispute regarding the administrative-financial claim lodged before the Central Tax Appeal Board on 25 March 2019 against the settlement agreement issued in relation to the disputed tax assessment concerning VAT for the period 07/2012 to 12/2014 which contained an adjustment for a tax amount due of 5,638 thousand euros (6,938 thousand euros in total including late-payment interest) in relation to various sector-based issues ended in the 2022 financial year. In June 2022, the Bank received a ruling from this court partially upholding the claim, which notifies the corresponding implementing agreement in December, resulting in a total reimbursement of 9,443 thousand euros.

The Group has, in any event, made suitable provisions for any contingencies that it is considered may arise in relation to these procedures.

In relation to items for which the statute of limitations is unexpired, due to potential differences in the interpretation of tax regulations, the results of the tax authority inspections for the years subject to review may give rise to contingent tax liabilities, which it is not possible to quantify objectively. However, the Group considers that the possibility of such liabilities materialising is remote, and if they did materialise, the resulting tax charge would not be such as to have any significant impact on these consolidated annual financial statements.

Temporary levy for credit institutions

On 28 December 2022, Law 38/2022, of 27 December, was published which, among other aspects, establishes a temporal levy on credit institutions and financial credit establishments. This levy must be complied with during 2023 and 2024 by credit institutions or financial credit establishments operating in Spain, whose sum of interest income and fees and commissions in 2019 was equal to or greater than 800 million euros. The payment amount was set at 4.8% of the sum of net interest income and net fees and commissions stemming from their activities in Spain recognised in the income statement for the calendar year preceding the year in which the payment obligation arose. The payment obligation arises each 1 January and must be paid during the first 20 calendar days of the month of September of each year, without prejudice to a 50% advance payment of the total levy, which must be paid during the first 20 calendar days of the month of February following the date on which the payment obligation arises.

The estimated impact of this levy for the Group in the consolidated income statement for 2023 amounts to approximately 170 million euros.

Note 40 – Related party transactions

In accordance with the provisions of Chapter VII *bis* Related Party Transactions, of the Capital Companies Act, introduced by Law 5/2021, of 12 April, amending the restated text of the Capital Companies Act, approved by Royal Legislative Decree 1/2010, of 2 July, and other financial regulations, with regard to the promotion of long-term shareholder involvement in listed companies, there are no transactions with officers and directors of the company that could be considered relevant, other than those considered to be “related party transactions” in accordance with Article 529 *vicies* of the Capital Companies Act, carried out following the corresponding approval procedure and, where applicable, reported in accordance with Articles 529 *unvicies et seq.* of the aforesaid Capital Companies Act. Those that did take place were performed in the normal course of the company’s business or were performed on an arm’s-length basis or under the terms generally available to any employee. There is no record of any transactions being performed other than on an arm’s-length basis with persons or entities related to directors or senior managers.

During 2022, the Board of Directors has not approved any significant transactions by reason of their amount or materiality carried out by the Bank with other related parties.

Details of the most significant balances held with related parties as at 31 December 2022 and 31 December 2021, as well as the amount recorded on the consolidated income statements for 2022 and 2021 arising from related party transactions, are shown below:

Thousand euro					
2022					
	Joint control or signif. influence (in B.Sab)	Associates	Key personnel	Other related parties (*)	TOTAL
Assets:					
Customer lending and other financial assets	—	139,981	3,917	515,006	658,904
Liabilities:					
Customer deposits and other financial liabilities	—	227,023	5,718	75,107	307,848
Off-balance sheet exposures:					
Financial guarantees given	—	294	—	15,067	15,361
Loan commitments given	—	47	395	296,880	297,322
Other commitments given	—	6,499	—	82,913	89,412
Income statement:					
Interest and similar income	—	3,467	36	5,646	9,149
Interest and similar expenses	—	(18)	(5)	(643)	(666)
Return on capital instruments	—	—	—	—	—
Fees and commissions (net)	—	137,175	25	(64)	137,136
Other operating income/expense	—	5,704	—	1	5,705

(*) Includes employee pension plans.

Thousand euro

	2021				
	Joint control or signif. influence (in B.Sab)	Associates	Key personnel	Other related parties (*)	TOTAL
Assets:					
Customer lending and other financial assets	—	173,423	4,774	540,008	718,205
Liabilities:					
Customer deposits and other financial liabilities	—	199,883	7,450	87,272	294,605
Off-balance sheet exposures:					
Financial guarantees given	—	302	—	10,042	10,344
Loan commitments given	—	102	449	108,373	108,924
Other commitments given	—	6,749	—	112,112	118,861
Income statement:					
Interest and similar income	—	3,625	25	5,004	8,654
Interest and similar expenses	—	(76)	1	(20)	(95)
Return on capital instruments	—	—	—	—	—
Fees and commissions (net)	—	139,930	48	1,444	141,422
Other operating income/expense	—	13,538	(1)	1	13,538

(*) Includes employee pension plans.

Note 41 – Remuneration of members of the Board of Directors and Senior Management and their respective balances

The following table shows, for the years ended 31 December 2022 and 2021, the amount paid to directors for services provided by them in that capacity:

Thousand euro

	Remuneration	
	2022	2021
Josep Oliu Creus (1)	1,600	1,259
Pedro Fontana García (2)	335	257
José Javier Echenique Landiribar (3)	—	185
César González-Bueno Mayer (*) (4)	100	83
Jaime Guardiola Romojaro (5)	—	17
Anthony Frank Elliott Ball	158	162
Aurora Catá Sala	179	178
Luis Deulofeu Fuguet (6)	175	39
María José García Beato (7)	180	166
Mireya Giné Torrens	160	150
Laura González Molero (8)	30	—
George Donald Johnston III	178	188
David Martínez Guzmán	100	100
José Manuel Martínez Martínez	180	167
José Ramón Martínez Sufrategui (9)	91	135
Alicia Reyes Revuelta	150	164
Manuel Valls Morató	140	145
David Vegara Figueras (*)	100	100
Total	3,856	3,495

(*) Perform executive functions.

(1) Chairman with status of Other External Director since 26 March 2021.

(2) Appointed Deputy Chair of the Board on 28 July 2021.

(3) Submitted resignation from position as Director on 28 July 2021.

(4) On 17 December 2020, the Board of Directors approved his appointment as Chief Executive Officer. He accepted the position on 18 March 2021.

(5) Submitted resignation from position as Chief Executive Officer on 18 March 2021.

(6) On 28 July 2021, the Board of Directors approved his appointment as member of the Board of Directors, in the capacity of Independent Director. He accepted the position on 26 October 2021.

(7) Other External Director since 31 March 2021.

(8) On 26 May 2022, the Board of Directors approved her appointment as member of the Board of Directors, in the capacity of Independent Director and she accepted the position on 19 September 2022.

(9) Resigned from his position as Director on 26 May 2022, effective as from the date of obtaining regulatory authorisation to fill the vacancy, which was received on 31 August 2022.

In 2021 and 2022, no contributions have been made to meet pension commitments for directors as a result of their duties as members of the Board of Directors.

Aside from the items mentioned above, members of the Board of Directors received 94 thousand euros as fixed remuneration in 2022 (124 thousand euros in 2021) by reason of their membership of boards of directors in Banco Sabadell Group companies (these amounts are included in the Annual Report on Directors' Remuneration).

Remuneration earned by directors for discharging their executive duties during 2022 amounted to 3,520 thousand euros (6,563 thousand euros in 2021).

Thousand euro

	Fixed remuneration	Variable remuneration	Long-term remuneration	Total ordinary remuneration	Compensation	Total 2022	Total 2021
Josep Oliu Creus (*)	—	—	—	—	—	—	988
Jaime Guardiola Romojaro (**)	—	—	—	—	—	—	697
María José García Beato (*)	—	—	55	55	—	55	2,037
César González-Bueno Mayer	2,024	698	—	2,722	—	2,722	2,155
David Vegara Figueras	573	101	69	743	—	743	686
Total	2,597	799	124	3,520	—	3,520	6,563

(*) In 2022, they have not performed executive duties.

(**) Submitted resignation from position as Chief Executive Officer on 18 March 2021.

For comparative purposes, it is important to note that during 2021, the Chairman, Josep Oliu Creus, following the amendment to the Articles of Association carried out at the Annual General Meeting of 26 March 2021, changed his status to Other External Director. In 2022, he has not received any amount for his executive duties.

The directorship of María José García Beato also changed to the category of Other External Director, effective as of 31 March 2021. In 2022, she received the amount corresponding to long-term remuneration 2020-2022 for the period in which she was an Executive Director.

The contributions made in 2022 in insurance premiums covering pension contingencies amounted to 101 thousand euros (4,381 thousand euros in 2021).

Total risk transactions granted by the Bank and consolidated companies to directors of the parent company amounted to 907 thousand euros as at 31 December 2022, of which 748 thousand euros corresponded to loans and receivables and 159 thousand euros related to loan commitments given (1,068 thousand euros as at 31 December 2021, consisting of 909 thousand euros in loans and receivables and 159 thousand euros in loan commitments given). These transactions form part of the ordinary business of the Bank and are carried out under normal market conditions. Liabilities amounted to 4,376 thousand euros as at 31 December 2022 (5,928 thousand euros as at 31 December 2021).

Total Senior Management remuneration earned during 2022 amounted to 12,875 thousand euros. Pursuant to applicable regulations, this amount includes the remuneration of the Senior Management members plus the Internal Audit Officer. The total remuneration of Senior Management includes amounts received by all those who were members of Senior Management at any time during 2022, in proportion to the time they spent in that position (on average 8.3 members in 2022 and 7.3 members in 2021).

Thousand euro

	2022			2021		
	Ordinary remuneration	Severance pay	Total	Ordinary remuneration	Severance pay	Total
Senior Management and Director of Internal Audit remuneration	6,675	6,200	12,875	6,418	5,340	11,758

Risk transactions granted by the Bank and consolidated companies to Senior Management staff (with the exception of those who are also Executive Directors, for whom details are provided above) amounted to 3,405 thousand euros as at 31 December 2022 (4,156 thousand euros in 2021), comprising 3,169 thousand euros in loans and receivables and 236 thousand euros related to loan commitments given (in 2021, 3,865 thousand euros related to loans and receivables and 290 thousand euros to loan commitments given). Liabilities amounted to 1,342 thousand euros as at 31 December 2022 (1,520 thousand euros as at 31 December 2021).

The accrued expenses corresponding to long-term remuneration schemes granted to members of Senior Management, including Executive Directors (see Note 33), amounted to 1,181 thousand euros in 2022 (1,952 thousand euros in 2021).

Details of existing agreements between the company and members of the Board and management staff with regard to severance pay are set out in the Group's Annual Corporate Governance Report, which is included for reference purposes in the Consolidated Directors' Report.

For further details on Directors' remuneration, see the Annual Report on Directors' Remuneration for 2022, which is included for reference purposes in the Consolidated Directors' Report.

The amounts included in the Annual Report on Directors' Remuneration and in the Annual Corporate Governance Report follow the criteria set forth in CNMV Circular 5/2013, amended by Circular 2/2018, of 12 June, CNMV Circular 1/2020, of 6 October, and CNMV Circular 3/2021, of 28 September; therefore, those amounts accrued and not subject to deferral are reported. The amounts included in this Note follow the criteria set forth in the accounting standards applicable to the Bank, and therefore take into account the amounts accrued during 2022, irrespective of the deferral schedule to which they are subject.

The Executive Directors and Senior Management are specified below, indicating the positions they hold in the Bank as at 31 December 2022:

Executive Directors

César González-Bueno Mayer	Sabadell Group CEO
David Vegara Figueras	Director-General Manager

Senior Management

Leopoldo Alvear Trenor	General Manager
Cristóbal Paredes Camuñas	General Manager
Jorge Rodríguez Maroto	General Manager
Carlos Ventura Santamans	General Manager
Gonzalo Baretino Coloma	Secretary General
Marc Armengol Dulcet	Deputy General Manager
Elena Carrera Crespo	Deputy General Manager
Carlos Paz Rubio	Deputy General Manager
Sonia Quibus Rodríguez	Deputy General Manager

Other information relating to the Board

In accordance with the provisions of Article 229 of Royal Legislative Decree 1/2010, of 2 July, approving the revised text of the Capital Companies Act (hereinafter, Capital Companies Act) in relation to the duty to avoid situations of conflict of interest, and without prejudice to the provisions of Article 529 *vicies et seq.* of the aforesaid Act¹, directors have reported to the company that, during 2022, they or persons related to them, as defined in Article 231 of the Capital Companies Act:

- Have not carried out transactions with the company without taking into account usual operations, performed under standard conditions for customers and whose significance is immaterial, understanding such operations to be those that do not need to be reported to give a true and fair view of the company's equity, financial situation and income, or any operations carried out and considered to be "related party transactions" in accordance with Article 529 *vicies* of the Capital Companies Act, having applied with the corresponding approval procedure and reporting requirement, in accordance with Articles 529 *unvicies et seq.* of the aforesaid Capital Companies Act.
- Have not used the name of the company or their position as administrator to unduly influence the performance of personal transactions.
- Have not made use of corporate assets, including the company's confidential information, for personal purposes.
- Have not taken undue advantage of the company's business opportunities.
- Have not obtained advantages or remuneration from third parties other than the company or group in connection with the discharge of their duties, with the exception of acts of mere courtesy.

¹ Related-party transactions are governed by their own special regime.

- Have not carried out activities on their own behalf or on behalf of a third party that involve competition with the company, whether on an isolated or potential basis, or that might otherwise place them in permanent conflict with the company's interests.

The Bank has entered into a civil liability insurance policy for 2022 that covers the Institution's Directors and Senior Management staff. The total premium paid was 3,761 thousand euros (5,420 thousand euros in 2021).

Note 42 – Other information

Transactions with significant shareholders

No major transactions with significant shareholders have been carried out during 2022 and 2021.

Environmental disclosures

At Banco Sabadell, sustainability is part of the company's values and the way in which the Institution understands banking; therefore, developments in this area have been gradual, focusing on the business relationship and positively impacting its surrounding environment.

Consequently, during 2022, the Bank has continued to make progress on all these aspects of its activity and organisation by creating an ESG framework, Sabadell's Commitment to Sustainability. To this end, the Institution continues to align its strategy to the Sustainable Development Goals (SDGs) and the Paris Agreement, with the aim of supporting and accelerating the key economic and social transformations that contribute to sustainable development and the fight against climate change.

With its sustainability strategy, the Group deals with the risks and opportunities posed by the climate and environmental issues that impact the strategic pillars of its ESG framework, Sabadell's Commitment to Sustainability, from a 'double materiality' perspective. To this end, the Bank has set objectives and is carrying out transformation actions. The following actions are worthy of note:

- Progress as a Sustainable Institution, by environmentally managing premises and by driving forward climate and environmental commitments. The Bank is focused on reducing its carbon footprint and on being carbon neutral.
- Support customers in the transition towards a sustainable economy, through advisory services and the development of specific solutions aligned with the regulatory environment, as well as the identification of transformation opportunities.

During 2022 and in line with the commitment to reduce CO₂ emissions, the Bank has implemented plans for energy saving, preventive maintenance of HVAC systems, waste management and recycling, and continues to invest in projects to offset its greenhouse gas (GHG) emissions.

In support of the main international commitments to sustainability and net zero, the Bank strengthens its transitional actions by signing new agreements such as the Platform for Carbon Accounting Financials (PCAF) to make progress in the calculation of the carbon footprint of the lending and investment portfolio.

As regards its support of customers in their transition, the Bank continues to learn more about the environmental and climate impact of its activity and classify it accordingly. It is also offering sustainable finance solutions, as well as promoting the energy transition and raising awareness of the importance of the green transition via training activities geared at employees and advice aimed at customers.

Moreover, the Bank has set decarbonisation targets for the most CO₂-intensive sectors to ensure that it meets its portfolio neutrality targets by 2050.

Another framework for action is to offer ESG investment opportunities by increasing the offer of sustainable savings and investment products, either our own or those of third parties, and by driving capital investment in renewable energy projects and promoting green initiatives and technologies.

Given the activities in which it is engaged, as at 31 December 2022, the Bank does not have responsibilities, expenses, assets, revenues or provisions or contingencies of an environmental nature that could be deemed significant with respect to equity, the financial situation and its consolidated results; therefore, there are no specific disclosures in the environmental disclosures document envisaged by Order JUS/616/2022, of 30 June, approving the new templates for the submission to the Companies Register of the annual financial statements of institutions required to published them.

For further details, see the Non-Financial Disclosures Report, which is included as part of the Consolidated Directors' Report.

Customer Care Service (SAC)

The Customer Care Service (hereinafter, SAC as per its Spanish acronym) and its head, who is appointed by the Board of Directors, report directly to the Compliance Division and is independent of the Bank's business and operational lines. Its main function is to handle and resolve complaints and claims brought forward by customers and users of the financial services of Banco de Sabadell, S.A. and member entities, when these relate to their interests and legally recognised rights arising from contracts, transparency and customer protection regulations or good financial practices and uses, in accordance with Banco Sabadell Regulations for the Protection of Customers and Users of Financial Services.

The entities that adhere to the SAC Regulations are the following: BanSabadell Financiación, E.F.C., S.A.; Sabadell Asset Management, S.A., S.G.I.I.C. Sociedad Unipersonal; Urquijo Gestión, S.G.I.I.C, S.A.; and Sabadell Consumer Finance, S.A.U.

In 2022, Banco Sabadell Customer Care Service received 41,887 complaints and 41,332 complaints were handled during the year with 1,465 claims and complaints pending analysis as at 31 December 2022.

	Complaints	% of total received
Product		
Loans and credit secured with mortgages	6,870	0.164
Loans and credit not secured with collateral	7,187	0.172
Demand deposits and payment accounts	20,345	0.486
Payment instruments and electronic money	2,271	0.053
Other payment services	1,978	0.047
Other products/services	2,163	0.052
Other products	1,073	0.026
Total	41,887	100 %

Complaints and claims processed by SAC at first instance

During 2022, the SAC received 38,726 complaints and claims and 28,726 were accepted for processing and resolved, in accordance with the provisions of Order ECO 734/2004, of 11 March.

Of the total number of complaints and claims accepted for processing and resolved by the SAC, 15,476 (53.9%) were resolved in the customer's favour, 13,238 (46.1%) in the Institution's favour and in 12 cases the customer withdrew their complaint. During 2022, 9,475 complaints and claims were not accepted for processing due to reasons envisaged in the SAC Regulations.

Of the total number of complaints and claims accepted for processing and resolved by the SAC, 15,546 (54.1%) were processed within a period of 15 working days, 11,487 (40.0%) within a period of less than one month and 1,693 (5.9%) within a period longer than one month.

Complaints and claims managed by the Ombudsman

At Banco Sabadell, the role of Customer Ombudsman is assumed by José Luis Gómez-Dégano y Ceballos-Zúñiga. The Ombudsman is responsible for resolving the complaints brought forward by the customers and users of Banco de Sabadell, S.A., and of the other aforementioned entities associated with it, both at first and second instance, and for resolving issues that are passed on by the SAC. The Ombudsman's decisions are binding on the Institution.

In 2022, the SAC received a total of 2,547 complaints and claims via the Customer Ombudsman, of which 2,524 were handled during the year.

With regard to claims and complaints resolved by the Customer Ombudsman, 8 were resolved in the customer's favour, 652 were resolved in the Institution's favour, in 1,099 cases the Bank acquiesced to the claimant's request and in 9 cases the customer withdrew their complaint. In 666 complaints, the Ombudsman declined to act in accordance with the regulations governing its remit. As at 31 December 2022, 53 complaints are pending submission of allegations and 90 pending resolution by the Customer Ombudsman.

Complaints and claims managed by the Bank of Spain and the CNMV

Under current legislation, customers or users who are dissatisfied with the response received from the SAC or from the Customer Ombudsman may submit their claims and complaints to the Market Conduct and Complaints Department of the Bank of Spain, to the CNMV or to the Directorate General for Insurance and Pension Funds, subject to the essential prerequisite of having previously addressed their complaint or claim to the Institution.

The SAC received a total of 614 claims referred by the Bank of Spain and the CNMV until 31 December 2022. During 2022, taking into account claims that remained pending at the end of the previous year, 607 claims were accepted and resolved.

Note 43 – Subsequent events

There were no significant events worthy of mention subsequent to 31 December 2022.

Schedule I – Banco Sabadell Group companies

Banco Sabadell Group companies as at 31 December 2022 consolidated by the full consolidation method

Thousand euro

Company name	Line of business	Registered office	% Shareholding		Company data			Group Investment	Contribution to reserves or losses in consolidated companies	Contribution to Group consolidated profit/(loss)		
			Direct	Indirect	Capital	Other equity	Profit/(loss)				Dividends paid	Total assets
Aurica Coinvestments, S.L.	Holding	Barcelona - Spain	—	61.76	50,594	(853)	1,880	1,043	51,651	50,594	(5,050)	(10,045)
Banco Atlantico (Bahamas) Bank & Trust Ltd.	Credit institution	Nassau - Bahamas	99.99	0.01	1,598	825	(31)	—	3,155	2,439	(403)	(32)
Banco de Sabadell, S.A.	Credit institution	Alicante - Spain	—	—	703,371	10,009,080	740,551	—	195,620,963	—	12,573,535	593,675
Banco Sabadell, S.A., Institución de Banca Múltiple	Credit institution	Mexico City - Mexico	99.99	0.01	573,492	(16,619)	12,599	—	4,789,408	618,750	(78,166)	(12,409)
BanSabadell Factura, S.L.U.	Other ancillary activities	Sant Cugat del Valles - Spain	100.00	—	100	381	432	—	1,150	799	(318)	432
BanSabadell Financiación, E.F.C., S.A.	Credit institution	Sabadell - Spain	100.00	—	24,040	12,856	683	—	571,813	24,040	12,856	683
BanSabadell Inversió Desenvolupament, S.A.U.	Holding	Barcelona - Spain	100.00	—	16,975	99,786	71,235	—	214,258	108,828	70,161	3,196
Bansabadell Mediación, Operador De Banca Seguros Vinculado Del Grupo Banco Sabadell, S.A.	Other regulated companies	Alicante - Spain	—	100.00	301	60	7,244	8,232	53,073	524	(1,597)	6,437
Bitarte, S.A.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	6,506	(2,176)	(113)	—	4,325	9,272	(4,488)	(93)
BStartup 10, S.L.U.	Holding	Barcelona - Spain	—	100.00	1,000	4,107	(315)	—	11,232	1,000	(999)	(169)
Business Services for Operational Support, S.A.U.	Other ancillary activities	Sant Cugat del Valles - Spain	100.00	—	—	—	—	—	51	—	(8,726)	2,825
Compañía de Cogeneración del Caribe Dominicana, S.A.	Power generation	Santo Domingo - Dominican Republic	—	100.00	5,016	(4,581)	—	—	454	—	(312)	—
Crisea Private Debt, S.L.U.	Other ancillary activities	Barcelona - Spain	—	100.00	3	181	104	—	352	200	(16)	103
Desarrollos y Participaciones Inmobiliarias 2006, S.L.U. in Liquidation	Real estate	Elche - Spain	—	100.00	1,942	(89,826)	(45)	—	3	1,919	(89,803)	(45)
Duncan de Inversiones S.I.C.A.V., S.A. in Liquidation	UCITS, funds and similar financial corporations	Sant Cugat del Valles - Spain	99.81	—	7,842	(7,787)	(55)	—	18	—	(345)	(55)
Duncan Holdings 2022-1 Limited	Holding	London - United Kingdom	—	100.00	1	—	—	—	1	—	—	5,993
Ederra, S.A.	Real estate	San Sebastián - Spain	97.85	—	2,036	34,085	371	—	36,563	36,062	(398)	363
ESUS Energía Renovable, S.L.	Power generation	Vigo - Spain	—	90.00	50	(1,279)	(173)	—	2,975	23	(1,361)	(297)
Fonomed Gestión Telefónica Mediterráneo, S.A.U.	Other ancillary activities	Alicante - Spain	100.00	—	1,232	2,913	1,017	—	6,820	2,771	1,962	1,247
Fuerza Eólica De San Matías, S. de R.L. de c.v.	Power generation	Monterrey - Mexico	—	99.99	8,144	(14,919)	(7,095)	—	53,496	5,951	(10,502)	(6,497)
Galeban 21 Comercial, S.L.U.	Services	A Coruña - Spain	100.00	—	10,000	(4,292)	(6)	—	5,702	14,477	(8,769)	(6)
Gazteluberri, S.L.	Real estate	Sant Cugat del Valles - Spain	—	100.00	53	(20,789)	(7)	—	1,672	23,891	(44,627)	(7)

Banco Sabadell Group companies as at 31 December 2022 consolidated by the full consolidation method

Thousand euro

Company name	Line of business	Registered office	Shareholding		Company data			Group investment	Contribution to reserves or losses in consolidated companies	Contribution to Group consolidated profit/(loss)		
			Direct	Indirect	Capital	Other equity	Profit/(loss)				Dividends paid	Total assets
Gest 21 Inmobiliaria, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	7,810	1,108	33	8,958	80,516	(46,727)	38	
Gestión Financiera del Mediterráneo, S.A.U.	Other financial services	Alicante - Spain	100.00	—	13,000	2,573	8,211	12,875	66,787	(42,959)	1,269	
Gier Operations 2021, S.L.U.	Other ancillary activities	Andorra - Andorra	100.00	—	730	—	(9)	722	730	—	(9)	
Guijuzcoano Promoción Empresarial, S.L.	Holding	San Sebastián - Spain	—	100.00	53	(75,662)	(1,447)	—	5,307	7,160	(82,761)	(1,447)
Hobalear, S.A.U.	Real estate	Barcelona - Spain	—	100.00	60	72	7	141	414	72	7	
Hondarriberrí, S.L.	Holding	San Sebastián - Spain	99.99	0.01	41	63,158	(54,168)	—	10,037	165,669	95,440	(2,092)
Hotel Management 6 Gestión Activa, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	135,730	28,269	(54)	—	163,945	136,335	50,335	(40)
Hotel Management 6 Holdco, S.L.U.	Real estate	Sant Cugat del Valles - Spain	—	100.00	29,074	(24,133)	(15)	—	61,579	27,611	(22,671)	(15)
Interstate Property Holdings, LLC.	Holding	Miami - United States	100.00	—	7,293	(977)	51	—	6,387	3,804	7,849	51
Inverán Gestión, S.L. in Liquidation	Real estate	Sant Cugat del Valles - Spain	44.83	55.17	90	(80)	(15)	—	52	45,090	(45,081)	(15)
Inversiones Cotizadas del Mediterráneo, S.L.	Holding	Alicante - Spain	100.00	—	308,000	195,644	10,690	—	1,005,403	589,523	(83,787)	10,733
Manston Invest, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	33,357	(13,595)	(93)	—	19,939	33,357	(13,595)	(93)
Mariñamendi, S.L.	Real estate	Sant Cugat del Valles - Spain	—	100.00	62	(11,590)	(8)	—	3,882	109,529	(121,057)	(8)
Mediterráneo Sabadell, S.L.	Holding	Alicante - Spain	50.00	50.00	85,000	16,528	(217)	—	101,314	510,829	(409,000)	(217)
Paycomet, S.L.U.	Payment institution	Torreldones - Spain	—	100.00	200	726	802	—	24,335	9,205	234	787
Puerto Pacific Vallarta, S.A. de C.V.	Real estate	Mexico City - Mexico	—	100.00	28,947	(16,488)	338	—	12,798	29,164	(11,951)	(314)
Ripollet Gestión, S.L.U.	Other financial services	Barcelona - Spain	100.00	—	20	272	124	—	458,163	593	(301)	124
Rubí Gestión, S.L.U.	Other financial services	Barcelona - Spain	100.00	—	3	20	(6)	—	402,936	53	(30)	(6)
Sabadell Consumer Finance, S.A.U.	Credit institution	Sabadell - Spain	100.00	—	35,720	77,380	17,857	—	1,888,124	72,232	45,790	17,857
Sabadell Information Systems Limited	Provision of technology services	London - United Kingdom	—	100.00	12,036	20,653	169	—	33,228	41,296	(8,332)	169
Sabadell Information Systems, S.A.U.	Provision of technology services	Sabadell - Spain	100.00	—	40,243	60,832	48,796	—	1,387,578	143,695	(47,700)	47,463
Sabadell Innovation Capital, S.L.U.	Holding	Sant Cugat del Valles - Spain	—	100.00	1,000	11,030	(1,129)	—	53,491	1,000	(8,152)	783
Sabadell Innovation Cells, S.L.U.	Other ancillary activities	Sant Cugat del Valles - Spain	100.00	—	3	755	155	—	1,354	3,203	(3,361)	528
Sabadell Patrimonio Inmobiliario, S.A.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	30,116	795,988	(1,029)	—	828,149	863,895	(27,970)	(10,850)
Sabadell Real Estate Activos, S.A.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	100,060	234,204	(190)	—	334,467	500,622	(166,358)	(190)

Banco Sabadell Group companies as at 31 December 2022 consolidated by the full consolidation method

Thousand euro

Company name	Line of business	Registered office	% Shareholding		Company data			Group investment	Contribution to reserves or losses in consolidated companies	Contribution to Group consolidated profit/(loss)
			Direct	Indirect	Capital	Other equity	Profit/(loss)			
Sabadell Real Estate Development, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	15,807	157,455	(19,168)	4,748,442	(4,552,614)	(20,796)
Sabadell Real Estate Housing, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	2,073	730	(6,068)	17,792	(14,990)	(6,068)
Sabadell Securities USA, Inc.	Other financial services	Miami - United States	100.00	—	551	6,200	265	551	5,412	280
Sabadell Strategic Consulting, S.L.U.	Other ancillary activities	Sant Cugat del Valles - Spain	100.00	—	3	488	176	3	488	176
Sabadell Venture Capital, S. L. U.	Holding	Barcelona - Spain	—	100.00	3	13,942	3,275	3	4,833	3,983
Sabcapital, S.A. de C.V., SOFOM, E.R.	Credit institution	Mexico City - Mexico	49.00	51.00	164,828	69,276	44,696	154,568	80,389	44,679
Sinia Capital, S.A. de C.V.	Holding	Mexico City - Mexico	—	100.00	20,830	10,230	6,899	20,140	5,448	7,391
Sinia Renovables, S.A.U.	UCITS, funds and similar financial corporations	Barcelona - Spain	100.00	—	15,000	2,318	(446)	15,000	3,885	211
Sogefiso Servicios Gestión Vivienda Innovación Social, S.L.U.	Real estate	Alicante - Spain	100.00	—	3	9,963	101	3	11,559	101
Stonington Spain, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	60,729	(11,704)	(122)	60,729	(11,705)	(122)
Tasaciones de Bienes Mediterráneo, S.A. in Liquidation	Other ancillary activities	Alicante - Spain	99.88	0.12	1,000	1,416	—	2,420	(2,850)	—
Tenedora de Inversiones y Participaciones, S.L.	Holding	Alicante - Spain	100.00	—	296,092	(128,603)	(532)	2,975,977	(2,738,513)	(1,336)
TSB Bank PLC	Credit institution	Edinburgh - United Kingdom	—	100.00	90,710	1,967,452	111,939	1,814,636	329,136	99,938
TSB Banking Group PLC	Holding	London - United Kingdom	100.00	—	7,028	1,764,655	80,586	2,200,560	(227,995)	(39,268)
TSB Banking Group plc Employee Share Trust	Other ancillary activities	Saint Heller - Jersey	—	100.00	1	(13,106)	(56)	343	(12,896)	—
TSB Covered Bonds (Holdings) Limited	Holding	London - United Kingdom	—	100.00	1	—	—	1	—	—
TSB Covered Bonds (LM) Limited	Other ancillary activities	London - United Kingdom	—	100.00	1	—	—	1	—	—
TSB Covered Bonds LLP	UCITS, funds and similar financial corporations	London - United Kingdom	—	100.00	1	15	4	67	17	4
Urquijo Gestión, S.A.U., S.G.I.I.C.	Funds management activities	Madrid - Spain	100.00	—	3,606	4,858	1,257	3,084	5,380	1,257
Urumea Gestión, S.L. in Liquidation	Other ancillary activities	San Sebastián - Spain	—	100.00	9	(14)	—	9	(14)	—
V&A Rental Homes, S.A.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	5,000	1,358	(1,580)	22,000	(15,642)	(1,580)
Venture Debt SVC, S.L.U.	Holding	Barcelona - Spain	—	100.00	3	—	—	2,578	3	—
TOTAL					104,894	16,382,618	4,325,889	4,325,889	738,662	

Banco Sabadell Group companies as at 31 December 2022 consolidated by the equity method (*)

Thousand euro															
Company name	Line of business	Registered office	% Shareholding		Company data (a)	Group Investment	Contribution to reserves or losses in consolidated companies (d)	Contribution to Group profit/(loss)	Direct	Indirect	Capital	Other equity	Profit/(loss) (b)	Dividends paid (c)	Total assets
Aurica III, Fondo de Capital Riesgo	UCITS, funds and similar financial corporations	Barcelona - Spain	—	47.50	(46,881)	24,318	(1,337)	—	—	—	51,130	—	69,348	36,612	75,249
Aurica IIB, S.C.R., S.A.	UCITS, funds and similar financial corporations	Barcelona - Spain	—	42.85	(56,273)	14,837	199	—	—	—	34,557	—	71,330	22,320	50,765
BanSabadell Pensiones, E.G.F.P., S.A.	Other regulated companies	Madrid - Spain	50.00	—	34,569	40,378	(18,544)	—	—	—	7,813	—	(740)	—	45,833
BanSabadell Seguros Generales, S.A. de Seguros y Reaseguros	Other regulated companies	Madrid - Spain	50.00	—	78,476	34,000	14,636	—	—	—	10,000	—	21,390	6,000	308,357
BanSabadell Vida, S.A. de Seguros y Reaseguros	Other regulated companies	Madrid - Spain	50.00	—	43,858	27,106	225,516	—	—	—	43,858	—	117,961	60,000	8,808,926
Doctor Energy Central Services, S.L.	Other business management consulting activities	Granollers - Spain	—	24.99	(57)	50	(17)	—	—	—	125	—	(127)	—	278
Catalana de Biogás Iberia, S.L.	Power generation	Barcelona - Spain	—	24.90	(1)	2	—	—	—	—	10	—	1	—	1
Parque Eólico Casa Vieja S. L.	Power generation	Ponferrada - Spain	—	50.00	500	267	(15)	—	—	—	3	—	—	—	633
Parque Eólico Villabrales S. L.	Power generation	Ponferrada - Spain	—	50.00	500	267	(15)	—	—	—	3	—	—	—	633
Parque Eólico Perales S. L.	Power generation	Ponferrada - Spain	—	50.00	500	267	(15)	—	—	—	3	—	—	—	633
Parque Eólico Los Pedrejonas S. L.	Power generation	Ponferrada - Spain	—	50.00	500	267	(15)	—	—	—	3	—	—	—	633
Energías Renovables Terra Ferma, S.L.	Power generation	Barcelona - Spain	—	50.00	(65)	3	(3)	—	—	—	6	—	(9)	—	1,928
Financiera Iberoamericana, S.A.	Credit institution	Havana - Cuba	50.00	—	13,710	19,144	3,163	—	—	—	38,288	—	7,579	2,514	102,654
Flex Equipos de Descanso, S.A.	Manufacturing	Getafe - Spain	—	19.16	66,071	50,930	26,210	—	—	—	66,071	—	10,262	—	261,388
Murcia Emprende, S.C.R. de R.S., S.A.	Other financial services	Murcia - Spain	28.70	—	(594)	2,026	(4,441)	—	—	—	2,557	—	1,925	—	1,962
Plaxic Estelar, S.L.	Real estate	Barcelona - Spain	—	45.01	(15,303)	3,114	(3,114)	—	—	—	3	—	8	—	31,981
Portic Barcelona, S.A.	Data processing, hosting and related activities	Barcelona - Spain	25.00	—	1,812	5	539	—	—	—	291	—	108	—	2,447
SBD Creixent, S.A.	Real estate	Sabadell - Spain	23.05	—	(1,073)	3,524	(2,397)	—	—	—	5,965	—	421	—	5,571
Total					127,446	220,505	229,206							127,446	119,980

(*) Companies consolidated by the equity method as the Group does not have control over them but does have significant influence.

(a) Figures for foreign companies translated to euros at the historical exchange rate; amounts in the consolidated income statement translated at the average exchange rate.

(b) Results pending approval by Annual General Meeting of Shareholders and Partners.

(c) Includes supplementary dividends from previous year and interim dividends paid to Group.

(d) The heading "Reserves or accumulated losses of investments in joint ventures and associates" on the consolidated balance sheet as at 31 December 2022 also includes 65,352 thousand euros corresponding to Promontoria Challenger I, S.A., an entity classified as a non-current asset held for sale.

The balance of total revenue from associates consolidated by the equity method and individually considered to be non-material amounted to 561,496 thousand euros as at 31 December 2022. The balance of liabilities as at the end of 2022 amounted to 439,403 thousand euros. The key figures as at 2022 year-end for BanSabadell Vida, S.A. are included in Note 14 of the consolidated annual financial statements.

Changes in the scope of consolidation in 2022

Additions to the scope of consolidation:

Name of entity (or line of business) acquired or merged	Category	Effective date of the transaction	Fair value of equity instruments issued for the acquisition		% Voting rights acquired	% Total voting rights	Type of shareholding	Method	Reason
			Acquisition cost	Fair value of equity instruments issued for the acquisition					
Catalana de Biogás Iberia, S.L.	Associate	25/4/2022	2	—	24.90 %	24.90 %	Indirect	Equity method	a
Duncan Holdings 2022-1 Limited	Subsidiary	29/3/2022	1	—	100.00 %	100.00 %	Indirect	Full consolidation	b
Gier Operations 2021, S.L.U.	Subsidiary	21/2/2022	730	—	100.00 %	100.00 %	Direct	Full consolidation	b
Total newly consolidated subsidiaries			731						
Total newly consolidated associates			2						

(a) Acquisition of associates

(b) Incorporation of subsidiaries

Exclusions from the scope of consolidation:

Thousand euro

Name of entity (or line of business) sold, spun off or otherwise disposed of	Category	Effective date of the transaction	% Voting rights disposed of	% Total voting rights following disposal	Profit/(loss) generated	Type of shareholding	Method	Reason
Inversiones en Resorts Mediterráneo, S.L. in Liquidation	Subsidiary	20/1/2022	55.06 %	— %	(800)	Indirect	Full consolidation	a
Aurica Capital Desarrollo, S.G.E.I.C., S.A.	Associate	29/7/2022	20.00 %	— %	2,585	Direct	Equity method	b
Europea Pall Mall Ltd.	Subsidiary	15/7/2022	100.00 %	— %	(32)	Direct	Full consolidation	b
Gestora de Aparcamientos del Mediterráneo, S.L. in Liquidation	Associate	5/5/2022	40.00 %	— %	—	Indirect	Equity method	a
Plataforma de Innovación Sabadell, S.L.U.	Subsidiary	11/7/2022	100.00 %	— %	—	Direct	Full consolidation	a
Sabadell Brasil Trade Services - Assessoria Comercial Ltda.	Subsidiary	30/8/2022	100.00 %	— %	(733)	Direct	Full consolidation	a
Sabadell Corporate Finance, S.L.U.	Subsidiary	22/6/2022	100.00 %	— %	(2)	Direct	Full consolidation	a
Arrendamiento de Bienes Inmobiliarios del Mediterráneo, S.L. in Liquidation	Subsidiary	14/12/2022	100.00 %	— %	(24)	Direct	Full consolidation	a
Atrian Bakers, S.L.	Associate	28/12/2022	22.41 %	— %	1,833	Indirect	Equity method	b
Solvía Servicios Inmobiliarios, S.L.	Associate	2/12/2022	20.00 %	— %	4,092	Direct	Equity method	b
LSP Finance, S.L.U. in Liquidation	Subsidiary	28/10/2022	100.00 %	— %	(10)	Indirect	Full consolidation	a
Other					2,711			
TOTAL					9,620			

(a) Items removed from the scope due to dissolution and/or liquidation.

(b) Items removed from the scope due to disposal

Banco Sabadell Group companies as at 31 December 2021 consolidated by the full consolidation method

Thousand euro

Company name	Line of business	Registered office	% Shareholding			Company data			Group investment	Contribution to reserves or losses in consolidated companies	Contribution to Group consolidated profit/ (loss)
			Direct	Indirect	Capital	Other equity	Profit/ (loss)	Dividends paid			
Arrendamiento de Bienes Inmobiliarios del Mediterráneo, S.L. in Liquidation	Real estate	Alicante - Spain	100.00	—	100	339	(10)	427	10,538	(10,099)	(10)
Aurica Colvestments, S.L.	Holding	Barcelona - Spain	—	61.76	50,594	(1,045)	1,880	1,043	31,247	(1,758)	(4,165)
Banco Atlantico (Bahamas) Bank & Trust Ltd.	Credit institution	Nassau - Bahamas	99.99	0.01	1,598	709	(25)	—	2,439	(378)	(25)
Banco de Sabadell, S.A.	Credit institution	Alicante - Spain	—	—	703,371	10,271,463	328,412	—	197,187,820	—	12,378,089
Banco Sabadell, S.A., Institución de Banca Múltiple	Credit institution	Mexico City - Mexico	99.99	0.01	573,492	(57,153)	(12,296)	—	3,851,192	(54,325)	(24,286)
BanSabadell Factura, S.L.U.	Other ancillary activities	Sant Cugat del Valles - Spain	100.00	—	100	(276)	157	—	299	(475)	157
BanSabadell Financiación, E.F.C., S.A.	Credit institution	Sabadell - Spain	100.00	—	24,040	12,339	517	—	649,954	24,040	12,339
BanSabadell Inversió Desenvolupament, S.A.U.	Holding	Barcelona - Spain	100.00	—	16,975	103,159	(213)	—	198,505	108,828	(2,401)
BanSabadell Mediación, Operador De Banca-Seguros Vinculado Del Grupo Banco Sabadell, S.A.	Other regulated companies	Alicante - Spain	—	100.00	301	59	8,232	9,288	53,763	524	(4,174)
Bitarte, S.A.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	6,506	(2,117)	(59)	—	4,416	9,272	(4,405)
BStartup 10, S.L.U.	Holding	Barcelona - Spain	—	100.00	1,000	3,768	384	—	9,605	1,000	(621)
Business Services for Operational Support, S.A.	Other ancillary activities	Sant Cugat del Valles - Spain	80.00	—	530	(8,052)	(1,938)	—	35,059	1,160	(6,290)
Compañía de Cogeneración del Caribe Dominicana, S.A.	Power generation	Santo Domingo - Dominican Republic	—	100.00	5,016	(4,606)	—	—	427	—	(312)
Crisae Private Debt, S.L.U.	Other ancillary activities	Barcelona - Spain	—	100.00	3	196	(14)	—	199	200	(1)
Desarrollos y Participaciones Inmobiliarias 2006, S.L.U. in Liquidation	Real estate	Elche - Spain	—	100.00	1,942	(90,935)	1,109	—	2	1,919	(90,912)
Duncan de Inversiones S.I.C.A.V., S.A.	UCITS, funds and similar financial corporations	Sant Cugat del Valles - Spain	99.81	—	7,842	(5,242)	(53)	—	2,887	2,887	(291)
Ederra, S.A.	Real estate	San Sebastián - Spain	97.85	—	2,036	34,219	(31)	—	36,331	36,062	(405)
ESUS Energía Renovable, S.L.	Power generation	Vigo - Spain	—	90.00	50	(727)	(44)	—	3,701	23	(1,367)
Europea Pall Mall Ltd.	Real estate	London - United Kingdom	100.00	—	20,843	(1,412)	633	—	24,194	20,843	(5,173)
Fonomed Gestión Telefónica Mediterráneo, S.A.U.	Other ancillary activities	Alicante - Spain	100.00	—	1,232	2,458	502	—	7,096	2,771	1,763
Fuerza Eólica De San Matías, S. de R.L. de C.V.	Power generation	Monterrey - Mexico	—	99.99	8,144	(10,146)	(3,981)	—	51,515	5,951	(4,688)

Banco Sabadell Group companies as at 31 December 2021 consolidated by the full consolidation method

Thousand euro

Company name	Line of business	Registered office	% Shareholding			Company data			Total assets	Group investment	Contribution to reserves or losses in consolidated companies	Contribution to Group consolidated profit/ (loss)
			Direct	Indirect	Capital	Other equity	Profit/ (loss)	Dividends paid				
Galeban 21 Comercial, S.L.U.	Servicios	A Coruña - España	100.00	—	10,000	(4,292)	—	5,708	14,477	(8,769)	—	
Gazteluberri, S.L.	Real estate	Sant Cugat del Valles - Spain	—	100.00	53	(20,740)	(49)	—	1,695	23,891	(49)	
Gest 21 Inmobiliaria, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	7,810	1,142	(34)	—	8,926	80,516	(8)	
Gestión Financiera del Mediterráneo, S.A.U.	Other financial services	Alicante - Spain	100.00	—	13,000	2,551	12,043	2,789	27,903	66,787	(41,914)	
Gupuzcoano Promoción Empresarial, S.L.	Holding	San Sebastián - Spain	—	100.00	53	(75,502)	(161)	—	6,774	7,160	(82,600)	
Hobalear, S.A.U.	Real estate	Barcelona - Spain	—	100.00	60	61	11	—	135	414	61	
Hondarriberrí, S.L.	Holding	San Sebastián - Spain	99.99	0.01	41	18,545	(386)	—	59,216	120,669	95,578	
Hotel Management 6 Gestión Activa, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	135,730	29,104	(835)	—	163,999	136,335	49,803	
Hotel Management 6 Holdco, S.L.U.	Real estate	Sant Cugat del Valles - Spain	—	100.00	29,074	(22,041)	(2,093)	—	61,620	27,611	(20,405)	
Interstate Property Holdings, LLC.	Holding	Miami - United States	100.00	—	7,293	(1,349)	5	—	5,951	3,804	6,387	
Inverán Gestión, S.L. in Liquidation	Real estate	Sant Cugat del Valles - Spain	44.83	55.17	90	(34)	(46)	—	70	45,090	(45,034)	
Inversiones Cotizadas del Mediterráneo, S.L.	Holding	Alicante - Spain	100.00	—	308,000	198,920	3,717	—	727,461	589,523	(83,233)	
Inversiones en Resorts Mediterráneos, S.L. in Liquidation	Real estate	Torre Pacheco - Spain	—	55.06	299,090	(302,367)	—	—	68	175,124	—	
LSP Finance, S.L.U.	Provision of technology services	Sant Cugat del Valles - Spain	—	100.00	252	(1,825)	1,229	—	3,012	6,484	(3,865)	
Manston Invest, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	33,357	(12,930)	(665)	—	20,055	33,357	(12,930)	
Mariñamendi, S.L.	Real estate	Sant Cugat del Valles - Spain	—	100.00	62	(65,791)	(316)	—	6,661	55,013	(120,741)	
Mediterráneo Sabadell, S.L.	Holding	Alicante - Spain	50.00	50.00	85,000	16,853	(171)	9	101,685	510,829	(408,829)	
Paycomet, S.L.U.	Payment institution	Torrelodones - Spain	—	100.00	200	223	517	—	8,458	8,853	(275)	
Plataforma de Innovación Sabadell, S.L.U.	Other ancillary activities	Sant Cugat del Valles - Spain	100.00	—	3	(1)	(3)	—	4	3	(3)	
Puerto Pacific Vallarta, S.A. de C.V.	Real estate	Mexico City - Mexico	—	100.00	28,947	(16,979)	(150)	—	11,820	29,164	(11,571)	
Ripollat Gestión, S.L.U.	Other financial services	Barcelona - Spain	100.00	—	20	(290)	(11)	—	356,364	20	(290)	
Rubi Gestión, S.L.U.	Other financial services	Barcelona - Spain	100.00	—	3	(24)	(6)	—	479,591	3	(24)	
Sabadell Brasil Trade Services - Assessoria Comercial Ltda.	Other financial services	São Paulo - Brazil	99.99	0.01	905	(845)	—	—	78	250	393	
Sabadell Consumer Finance, S.A.U.	Credit institution	Sabadell - Spain	100.00	—	35,720	56,936	20,444	—	1,777,133	72,232	25,069	

Banco Sabadell Group companies as at 31 December 2021 consolidated by the full consolidation method

Thousand euro

Company name	Line of business	Registered office	% Shareholding			Company data			Group Investment	Contribution to reserves or losses in consolidated companies	Contribution to Group consolidated profit/ (loss)
			Direct	Indirect	Capital	Other equity	Profit/ (loss)	Dividends paid			
Sabadell Corporate Finance, S.L.U.	Other ancillary activities	Sant Cugat del Valles - Spain	100.00	—	70	8,078	(1,31)	8,134	9,373	(1,204)	(152)
Sabadell Information Systems Limited	Provision of technology services	London - United Kingdom	—	100.00	12,036	22,563	(115)	61,548	41,296	(8,266)	(115)
Sabadell Information Systems, S.A.U.	Provision of technology services	Sabadell - Spain	100.00	—	40,243	36,312	23,004	1,561,069	143,695	(67,662)	15,589
Sabadell Innovation Capital, S.L.U.	Holding	Sant Cugat del Valles - Spain	—	100.00	1,000	3,824	(2,073)	45,555	1,000	(2,651)	(600)
Sabadell Innovation Cells, S.L.U.	Other ancillary activities	Sant Cugat del Valles - Spain	100.00	—	3	(2,988)	169	2,929	3	(3,041)	(320)
Sabadell Patrimonio Inmobiliario, S.A.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	30,116	813,910	(17,922)	888,175	863,895	(19,869)	(8,101)
Sabadell Real Estate Activos, S.A.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	100,060	235,327	(1,123)	334,842	500,622	(165,235)	(1,123)
Sabadell Real Estate Development, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	15,807	(2,406,085)	(36,983)	1,151,093	2,147,442	(4,513,277)	(39,337)
Sabadell Real Estate Housing, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	2,073	122	(2,893)	25,235	14,292	(11,836)	(3,154)
Sabadell Securities USA, Inc.	Other financial services	Miami - United States	100.00	—	551	5,266	530	6,547	551	4,873	539
Sabadell Strategic Consulting, S.L.U.	Other ancillary activities	Sant Cugat del Valles - Spain	100.00	—	3	320	168	1,018	3	275	213
Sabadell Venture Capital, S. L.U.	Holding	Barcelona - Spain	—	100.00	3	12,061	1,763	56,417	3	2,964	582
Sabcapital, S.A de C.V., SOFOM, E.R.	Credit institution	Mexico City - Mexico	49.00	51.00	164,828	20,841	24,759	1,493,425	151,709	55,610	24,779
Sinia Capital, S.A. de C.V.	Holding	Mexico City - Mexico	—	100.00	20,830	6,542	(526)	75,454	18,150	6,538	(1,563)
Sinia Renovables, S.A.U.	UCITS, funds and similar financial corporations	Barcelona - Spain	100.00	—	15,000	1,338	505	60,915	15,000	3,400	718
Sogefiso Servicios Gestión Vivienda Innovación Social, S.L.U.	Real estate	Alicante - Spain	100.00	—	3	9,893	70	11,707	3	10,026	(62)
Stonington Spain, S.L.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	60,729	(11,092)	(613)	49,496	60,729	(11,092)	(613)
Tasaciones de Bienes Mediterráneo, S.A. in Liquidation	Other ancillary activities	Alicante - Spain	99.88	0.12	1,000	1,416	—	2,420	5,266	(2,876)	26
Tenedora de Inversiones y Participaciones, S.L.	Holding	Alicante - Spain	100.00	—	296,092	(528,628)	(11,037)	351,343	2,564,914	(2,725,376)	(13,159)
TSB Bank PLC	Credit institution	Edinburgh - United Kingdom	—	100.00	90,710	1,981,428	149,533	55,583,840	1,814,636	193,342	137,490
TSB Banking Group PLC	Holding	London - United Kingdom	100.00	—	7,028	1,864,273	1,979	2,787,944	2,213,148	(189,474)	(38,646)
TSB Banking Group plc Employee Share Trust	Other ancillary activities	Saint Helier - Jersey	—	100.00	1	(12,225)	44	526	—	(11,183)	—
TSB Covered Bonds (Holdings) Limited	Holding	London - United Kingdom	—	100.00	1	—	—	1	—	—	—

Banco Sabadell Group companies as at 31 December 2021 consolidated by the full consolidation method

Thousand euro

Company name	Line of business	Registered office	% Shareholding		Company data			Dividends paid	Total assets	Group Investment	Contribution to reserves or losses in consolidated companies	Contribution to Group consolidated profit/ (loss)
			Direct	Indirect	Capital	Other equity	Profit/ (loss)					
TSB Covered Bonds (LM) Limited	Other ancillary activities	London - United Kingdom	—	100.00	1	—	—	—	1	—	—	
TSB Covered Bonds LLP	UCITS, funds and similar financial corporations	London - United Kingdom	—	100.00	1	14	3	—	61	—	14	
Urquijo Gestión, S.A.U., S.G.I.I.C.	Funds management activities	Madrid - Spain	100.00	—	3,606	4,858	4,213	2,717	18,542	3,084	5,380	
Urumea Gestión, S.L. in Liquidation	Other ancillary activities	San Sebastián - Spain	—	100.00	9	(13)	(1)	—	1	9	(12)	
VeA Rental Homes, S.A.U.	Real estate	Sant Cugat del Valles - Spain	100.00	—	5,000	(17,022)	1,380	—	44,202	5,000	(17,022)	
Venture Debt SVC, S.L.U.	Holding	Barcelona - Spain	—	100.00	3	—	—	—	3	3	—	
TOTAL							20,672		13,418,379	4,004,030	439,553	

Banco Sabadell Group companies as at 31 December 2021 consolidated by the equity method (*)

Thousand euro												
Company name	Line of business	Registered office	% Shareholding		Other equity	Profit/(loss)	Dividends paid (c)	Total assets	Group Investment	Contribution to reserves or losses in consolidated companies (d)	Contribution to Group profit/(loss) (e)	
			Direct	Indirect	Capital	(b)	(c)					
Atrian Bakers, S.L.	Manufacturing	Castellgallí - Spain	—	22.41	26,249	(11,299)	(1,380)	—	32,988	2,000	(854)	
Aurica Capital Desarrollo, S.G.E.I.C., S.A.	Funds management activities	Barcelona - Spain	20.00	—	750	(79)	596	602	2,078	161	119	
Aurica III, Fondo de Capital Riesgo	UCITS, funds and similar financial corporations	Barcelona - Spain	—	47.50	76,699	(8,760)	217	—	69,308	37,183	1,992	
Aurica IIB, S.C.R., S.A.	UCITS, funds and similar financial corporations	Barcelona - Spain	—	42.85	51,839	(5,990)	142	—	46,771	22,680	1,207	
BanSabadell Pensiones, E.G.F.P., S.A.	Other regulated companies	Madrid - Spain	50.00	—	7,813	35,176	737	—	49,466	40,378	(18,913)	
BanSabadell Seguros Generales, S.A. de Seguros y Reaseguros	Other regulated companies	Madrid - Spain	50.00	—	10,000	77,263	22,658	5,000	297,303	34,000	9,311	
BanSabadell Vida, S.A. de Seguros y Reaseguros	Other regulated companies	Madrid - Spain	50.00	—	43,858	537,011	92,570	52,500	10,418,907	27,106	236,190	
Doctor Energy Central Services, S.L.	Other business management consulting activities	Granollers - Spain	—	24.99	7	(2)	1	—	23	12	(11)	
Parque Eólico Casa Vieja S. L.	Power generation	Ponferrada - Spain	—	50.00	3	500	—	—	629	267	(15)	
Parque Eólico Vilaumbrales S. L.	Power generation	Ponferrada - Spain	—	50.00	3	500	—	—	628	267	(15)	
Parque Eólico Perales S. L.	Power generation	Ponferrada - Spain	—	50.00	3	500	—	—	628	267	(15)	
Parque Eólico Los Pedrejonas S. L.	Power generation	Ponferrada - Spain	—	50.00	3	500	—	—	628	267	(15)	
Energías Renovables Terra Ferma, S.L.	Power generation	Barcelona - Spain	—	50.00	6	(55)	(13)	—	1,531	3	(3)	
Financiera Iberoamericana, S.A.	Credit institution	Havana - Cuba	50.00	—	38,288	11,436	5,620	1,407	95,226	19,144	3,062	
Flex Equipos de Descanso, S.A.	Manufacturing	Getafe - Spain	—	19.16	66,071	21,237	19,472	1,917	268,777	50,930	2,912	
Gestora de Aparcamientos del Mediterráneo, S.L. in Liquidation	Services	Alicante - Spain	—	40.00	1,000	(10,551)	(207)	—	2,006	7,675	(7,675)	
Murcia Emprende, S.C.R. de R.S., S.A.	Other financial services	Murcia - Spain	28.70	—	2,557	(316)	(169)	—	2,307	2,026	(1,337)	
Plaxic Estelar, S.L.	Real estate	Barcelona - Spain	—	45.01	3	(15,260)	(25)	—	31,967	3,057	(3,057)	
Portic Barcelona, S.A.	Data processing, hosting and related activities	Barcelona - Spain	25.00	—	291	1,754	131	—	2,392	486	506	
SBD Creixent, S.A.	Real estate	Sabadell - Spain	23.05	—	5,965	(1,168)	90	—	5,437	3,524	(2,414)	
Solvía Servicios Inmobiliarios, S.L.	Real estate	Alicante - Spain	20.00	—	660	143,772	37,703	—	221,138	16,517	32,924	
Total							61,426		267,950	253,899	137,592	

(*) Companies consolidated by the equity method as the Group does not have control over them but does have significant influence.

(a) Figures for foreign companies translated to euros at the historical exchange rate; amounts in the consolidated income statement translated at the average exchange rate.

(b) Results pending approval by Annual General Meeting of Shareholders and Partners.

(c) Includes supplementary dividends from previous year and interim dividends paid to Group.

(d) The heading "Reserves or accumulated losses of investments in joint ventures and associates" on the consolidated balance sheet as at 31 December 2021 also includes -18,445 thousand euros corresponding to Promontoria Challenger I, S.A., an entity classified as a non-current asset held for sale.

(e) The contribution of Promontoria Challenger I, S.A. to the Group's consolidated profit/(loss) in 2021 was -46,907 thousand euros.

The balance of total revenue from associates consolidated by the equity method and individually considered to be non-material amounted to 709,825 thousand euros as at 31 December 2021. The balance of liabilities as at the end of 2021 amounts to 519,694 thousand euros.

Changes to the scope of consolidation in 2021

Additions to the scope of consolidation:

Thousand euro

Name of entity (or line of business) acquired or merged	Category	Effective date of the transaction	Fair value of equity instruments issued for the acquisition		% Voting rights acquired	% Total voting rights	Type of shareholding	Method	Reason
			Acquisition cost	Fair value of equity instruments issued for the acquisition					
Parque Edificio Casa Vieja S. L.	Associate	15/4/2021	267	—	50.00 %	50.00 %	Indirect	Equity method	a
Parque Edificio Vilaumbrales S. L.	Associate	15/4/2021	267	—	50.00 %	50.00 %	Indirect	Equity method	a
Parque Edificio Perales S. L.	Associate	15/4/2021	267	—	50.00 %	50.00 %	Indirect	Equity method	a
Parque Edificio Los Pedrejonas S. L.	Associate	15/4/2021	267	—	50.00 %	50.00 %	Indirect	Equity method	a
Aurica Capital Desarrollo, S.G.E.I.C., S.A.	Associate	6/5/2021	248	—	20.00 %	20.00 %	Direct	Equity method	b
Doctor Energy Central Services, S.L.	Associate	5/10/2021	12	—	24.99 %	24.99 %	Indirect	Equity method	a
Portic Barcelona, S.A.	Associate	1/7/2021	486	—	25.00 %	25.00 %	Direct	Equity method	a
Venture Debt SVC, S.L.U.	Subsidiary	24/11/2021	3	—	100.00 %	100.00 %	Indirect	Full consolidation	c
Total newly consolidated subsidiaries			3						
Total newly consolidated associates			1,814						

(a) Acquisition of subsidiaries.

(b) Change in consolidation method.

(c) Incorporation of subsidiaries.

Exclusions from the scope of consolidation:

Thousand euro

Name of entity (or line of business) sold, spun off or otherwise disposed of	Category	Effective date of the transaction	% Voting rights disposed of	% Total voting rights following disposal	Profit/(loss) generated	Type of shareholding	Method	Reason
Caminsa Urbanismo, S.A.U. in Liquidation	Subsidiary	20/1/2021	100.00 %	— %	—	Indirect	Full consolidation	b
Gestión de Proyectos Urbanísticos del Mediterráneo, S.L.U. in Liquidation	Subsidiary	19/1/2021	100.00 %	— %	—	Indirect	Full consolidation	b
Gulpuzcoano Valores, S.A. in Liquidation	Subsidiary	8/2/2021	100.00 %	— %	(37)	Direct	Full consolidation	b
Tierras Vega Alta del Segura, S.L. in Liquidation	Subsidiary	19/1/2021	100.00 %	— %	—	Indirect	Full consolidation	b
Mercurio Alicante Sociedad de Arrendamientos 1, S.L.	Subsidiary	2/6/2021	100.00 %	— %	(31)	Direct	Full consolidation	b
Verum Inmobiliaria Urbanismo y Promoción, S.A.	Subsidiary	14/5/2021	97.20 %	— %	(2)	Indirect	Full consolidation	b
Duncan Holdings 2020-1 Limited	Subsidiary	23/7/2021	100.00 %	— %	—	Indirect	Full consolidation	b
Sociedad de Cartera del Vallés, S.I.C.A.V., S.A.	Associate	5/8/2021	47.81 %	— %	(17)	Direct	Equity method	b
Termosolar Borges, S.L.	Associate	5/8/2021	47.50 %	— %	(13,920)	Direct	Equity method	a
Villoldo Solar, S.L.	Associate	5/8/2021	50.00 %	— %	52	Direct	Equity method	a
Aurica Capital Desarrollo, S.G.E.I.C., S.A.U.	Subsidiary	6/5/2021	80.00 %	20.00 %	(99)	Direct	Full consolidation	c
Assegurances Segur-Vida, S.A.U.	Subsidiary	5/10/2021	50.97 %	— %	—	Indirect	Full consolidation	a
BancSabadell d'Andorra, S.A.	Subsidiary	5/10/2021	50.97 %	— %	11,725	Direct	Full consolidation	a
Sabadell d'Andorra Inversions, S.G.O.I.C., S.A.U.	Subsidiary	5/10/2021	50.97 %	— %	—	Indirect	Full consolidation	a
Serveis i Mitjans de Pagament XXI, S.A.	Associate	5/10/2021	20.00 %	— %	—	Indirect	Equity method	a
BanSabadell Renting, S.L.U.	Subsidiary	30/11/2021	100.00 %	— %	41,907	Direct	Full consolidation	a
Duncan Holdings 2016-1 Limited	Subsidiary	21/12/2021	100.00 %	— %	—	Indirect	Full consolidation	b
Duncan Holdings 2015-1 Limited	Subsidiary	21/12/2021	100.00 %	— %	—	Indirect	Full consolidation	b
Other					15,169			
TOTAL					54,747			

(a) Disposals from the scope of consolidation due to sale of shareholding.

(b) Disposals from the scope due to dissolution and/or liquidation.

(c) Partial sale and change of consolidation method.

Schedule II – Structured entities – Securitisation funds

Thousand euro

Year	Securitisation funds fully retained on the balance sheet	Entity	Total securitised assets as at 31/12/2022	Of which: issued via mortgage transfer certificates (*)	Of which: issued via mortgage participations (*)
2005	TDA CAM 4 F.T.A	Banco CAM	111,784	17,038	94,062
2005	TDA CAM 5 F.T.A	Banco CAM	277,873	78,556	197,886
2006	TDA 26-MIXTO, F.T.A	Banco Guipuzcoano	45,146	1,747	43,000
2006	TDA CAM 6 F.T.A	Banco CAM	199,257	86,012	111,383
2006	FTPYME TDA CAM 4 F.T.A	Banco CAM	63,600	51,897	—
2006	TDA CAM 7 F.T.A	Banco CAM	312,333	130,537	179,427
2006	CAIXA PENEDES 1 TDA, FTA	BMN- Penedés	118,640	24,935	93,552
2007	TDA 29, F.T.A	Banco Guipuzcoano	63,348	6,561	56,024
2007	TDA CAM 8 F.T.A	Banco CAM	288,874	73,544	213,084
2007	TDA CAM 9 F.T.A	Banco CAM	295,849	109,153	185,636
2007	CAIXA PENEDES PYMES 1 TDA, FTA	BMN- Penedés	21,670	20,550	—
2008	CAIXA PENEDES FTGENCAT 1 TDA, FTA	BMN- Penedés	36,945	36,437	—
2009	GAT-ICO-FTVPO 1, F.T.H (CP)	BMN- Penedés	1,571	—	1,571
2017	TDA SABADELL RMBS 4, FT	Banco Sabadell	3,842,401	3,838,383	—
2022	SABADELL CONSUMO 2 FDT	Banco Sabadell	637,343	—	—
2022	DUNCAN FUNDING 2022 PLC	TSB	1,436,592	—	—
Total			7,753,225	4,475,352	1,175,625

(*) Corresponds to the allocation at source of loans when mortgage transfer certificates and mortgage participations were issued.

Thousand euro

Year	Securitisation funds fully derecognised from the balance sheet	Entity	Total securitised assets as at 31/12/2022	Of which: issued via mortgage transfer certificates (**)	Of which: issued via mortgage participations (**)
2006	TDA 25, FTA (*)	Banco Gallego	2,913	1,176	1,737
2010	FPT PYMES 1 LIMITED	Banco CAM	214,204	87,727	26,228
2019	SABADELL CONSUMO 1, FT	Banco Sabadell	219,219	—	—
Total			436,335	88,903	27,965

(*) Securitisation fund in process of early liquidation.

(**) Corresponds to the allocation at source of loans when mortgage transfer certificates and mortgage participations were issued.

Schedule III – Information required to be kept by issuers of mortgage market securities

On 3 November 2021, Royal Decree-Law 24/2021, of 2 November, was published, transposing in book one Directive (EU) 2019/2162 of the European Parliament and of the Council, of 27 November 2019, on the issuance and public supervision of covered bonds. The aim of this transposition was to harmonise the legislation on the mortgage markets of member states and give easy access to financing from credit institutions. The entry into force of this Royal Decree-Law on 8 July 2022 has brought about a change in the way in which the assets that serve as collateral for outstanding issues of covered bonds are considered.

In line with the new methodology for assets, at the end of 2022, the Bank held a total of 24,187 million euros of mortgage loans and credits compared to 16,114 million euros of mortgage covered bonds issued. This entails an over-collateralisation level of 150% for mortgage covered bonds, with all their collateral denominated in euro.

The following information is provided below (for information and comparison purposes only) on mortgage-backed loans that would be linked to the issuance of mortgage covered bonds as at 2022 and 2021 year-end, in accordance with the legislation repealed by the aforementioned Royal Decree 24/2021 (primarily, Law 2/1981, of 25 March, on the mortgage market) and Rule 60 of Bank of Spain Circular 4/2017, which makes it mandatory for this information to be reported to the Bank of Spain at close of these consolidated annual financial statements.

A) Asset-side transactions

Details of the aggregate nominal values of mortgage loans and credit as at 31 December 2022 and 2021 used as collateral for issues, their eligibility and the extent to which they qualify as such for mortgage market purposes, would be as follows:

Thousand euro

Breakdown of overall mortgage loan & credit portfolio; eligibility and qualifying amounts (nominal values)		
	2022	2021
Total mortgage loan and credit portfolio	49,785,504	50,225,414
Participation mortgages issued	1,203,590	1,535,765
<i>Of which: Loans held on balance sheet</i>	1,175,625	1,502,504
Mortgage transfer certificates	4,717,842	5,466,788
<i>Of which: Loans held on balance sheet</i>	4,475,352	5,219,354
Mortgage loans pledged as security for financing received	—	—
Loans backing issues of mortgage bonds and covered bonds	43,864,072	43,222,861
Ineligible loans	7,902,005	8,794,185
Fulfil eligibility requirements except for limit under Article 5.1 of Royal Decree 716/2009	7,311,513	8,429,918
Other	590,492	364,267
Eligible loans	35,962,067	34,428,676
Non-qualifying portions	63,623	59,146
Qualifying portions	35,898,444	34,369,530
Loans covering mortgage bond issues	—	—
Loans eligible as coverage for covered bond issues	35,898,444	34,369,530
Replacement assets subject to covered bond issues	—	—

A breakdown of these nominal values according to different classifications is given below:

Thousand euro

Breakdown of total mortgage loan and credit portfolio backing mortgage market issues				
	2022		2021	
	Total	Of which: Eligible loans	Total	Of which: Eligible loans
Total mortgage loan and credit portfolio	43,864,072	35,962,067	43,222,861	34,428,676
Origin of operations	43,864,072	35,962,067	43,222,861	34,428,676
Originated by the Institution	43,294,159	35,488,626	42,655,304	34,016,806
Subrogated from other entities	391,841	366,620	292,307	256,014
Other	178,072	106,821	275,250	155,856
Currency	43,864,072	35,962,067	43,222,861	34,428,676
Euro	43,832,854	35,935,560	43,173,341	34,386,431
Other currencies	31,218	26,507	49,520	42,245
Payment status	43,864,072	35,962,067	43,222,861	34,428,676
Satisfactory	40,278,656	33,574,531	39,681,234	32,280,269
Other	3,585,416	2,387,536	3,541,627	2,148,407
Average residual maturity	43,864,072	35,962,067	43,222,861	34,428,676
Up to 10 years	9,510,104	8,403,102	9,789,964	8,350,104
10 to 20 years	16,710,609	14,041,084	16,907,433	13,923,891
20 to 30 years	17,417,939	13,441,173	16,088,183	11,979,015
More than 30 years	225,420	76,708	437,281	175,666
Interest rate	43,864,072	35,962,067	43,222,861	34,428,676
Fixed	24,402,318	20,372,560	21,087,632	17,206,952
Variable	19,461,754	15,589,507	22,135,229	17,221,724
Mixed				
Borrowers	43,864,072	35,962,067	43,222,861	34,428,676
Legal entities and individual entrepreneurs	11,416,719	8,975,562	11,403,204	8,578,554
<i>Of which: Real estate developers</i>	<i>1,769,356</i>	<i>1,183,218</i>	<i>1,805,426</i>	<i>1,062,649</i>
Other individuals and NPISHs	32,447,353	26,986,505	31,819,657	25,850,122
Type of guarantee	43,864,072	35,962,067	43,222,861	34,428,676
Completed assets/buildings	43,226,453	35,541,201	42,517,282	33,960,470
<i>Residential</i>	<i>35,980,366</i>	<i>29,848,881</i>	<i>35,052,356</i>	<i>28,295,021</i>
<i>Of which: Social housing</i>	<i>1,329,898</i>	<i>1,090,829</i>	<i>1,360,692</i>	<i>1,120,368</i>
<i>Commercial</i>	<i>7,055,271</i>	<i>5,557,543</i>	<i>7,238,866</i>	<i>5,491,003</i>
<i>Other</i>	<i>190,816</i>	<i>134,777</i>	<i>226,060</i>	<i>174,446</i>
Assets/ buildings under construction	159,876	154,367	139,896	132,851
<i>Residential</i>	<i>133,587</i>	<i>128,091</i>	<i>125,565</i>	<i>118,595</i>
<i>Of which: Social housing</i>	<i>47</i>	<i>47</i>	<i>50</i>	<i>50</i>
<i>Commercial</i>	<i>26,040</i>	<i>26,027</i>	<i>13,977</i>	<i>13,902</i>
<i>Other</i>	<i>249</i>	<i>249</i>	<i>354</i>	<i>354</i>
Land	477,743	266,499	565,683	335,355
<i>Developed</i>	<i>51,410</i>	<i>19,374</i>	<i>68,582</i>	<i>22,181</i>
<i>Rest</i>	<i>426,333</i>	<i>247,125</i>	<i>497,101</i>	<i>313,174</i>

The nominal value of available funds (undrawn commitments) of mortgage loans and credit as at 31 December 2022 and 2021 would be as follows:

Thousand euro

Undrawn balances (nominal value). Total mortgage loans and credit backing issues of mortgage bonds and covered bonds		
	2022	2021
Potentially eligible	2,220,700	1,051,888
Ineligible	991,567	1,969,968

The breakdown of nominal values based on the loan-to-value (LTV) ratio measuring the risk based on the last available valuation of the mortgage lending portfolio eligible for the issuance of mortgage bonds and mortgage covered bonds as at 31 December 2022 and 2021 would be as set out below:

Thousand euro

LTV ratio by type of security. Loans eligible for the issuance of mortgage bonds and covered bonds		
	2022	2021
Secured on residential property	29,972,232	28,408,838
<i>Of which LTV <= 40%</i>	8,282,779	8,015,059
<i>Of which LTV 40%-60%</i>	10,270,663	9,912,812
<i>Of which LTV 60%-80%</i>	11,418,790	10,480,967
<i>Of which LTV > 80%</i>	—	—
Secured on other property	5,989,835	6,019,838
<i>Of which LTV <= 40%</i>	3,608,965	3,666,010
<i>Of which LTV 40%-60%</i>	2,380,870	2,353,828
<i>Of which LTV > 60%</i>	—	—

Changes during 2022 and 2021 in the nominal values of mortgage loans that would secure issues of mortgage bonds and mortgage covered bonds (eligible and ineligible) would be as follows:

Thousand euro

Changes in nominal values of mortgage loans		
	Eligible	Ineligible
Balance as at 31 December 2020	32,580,946	10,169,340
Disposals during the period	(5,351,119)	(3,764,409)
Terminations upon maturity	(2,694,833)	(523,277)
Early terminations	(2,037,072)	(1,205,645)
Subrogations by other entities	(47,071)	(6,509)
Derecognised due to securitisations	—	—
Other	(572,143)	(2,028,978)
Additions during the period	7,198,849	2,389,254
Originated by the Institution	4,816,896	1,835,061
Subrogations by other entities	56,991	2,358
Other	2,324,962	551,835
Balance as at 31 December 2021	34,428,676	8,794,185
Disposals during the period	(5,272,051)	(2,798,469)
Terminations upon maturity	(2,557,971)	(468,270)
Early terminations	(1,770,460)	(496,843)
Subrogations by other entities	(47,309)	(6,004)
Derecognised due to securitisations	—	—
Other	(896,311)	(1,827,352)
Additions during the period	6,805,442	1,906,289
Originated by the Institution	4,915,527	1,627,536
Subrogations by other entities	122,565	593
Other	1,767,350	278,160
Balance as at 31 December 2022	35,962,067	7,902,005

B) Liability-side transactions

Information on issues carried out and secured with Banco Sabadell's mortgage loans and credit portfolio included in the cover pool of mortgage covered bonds is provided in the following table, broken down according to whether the sale was by public offering or otherwise and by their residual maturity:

Thousand euro				
Nominal value	2022		2021	
Mortgage covered bonds issued	16,114,410		14,986,254	
<i>Of which: Not recognised on liabilities side of the balance sheet</i>	<i>8,115,000</i>		<i>7,315,000</i>	
Debt securities. Issued through public offering	5,100,000		4,100,000	
Residual maturity up to one year	1,000,000		—	
Residual maturity from one to two years	1,000,000		1,000,000	
Residual maturity from two to three years	—		1,000,000	
Residual maturity from three to five years	1,100,000		—	
Residual maturity from five to ten years	2,000,000		2,100,000	
Residual maturity more than ten years	—		—	
Debt securities. Other issues	10,578,000		9,755,400	
Residual maturity up to one year	338,000		1,677,400	
Residual maturity from one to two years	1,600,000		338,000	
Residual maturity from two to three years	2,750,000		1,600,000	
Residual maturity from three to five years	4,890,000		5,140,000	
Residual maturity from five to ten years	1,000,000		1,000,000	
Residual maturity more than ten years	—		—	
Deposits	436,410		1,130,854	
Residual maturity up to one year	100,000		694,444	
Residual maturity from one to two years	—		100,000	
Residual maturity from two to three years	336,410		—	
Residual maturity from three to five years	—		336,410	
Residual maturity from five to ten years	—		—	
Residual maturity more than ten years	—		—	

	2022		2021	
	Nominal value	Average residual maturity	Nominal value	Average residual maturity
	(thousand euro)	(years)	(thousand euro)	(years)
Mortgage transfer certificates	4,717,842	20	5,466,788	20
Issued through public offering				
Other issues	4,717,842	20	5,466,788	20
Participation mortgages	1,203,590	11	1,535,765	12
Issued through public offering				
Other issues	1,203,590	11	1,535,765	12

Other matters

Royal Decree-Law 24/2021 provides that covered bonds will have a cover pool consisting of a portfolio of assets whose sole purpose is to serve as collateral for the holders of these issues. To that end, the Group has control procedures in place to monitor its entire loan portfolio, the amount drawn down from the loans, any assets that replace them and assets to cover the liquidity requirement and the derivative instruments that comprise each of the cover pools, as well as any collateral received in connection with positions in derivative instruments and any credit right arising from damage insurance policies referred to in Article 23.6 of the abovementioned Royal Decree-Law, as well as to verify compliance with the suitability criteria for allocation to the issuance of mortgage covered bonds, and to comply at all times with the maximum issuance limit. These procedures are all regulated by current mortgage market regulations.

In order to ensure compliance with the regulations governing the mortgage market for covered bonds, the Group has policies and procedures relating to the Group's activity in the mortgage market, with the Board of Directors being responsible for the Group's risk management and control processes (see Note 4.3 "General principles of risk management"). In terms of credit risk, in particular, the Board of Directors confers powers and discretions to the Delegated Credit Committee, which then sub-delegates authority to the various decision-making levels. The internal procedures set up to handle the origination and monitoring of assets that make up the Group's lending, and particularly those secured by mortgages, which back the Group's mortgage covered bond issues, are described in detail below for each type of loan applicant.

Individuals

Loans to individuals are approved and decided on using the credit scoring tools described in Note 4.4.2.2 “Risk management models”. Where necessary, these tools are complemented with the work of a risk analyst, who carries out more in-depth studies of supplementary materials and reports. Furthermore, a series of other information and parameters are considered, such as the consistency of customers’ applications and how well their requested products match their repayment possibilities; customers’ ability to pay based on their current and future circumstances; the value of the property provided as security for the loan (as determined by an appraisal carried out by a valuation firm authorised by Bank of Spain and which the institution’s own internal approval processes will, additionally, have shown to be free of any association with the Group); the availability of any additional guarantees; examinations of internal and external databases of defaulters, etc.

One aspect of the decision-making process involves establishing the maximum amount of the loan, based on the appraisal value of the assets pledged as guarantees, as well as the purchase value if that is the purpose of the loan. As a general rule, under internal Group policies, the maximum amount of the loan relative to the appraisal value or the purchase value, whichever is lower, is applicable to purchases by individuals of properties for use as their primary residence and is fixed at 80%. This provides an upper limit below which a range of other maximum ratios of less than 80% are set, having regard to the purpose of the loan.

In addition, it should be noted that, if the application is accepted and as part of the process of completing the transaction, the charges associated with the assets provided as collateral for the loan granted are reviewed, as well as the insurance policies arranged on the aforementioned collateral, and the corresponding mortgage is registered in the Property Registry.

Concerning approval discretions, the credit scoring tools are the main reference for determining the feasibility of the transaction. Where the loan being sought is above a certain amount, or where factors are present that are not readily captured by a credit scoring procedure, a risk analyst will be involved. The limit for each discretion is based on credit scores and the amount of the transaction/risk of the customer, with additional conditions being specified at each level to determine when special intervention is required. A list of exceptions has been drawn up, based on the particular circumstances of the borrower and the transaction, and these exceptions are covered in the Group’s internal rules and procedures.

As mentioned in Note 4.4.2.2 “Risk management models”, the Group has a comprehensive monitoring system in place which uses early warning tools that enable the early detection of borrowers that could be predisposed to compliance issues. A key part of this process consists of well-established procedures to review and validate the guarantees given.

Corporates engaging in construction and/or real estate development

The Bank includes the management of real estate developer loans in the Real Estate Business Division. This unit has its own organisational structure geared towards a specialised management of these assets based on knowledge of the situation and development of the real estate market. Managing the risks in this portfolio is the responsibility of the Real Estate Risk Division, a specialist unit which forms part of the Risk Management Division.

Risk assessments are carried out by teams of specialised analysts who operate in conjunction with the Real Estate Business Division to ensure that a risk management perspective is combined with a view based on direct contact with customers and knowledge of them.

The decision is reached by assessing both the developer and the project and a set of supplementary information. The developer is assessed on their experience, the current status of ongoing projects, equity situation and financial capacity. The project is assessed in terms of location, distribution and qualities, supply versus demand and forecasts of income and expenses, among other aspects.

Furthermore, the Institution validates that own funds are contributed at the start, that the land is owned and the building permit is in force, that there is a building agreement in place with a solvent construction company and sale agreements (date of signature, date of delivery, payments on account, penalties, etc.).

Loans for real estate development purposes are conditional upon the progress of the project. To that end, an external Project Monitor is engaged that validates the progress of the development item by item and the destination of the funds.

Depending on the quality of the developer and the internal assessment of the project, the maximum loan rate (loan-to-cost, or LTC) is capped and a minimum level of sales is set. This allows the loan to be matched to the risk profile of the transaction.

Decision-making powers and discretions are assigned according to the specific types of portfolios handled within this business segment, which may be related to new projects, sales, purchases or action plans, as established in internal regulations.

The management of these risks is constantly monitored. For development projects, the Project Monitor issues regular reports that give an update on the progress of the works, the level of sales, costs, potential deviations, the planned calendar and potential project concerns. In the case of finished products, the level of sales or rentals is monitored, as well as remaining up-to-date with payment commitments. As in the case of other companies, a key part of this process consists of well-established procedures to review and validate the guarantees given.

Corporates unrelated to construction and/or real estate development

Analyses and decisions concerning the approval of risks (lending and guarantees) are based on rating tools and “core risk management teams”, formed by one person from the business side and one from the risks side at different decision-making levels, both described in Note 4.4.2.2 “Risk management models”. A range of other data and parameters are also taken into account, such as the consistency of the application, ability to pay and the nature of the security provided (as determined by an appraisal carried out by a Bank of Spain-authorized valuation firm which Banco Sabadell’s own approval processes will, additionally, have shown to be free of any association with the Group) and considering any supplementary guarantees, the “fit” between the company’s working capital and its total sales; the appropriateness of the total amount borrowed from the Group based on the business’s capital strength, examinations of internal and external databases of defaulters, etc. The profitability associated with the level of risk of each customer is also included in the analysis, with minimum levels to be achieved.

Reviews of charges and liens associated with the security provided and the registration of mortgages with the Property Registry are also applicable in this case.

Discretion figures are assigned based on the expected loss on the transaction/customer/risk group and the total risk of the customer or risk group. There are several levels in the approval process. In each such level there is a “core management team”, one member of which will be on the business side and one on the risk management side. All loan approvals must be the result of a joint decision. As with retail customers, a set of exceptional circumstances has been specified for borrowers and sectors, and these are provided for in the Group’s internal procedures.

As in the case of retail customers, transactions are monitored using early warning tools. There are also procedures to ensure that the securities and guarantees provided are constantly being reviewed and validated.

Schedule IV – Details of outstanding issues and subordinate liabilities of the Group

Debt securities in issue

The breakdown of the Group's issues as at 31 December 2022 and 2021 is as follows:

Thousand euro							
Issuer	Issue date	Amount		Interest rate ruling as at 31/12/2022	Maturity/call date	Issue currency	Target of offering
		31/12/2022	31/12/2021				
Banco de Sabadell, S.A.	03/07/2017	—	10,000	MAX(EURIBOR 3M + 0.30; 0.3%)	04/07/2022	Euros	Retail
Banco de Sabadell, S.A.	28/07/2017	—	26,800	MAX(EURIBOR 3M; 0.60%)	28/07/2022	Euros	Retail
Banco de Sabadell, S.A.	28/09/2017	—	10,000	MAX(EURIBOR 3M + 0.30; 0.3%)	28/09/2022	Euros	Retail
Banco de Sabadell, S.A.	05/12/2017	1,000,000	1,000,000	0.875%	05/03/2023	Euros	Institutional
Banco de Sabadell, S.A.	26/02/2018	4,000	4,000	MAX(EURIBOR 3M; 0.4%)	27/02/2023	Euros	Retail
Banco de Sabadell, S.A.	16/03/2018	6,000	6,000	MAX(EURIBOR 3M; 0.67%)	17/03/2025	Euros	Retail
Banco de Sabadell, S.A.	03/04/2018	6,000	6,000	MAX(EURIBOR 3M; 0.4%)	03/04/2023	Euros	Retail
Banco de Sabadell, S.A.	31/05/2018	3,000	3,000	MAX(EURIBOR 3M; 0.3%)	31/05/2023	Euros	Retail
Banco de Sabadell, S.A.	07/09/2018	750,000	750,000	1.625%	07/03/2024	Euros	Institutional
Banco de Sabadell, S.A.	14/11/2018	1,000	1,000	MAX(EURIBOR 3M; 1.1%)	14/11/2023	Euros	Retail
Banco de Sabadell, S.A.	14/11/2018	2,500	2,500	MAX(EURIBOR 3M; 1.5%)	14/11/2025	Euros	Retail
Banco de Sabadell, S.A.	28/03/2019	—	601,415	0.700%	28/03/2022	Euros	Retail
Banco de Sabadell, S.A.	10/05/2019	1,000,000	1,000,000	1.750%	10/05/2024	Euros	Institutional
Banco de Sabadell, S.A.	22/07/2019	1,000,000	1,000,000	0.875%	22/07/2025	Euros	Institutional
Banco de Sabadell, S.A.	27/09/2019	500,000	500,000	1.125%	27/03/2025	Euros	Institutional
Banco de Sabadell, S.A. (*)	07/11/2019	500,000	500,000	0.625%	07/11/2024	Euros	Institutional
Banco de Sabadell, S.A. (*)	29/06/2020	—	500,000	1.750%	29/06/2022	Euros	Institutional
Banco de Sabadell, S.A. (*)	11/09/2020	500,000	500,000	1.125%	11/03/2026	Euros	Institutional
Banco de Sabadell, S.A. (*)	15/10/2020	—	120,000	EURIBOR 3M + 0.646%	15/05/2024	Euros	Institutional
TSB Banking Group Plc (*) (**)	29/12/2020	—	535,536	SONIA + 2.1%	29/06/2022	Pounds sterling	Institutional
Banco de Sabadell, S.A. (*)	16/06/2021	500,000	500,000	0.875%	16/06/2027	Euros	Institutional
Banco de Sabadell, S.A.	29/11/2021	67,000	67,000	MAX(EURIBOR 12M; 0.77%)	30/11/2026	Euros	Institutional
Banco de Sabadell, S.A. (*)	24/03/2022	750,000	—	2.625%	24/03/2025	Euros	Institutional
Banco de Sabadell, S.A.	30/3/2022	120,000	—	3.15%	30/03/2037	Euros	Institutional
TSB Banking Group Plc (*)	13/6/2022	507,368	—	SONIA + 2.45%	13/06/2026	Pounds sterling	Institutional
Banco de Sabadell, S.A. (*)	8/9/2022	500,000	—	5.375%	08/09/2025	Euros	Institutional
Banco de Sabadell, S.A. (*)	2/11/2022	750,000	—	5.125%	10/11/2027	Euros	Institutional
Banco de Sabadell, S.A. (*)	23/11/2022	75,000	—	5.500%	23/11/2031	Euros	Institutional
TSB Banking Group Plc (*)	9/12/2022	281,871	—	SONIA + 3.40%	09/12/2025	Pounds sterling	Institutional
Subscribed by Group companies		(874,239)	(620,536)				
Total straight bonds		7,949,500	7,022,715				

(*) "Maturity/call date" refers to the first call option.

(**) Equivalent amount in EUR as at end December 2022.

Thousand euro							
Issuer	Issue date	Amount		Interest rate ruling as at 31/12/2022	Maturity date	Issue currency	Target of offering
		31/12/2022	31/12/2021				
Banco Guipuzcoano, S.A. (*)	18/04/2007	—	25,000	1.70%	18/04/2022	Euros	Institutional
Banco de Sabadell, S.A.	25/07/2012	—	3,000	Underlying benchmark	25/07/2022	Euros	Retail
Banco de Sabadell, S.A.	14/07/2014	10,000	10,000	Underlying benchmark	15/07/2024	Euros	Retail
Banco de Sabadell, S.A.	05/11/2018	10,000	10,000	Underlying benchmark	01/04/2025	Euros	Retail
Banco de Sabadell, S.A.	12/11/2018	3,200	3,200	Underlying benchmark	01/04/2025	Euros	Retail
Banco de Sabadell, S.A.	18/02/2019	—	3,000	Underlying benchmark	18/02/2022	Euros	Retail
Banco de Sabadell, S.A.	04/04/2019	—	3,000	Underlying benchmark	04/10/2022	Euros	Retail
Banco de Sabadell, S.A.	03/06/2022	8,900	—	MAX (EURIBOR 12M;2.75%)	03/06/2027	Euros	Institutional
Banco de Sabadell, S.A.	01/08/2022	9,200	—	MAX (EURIBOR 12M;4%)	02/08/2027	Euros	Institutional
Subscribed by Group companies							
Total structured bonds		41,300	57,200				

(*) Company merged with Banco Sabadell.

Thousand euro

Issuer	Issue date	Amount		Average interest rate	Maturity date	Issue currency	Target of offering
		31/12/2022	31/12/2021	31/12/2022			
Banco de Sabadell, S.A. (*)	10/05/2022	1,445,701	903,897	0.00%	Various	Euros	Institutional
Subscribed by Group companies		(573,805)	(477,803)				
Total commercial paper		871,896	426,094				

(*) Programme with issuance limit of 7,000,000 thousand euros, which can be extended to 9,000,000 thousand euros, registered with Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores, S.A.U. (IBERCLEAR).

Thousand euro

Issuer	Issue date	Amount		Interest rate ruling as at	Maturity date	Issue currency	Target of offering
		31/12/2022	31/12/2021	31/12/2022			
Banco de Sabadell, S.A.	05/10/2012	—	77,400	EURIBOR 3M + 4.80	05/10/2022	Euros	Institutional
Banco de Sabadell, S.A.	26/09/2014	—	250,000	EURIBOR 3M + 0.70	26/09/2022	Euros	Institutional
Banco de Sabadell, S.A.	03/10/2014	38,000	38,000	EURIBOR 3M + 0.68	03/10/2023	Euros	Institutional
Banco de Sabadell, S.A.	05/12/2014	—	100,000	EURIBOR 3 M + 0.40	05/12/2022	Euros	Institutional
Banco de Sabadell, S.A.	04/05/2015	250,000	250,000	EURIBOR 3 M + 0.13	04/05/2023	Euros	Institutional
Banco de Sabadell, S.A.	03/07/2015	50,000	50,000	EURIBOR 3 M + 0.20	03/07/2023	Euros	Institutional
Banco de Sabadell, S.A.	26/01/2016	550,000	550,000	EURIBOR 3M + 0.80	26/01/2024	Euros	Institutional
Banco de Sabadell, S.A.	24/05/2016	50,000	50,000	EURIBOR 3M + 0.535	24/05/2024	Euros	Institutional
Banco de Sabadell, S.A.	10/06/2016	1,000,000	1,000,000	0.63%	10/06/2024	Euros	Institutional
Banco de Sabadell, S.A.	20/10/2016	1,000,000	1,000,000	0.13%	20/10/2023	Euros	Institutional
Banco de Sabadell, S.A.	29/12/2016	250,000	250,000	0.97%	27/12/2024	Euros	Institutional
Banco de Sabadell, S.A.	26/04/2017	1,100,000	1,100,000	1.00%	26/04/2027	Euros	Institutional
Banco de Sabadell, S.A.	21/07/2017	500,000	500,000	0.89%	21/07/2025	Euros	Institutional
Banco de Sabadell, S.A.	21/12/2018	390,000	390,000	1.09%	21/12/2026	Euros	Institutional
Banco de Sabadell, S.A.	30/01/2019	—	1,250,000	EURIBOR 12M + 0.130	30/01/2022	Euros	Institutional
Banco de Sabadell, S.A.	20/12/2019	750,000	750,000	EURIBOR 12M + 0.074	20/12/2024	Euros	Institutional
Banco de Sabadell, S.A.	20/12/2019	750,000	750,000	EURIBOR 12M + 0.104	22/12/2025	Euros	Institutional
Banco de Sabadell, S.A.	20/01/2020	1,000,000	1,000,000	0.13%	10/02/2028	Euros	Institutional
Banco de Sabadell, S.A.	23/06/2020	1,500,000	1,500,000	EURIBOR 12M + 0.080	23/06/2025	Euros	Institutional
Banco de Sabadell, S.A.	30/03/2021	1,000,000	1,000,000	EURIBOR 12M + 0.018	30/03/2026	Euros	Institutional
Banco de Sabadell, S.A.	08/06/2021	1,000,000	1,000,000	EURIBOR 12M + 0.012	08/06/2026	Euros	Institutional
Banco de Sabadell, S.A.	08/06/2021	1,000,000	1,000,000	EURIBOR 12M + 0.022	08/06/2027	Euros	Institutional
Banco de Sabadell, S.A.	21/01/2022	1,500,000	—	EURIBOR 12M + 0.010	21/09/2027	Euros	Institutional
Banco de Sabadell, S.A.	30/05/2022	1,000,000	—	1.75%	30/05/2029	Euros	Institutional
Banco de Sabadell, S.A.	12/12/2022	500,000	—	EURBOR 12M + 0.140	12/06/2028	Euros	Institutional
Banco de Sabadell, S.A.	21/12/2022	500,000	—	EURIBOR 3M + 0.600	20/12/2030	Euros	Institutional
Subscribed by Group companies		(8,115,000)	(7,315,000)				
Total mortgage covered bonds		7,563,000	6,540,400				

Thousand euro

Issuer	Issue date	Amount		Interest rate ruling as at	Maturity date	Issue currency	Target of offering
		31/12/2022	31/12/2021	31/12/2021			
TSB Banking Group Plc	7/12/2017	—	595,040	SONIA + 0.372	7/12/2022	Pounds sterling	Institutional
TSB Banking Group Plc	15/2/2019	845,614	892,560	SONIA + 0.870	15/2/2024	Pounds sterling	Institutional
TSB Banking Group Plc	22/6/2021	563,742	595,040	SONIA + 0.370	22/6/2028	Pounds sterling	Institutional
Subscribed by Group companies		—	—				
Total Covered Bonds		1,409,356	2,082,640				

Securitisations

The following table shows the bonds issued by asset securitisation funds outstanding as at 31 December 2022 and 2021, respectively:

Thousand euro							
Year	Name of fund (*)	Types of issue	Issue		Outstanding balance of liabilities		Yield
			Number of securities	Amount	2022	2021	
2005	TDA CAM 4, F.T.A	RMBS	20,000	2,000,000	47,009	72,293	EURIBOR 3M + (between 0.09% and 0.24%)
2005	TDA CAM 5, F.T.A	RMBS	20,000	2,000,000	105,476	126,029	EURIBOR 3M + (between 0.12% and 0.35%)
2006	TDA CAM 6, F.T.A	RMBS	13,000	1,300,000	68,970	83,863	EURIBOR 3M + (between 0.13% and 0.27%)
2006	TDA CAM 7, F.T.A	RMBS	15,000	1,500,000	82,944	101,682	EURIBOR 3M + (between 0.14% and 0.3%)
2006	CAIXA PENEDES 1 TDA, F.T.A	RMBS	10,000	1,000,000	31,725	37,882	EURIBOR 3M + 0.14%
2006	FTPYME TDA CAM 4, F.T.A	SMEs	15,293	1,529,300	27,614	33,739	EURIBOR 3M + (between 0.29% and 0.61%)
2007	TDA CAM 8, F.T.A	RMBS	17,128	1,712,800	75,165	87,919	EURIBOR 3M + (between 0.13% and 0.47%)
2007	CAIXA PENEDES PYMES 1 TDA, F.T.A	SMEs	7,900	790,000	300	300	EURIBOR 3M + 0.8%
2007	TDA CAM 9, F.T.A	RMBS	15,150	1,515,000	108,025	124,231	EURIBOR 3M + (between 0.19% and 0.75%)
2017	IM SABADELL PYME 11, F.T	SMEs	19,000	1,900,000	—	3,379	EURIBOR 3M + 0.75%
2022	SABADELL CONSUMO 2, F.T.	CONSUMER	7,591	759,100	655,618	—	EURIBOR 1M + (between 0.87% and 13.25%)
Total securitisation funds					1,202,846	671,317	

(*) The bonds issued by securitisation funds are listed in the AIAF market.

Subordinated liabilities

Subordinated liabilities issued by the Group as at 31 December 2022 and 2021 are as follows:

Thousand euro							
Issuer	Issue date	Amount		Interest rate ruling as at 31/12/2022	Maturity/call date	Issue currency	Target of offering
		31/12/2022	31/12/2021				
Banco de Sabadell, S.A.	06/05/2016	500,000	500,000	5.625%	6/5/2026	Euros	Institutional
Banco de Sabadell, S.A. (*)	12/12/2018	500,000	500,000	5.38%	12/12/2023	Euros	Institutional
Banco de Sabadell, S.A. (*)	17/01/2020	300,000	300,000	2.00%	17/01/2025	Euros	Institutional
Banco de Sabadell, S.A. (*)	15/01/2021	500,000	500,000	2.50%	15/04/2026	Euros	Institutional
TSB Banking Group Plc (*)	30/03/2021	338,245	357,024	3.45%	30/03/2026	GBP	Institutional
Subscribed by Group companies		(338,245)	(357,024)				
Total subordinated bonds		1,800,000	1,800,000				

(*) "Maturity/call date" refers to the first call option.

Thousand euro							
Issuer	Issue date	Amount		Interest rate ruling as at 31/12/2022	Maturity/call date	Issue currency	Target of offering
		31/12/2022	31/12/2021				
Banco de Sabadell, S.A. (*)	18/05/2017	—	750,000	6.50%	18/05/2022	Euros	Institutional
Banco de Sabadell, S.A. (*)	23/11/2017	400,000	400,000	6.13%	23/02/2023	Euros	Institutional
Banco de Sabadell, S.A. (*)	15/03/2021	500,000	500,000	5.75%	15/09/2026	Euros	Institutional
Banco de Sabadell, S.A. (*)	19/11/2021	750,000	750,000	5.00%	19/11/2027	Euros	Institutional
Total preferred securities		1,650,000	2,400,000				

(*) Perpetual issue. "Maturity/call date" refers to date of first call option. The aforesaid subordinated securities and undated securities are perpetual, although they may be converted into newly issued Banco Sabadell shares, if either Banco Sabadell or its consolidated group has a Common Equity Tier 1 (CET1) ratio lower than 5.125%, calculated in accordance with Regulation (EU) No 575/2013 of the European Parliament and of the Council, of 26 June, on prudential requirements for credit institutions and investment firms.

The issues included in subordinated liabilities, for the purposes of credit priority, are ranked below all of the Group's regular creditors.

For the purpose of complying with the requirements of IAS 7, the table below shows the reconciliation of liabilities derived from funding activities, identifying the components that have entailed their movements:

Thousand euro	
Total subordinated liabilities as at 31 December 2020	2,873,239
Newly issued	1,750,000
Amortised	(443,497)
Capitalisation	—
Exchange rate	15,258
Change in subordinated liabilities subscribed by Group companies	5,000
Total subordinated liabilities as at 31 December 2021	4,200,000
Newly issued	—
Amortised	(750,000)
Capitalisation	—
Exchange rate	—
Change in subordinated liabilities subscribed by Group companies	—
Total subordinated liabilities as at 31 December 2022	3,450,000

Schedule V – Other risk information

Credit risk exposure

Loans and advances to customers broken down by activity and type of guarantee

The breakdown of the balance of the heading “Loans and advances – Customers” by activity and type of guarantee, excluding advances not classed as loans, as at 31 December 2022 and 2021, respectively, is as follows:

	2022							
	TOTAL	Of which: secured with real estate	Of which: secured with other collateral	Secured loans. Carrying amount based on last available valuation. Loan to value				
				Less than or equal to 40%	Over 40% and less than or equal to 60%	Over 60% and less than or equal to 80%	Over 80% and less than or equal to 100%	Over 100%
General governments	10,112,875	27,806	404,416	21,478	8,006	—	906	401,832
Other financial corporations and individual entrepreneurs (financial business activity)	1,053,004	302,774	362,324	433,339	194,881	21,854	6,451	8,573
Non-financial corporations and individual entrepreneurs (non-financial business activity)	60,962,804	13,324,354	5,961,022	7,596,497	4,652,265	2,200,628	1,546,495	3,289,491
Construction and real estate development (including land)	2,558,107	1,490,609	316,320	756,742	534,819	153,846	147,140	214,382
Civil engineering construction	968,875	25,767	151,094	140,083	11,224	2,729	3,783	19,042
Other purposes	57,435,822	11,807,978	5,493,608	6,699,672	4,106,222	2,044,053	1,395,572	3,056,067
Large enterprises	25,586,942	2,161,488	2,006,076	1,773,688	443,347	276,123	372,204	1,302,202
SMES and individual entrepreneurs	31,848,880	9,646,490	3,487,532	4,925,984	3,662,875	1,767,930	1,023,368	1,753,865
Other households	85,544,442	77,898,980	1,384,690	17,922,933	24,711,578	26,895,158	6,936,913	2,817,088
Home loans	77,075,115	76,728,550	296,420	17,006,740	24,088,867	26,531,341	6,779,029	2,618,993
Consumer loans	5,440,517	41,627	672,238	126,801	262,036	149,721	74,613	100,694
Other purposes	3,028,810	1,128,803	416,032	789,392	360,675	214,096	83,271	97,401
TOTAL	157,673,125	91,553,914	8,112,452	25,974,247	29,566,730	29,117,640	8,490,765	6,516,984
MEMORANDUM ITEM								
Refinancing, refinanced and restructured transactions	4,512,316	2,911,059	272,013	961,790	840,122	534,705	248,379	598,076

Thousand euro

	2021							
	TOTAL	Of which: secured with real estate	Of which: secured with other collateral	Secured loans. Carrying amount based on last available valuation. Loan to value				
				Less than or equal to 40%	Over 40% and less than or equal to 60%	Over 60% and less than or equal to 80%	Over 80% and less than or equal to 100%	Over 100%
General governments	9,408,771	33,916	553,176	13,891	11,091	—	963	561,147
Other financial corporations and individual entrepreneurs (financial business activity)	948,435	188,751	370,675	394,379	119,440	26,501	6,063	13,043
Non-financial corporations and individual entrepreneurs (non-financial business activity)	60,321,572	13,494,991	5,387,073	7,661,213	4,648,179	2,596,527	1,397,013	2,579,132
Construction and real estate development (including land)	2,652,955	1,569,215	320,736	829,524	496,816	248,870	144,481	170,260
Civil engineering construction	819,200	32,852	25,371	26,128	12,252	2,556	2,803	14,484
Other purposes	56,849,417	11,892,924	5,040,966	6,805,561	4,139,111	2,345,101	1,249,729	2,394,388
Large enterprises	24,465,428	1,893,913	1,944,357	1,992,477	332,307	294,649	505,815	713,022
SMES and individual entrepreneurs	32,383,989	9,999,011	3,096,609	4,813,084	3,806,804	2,050,452	743,914	1,681,366
Other households	86,247,200	78,518,084	1,316,948	16,755,153	23,692,853	28,115,931	7,955,458	3,315,637
Home loans	77,741,032	77,267,421	324,331	15,851,014	23,061,319	27,752,944	7,775,459	3,151,016
Consumer loans	5,387,338	48,559	622,025	164,816	245,859	127,265	74,417	58,227
Other purposes	3,118,830	1,202,104	370,592	739,323	385,675	235,722	105,582	106,394
TOTAL	156,925,978	92,235,742	7,627,872	24,824,636	28,471,563	30,738,959	9,359,497	6,468,959
MEMORANDUM ITEM								
Refinancing, refinanced and restructured transactions	5,503,333	3,117,314	397,856	955,550	949,483	742,577	409,411	458,149

In terms of risks with LTV >80%, these mainly correspond to transactions from acquired entities or business operations in which, as a supplement to the valuation of the transaction, a mortgage guarantee is available to cover that transaction. Similarly, there are other additional reasons for approval, which mainly correspond to solvent borrowers with a proven payment capacity, as well as customers with a good profile who contribute guarantees (personal guarantees and/or pledges) which are additional to the mortgage guarantees already considered in the LTV ratio.

Refinancing and restructuring transactions

The outstanding balance of refinancing and restructuring transactions as at 31 December 2022 and 2021 is as follows:

	2022						Total
	Credit institutions	General governments	Other financial corporations and individual entrepreneurs (financial business activity)	Non-financial corporations and individual entrepreneurs (non-financial business activity)	Of which: lending for construction and real estate development (including land)	Other households	
TOTAL							
Not secured with collateral							
Number of transactions	—	13	77	29,290	807	59,586	88,966
Gross carrying amount	—	8,115	24,424	1,910,336	76,455	245,991	2,188,866
Secured with collateral							
Number of transactions	—	1	11	7,936	1,238	14,654	22,602
Gross carrying amount	—	100	1,688	2,079,054	180,451	1,323,929	3,404,771
Impairment allowances	—	1,049	15,313	776,751	79,589	288,210	1,081,323
Of which, non-performing loans							
Not secured with collateral							
Number of transactions	—	10	35	14,428	478	43,708	58,181
Gross carrying amount	—	6,938	16,529	891,441	60,892	173,526	1,088,434
Secured with collateral							
Number of transactions	—	1	5	4,539	1,128	7,202	11,747
Gross carrying amount	—	100	218	895,810	75,145	759,672	1,655,800
Impairment allowances	—	864	15,176	702,017	74,597	262,845	980,902
TOTAL							
Number of transactions	—	14	88	37,226	2,045	74,240	111,568
Gross value	—	8,215	26,112	3,989,390	256,906	1,569,920	5,593,637
Impairment allowances	—	1,049	15,313	776,751	79,589	288,210	1,081,323
Additional information: lending included under non-current assets and disposal groups classified as held for sale	—	—	—	—	—	—	—

Thousand euro

	2021						
	Credit institutions	General governments	Other financial corporations and individual entrepreneurs (financial business activity)	Non-financial corporations and individual entrepreneurs (non-financial business activity)	Of which: lending for construction and real estate development (including land)	Other households	Total
TOTAL							
Not secured with collateral							
Number of transactions	—	14	173	35,608	688	64,850	100,645
Gross carrying amount	—	9,055	28,192	2,571,808	138,613	332,020	2,941,075
Secured with collateral							
Number of transactions	—	2	17	8,732	1,367	14,957	23,708
Gross carrying amount	—	203	2,492	2,329,048	170,870	1,561,620	3,893,363
Impairment allowances	—	1,255	16,215	972,963	78,863	340,664	1,331,097
Of which, non-performing loans							
Not secured with collateral							
Number of transactions	—	12	58	17,603	410	44,497	62,170
Gross carrying amount	—	8,133	17,719	977,368	64,623	210,091	1,213,311
Secured with collateral							
Number of transactions	—	1	9	5,543	1,253	8,417	13,970
Gross carrying amount	—	126	627	916,569	78,527	879,217	1,796,539
Impairment allowances	—	1,255	15,978	823,960	69,424	302,977	1,144,170
TOTAL							
Number of transactions	—	16	190	44,340	2,055	79,807	124,353
Gross value	—	9,258	30,684	4,900,856	309,483	1,893,640	6,834,438
Impairment allowances	—	1,255	16,215	972,963	78,863	340,664	1,331,097
Additional information: lending included under non-current assets and disposal groups classified as held for sale	—	—	—	—	—	—	—

The value of the guarantees received to ensure collection associated with refinancing and restructuring transactions, broken down into collateral and other guarantees, as at 31 December 2022 and 2021, is as follows:

Thousand euro

Guarantees received	2022	2021
Value of collateral	2,893,373	3,430,237
Of which: securing stage 3 loans	1,310,560	1,382,700
Value of other guarantees	1,061,177	1,281,854
Of which: securing stage 3 loans	376,624	316,047
Total value of guarantees received	3,954,550	4,712,091

Detailed movements of the balance of refinancing and restructuring transactions during 2022 and 2021 are as follows:

Thousand euro

	2022	2021
Opening balance	6,834,437	5,337,617
(+) Forbearance (refinancing and restructuring) in the period	933,461	3,190,252
Memorandum item: impact recognised on the income statement for the period	116,365	227,263
(-) Debt repayments	(919,789)	(854,208)
(-) Foreclosures	(8,044)	(13,460)
(-) Derecognised from the balance sheet (reclassified as write-offs)	(105,546)	(137,743)
(+)/(-) Other changes (*)	(1,140,882)	(688,020)
Year-end balance	5,593,637	6,834,438

(*) Includes transactions no longer classified as refinancing, refinanced or restructured due to meeting the requirements for reclassification from stage 2 to stage 1 exposures (see Note 1.3.4).

The table below shows the value of transactions which, after refinancing or restructuring, have been classified as stage 3 exposures during 2022 and 2021:

Thousand euro	2022	2021
General governments	—	—
Other legal entities and individual entrepreneurs	374,135	297,088
<i>Of which: Lending for construction and real estate development</i>	20,280	15,882
Other natural persons	90,171	209,610
Total	464,306	506,698

The average probability of default on current refinanced and restructured transactions broken down by activity as at 31 December 2022 and 2021 is as follows:

%	2022	2021
General governments (*)		—
Other legal entities and individual entrepreneurs	14	13
<i>Of which: Lending for construction and real estate development</i>	19	12
Other natural persons	10	10

(*) Authorisation has not been granted for the use of internal models in the calculation of capital requirements.

Average probability of default calculated as at 30 September 2022.

Concentration risk

Geographical exposure

Global

The breakdown of risk concentration, by activity and at a global level, as at 31 December 2022 and 2021 is as follows:

Thousand euro	2022				
	TOTAL	Spain	Rest of European Union	Americas	Rest of the world
Central banks and Credit institutions	47,918,906	34,158,121	3,778,817	2,613,583	7,368,385
General governments	36,026,312	27,319,509	4,865,464	1,685,660	2,155,679
Central governments	25,682,763	18,162,012	4,671,930	693,142	2,155,679
Other	10,343,549	9,157,497	193,534	992,518	—
Other financial corporations and individual entrepreneurs	7,416,023	1,367,666	2,502,161	485,170	3,061,026
Non-financial corporations and individual entrepreneurs	63,587,639	48,156,329	3,400,613	9,597,141	2,433,556
Construction and real estate development	2,680,945	2,205,881	54,640	286,390	134,034
Civil engineering construction	1,043,510	767,633	14,266	236,171	25,440
Other purposes	59,863,184	45,182,815	3,331,707	9,074,580	2,274,082
Large enterprises	27,398,039	16,773,028	1,859,562	7,549,562	1,215,887
SMEs and individual entrepreneurs	32,465,145	28,409,787	1,472,145	1,525,018	1,058,195
Other households	86,241,976	39,850,415	1,193,792	612,502	44,585,267
Home loans	77,672,228	33,741,442	1,170,817	282,090	42,477,879
Consumer loans	5,440,517	3,488,618	8,853	6,998	1,936,048
Other purposes	3,129,231	2,620,355	14,122	323,414	171,340
TOTAL	241,190,856	150,852,040	15,740,847	14,994,056	59,603,913

Thousand euro

	2021				
	TOTAL	Spain	Rest of European Union	Americas	Rest of the world
Central banks and Credit institutions	56,135,227	42,901,463	4,324,590	1,937,097	6,972,077
General governments	30,944,737	23,058,110	2,905,921	1,521,875	3,458,831
Central governments	22,243,892	15,386,550	2,905,917	492,765	3,458,660
Other	8,700,845	7,671,560	4	1,029,110	171
Other financial corporations and individual entrepreneurs	3,029,456	1,281,242	773,852	478,222	496,140
Non-financial corporations and individual entrepreneurs	62,991,664	48,323,248	3,330,753	8,599,608	2,738,055
Construction and real estate development	2,721,772	2,296,122	3,961	300,391	121,298
Civil engineering construction	916,490	872,392	19,718	5,013	19,367
Other purposes	59,353,402	45,154,734	3,307,074	8,294,204	2,597,390
Large enterprises	26,326,637	15,295,916	2,159,755	7,218,989	1,651,977
SMEs and individual entrepreneurs	33,026,765	29,858,818	1,147,319	1,075,215	945,413
Other households	86,396,456	39,304,626	979,842	515,497	45,596,491
Home loans	77,782,121	33,274,507	952,291	218,760	43,336,563
Consumer loans	5,387,338	3,297,195	6,812	5,521	2,077,810
Other purposes	3,226,997	2,732,924	20,739	291,216	182,118
TOTAL	239,497,540	154,868,689	12,314,958	13,052,299	59,261,594

By autonomous communities

The breakdown of risk concentration, by activity and at the level of Spanish autonomous communities, as at 31 December 2022 and 2021, respectively, is as follows:

Thousand euro

	TOTAL	2022								
		AUTONOMOUS COMMUNITIES								
		Andalusia	Aragón	Asturias	Balearic Islands	Canary Islands	Cantabria	Castilla-La Mancha	Castilla y León	Catalonia
Central banks and Credit institutions	34,158,121	5,145	1	13	8	2	349,943	—	—	350,636
General governments	27,319,509	548,524	282,965	377,523	413,874	614,807	5,646	177,985	886,455	806,616
Central governments	18,162,012	—	—	—	—	—	—	—	—	—
Other	9,157,497	548,524	282,965	377,523	413,874	614,807	5,646	177,985	886,455	806,616
Other financial corporations and individual entrepreneurs	1,367,666	4,751	1,754	3,187	1,433	941	247	705	11,318	496,126
Non-financial corporations and individual entrepreneurs	48,156,329	2,461,160	1,077,323	1,355,755	2,131,431	1,162,785	203,928	677,576	1,191,791	13,643,536
Construction and real estate development	2,205,881	97,474	38,811	43,796	73,749	25,553	7,609	16,082	33,632	519,457
Civil engineering construction	767,633	32,037	11,282	21,868	5,224	4,860	4,146	6,674	14,556	156,519
Other purposes	45,182,815	2,331,649	1,027,230	1,290,091	2,052,458	1,132,372	192,173	654,820	1,143,603	12,967,560
Large enterprises	16,773,028	631,451	380,888	383,933	956,528	295,167	73,266	186,787	235,303	4,383,584
SMEs and individual entrepreneurs	28,409,787	1,700,198	646,342	906,158	1,095,930	837,205	118,907	468,033	908,300	8,583,976
Other households	39,850,415	2,814,410	562,841	1,168,698	1,467,079	615,733	116,407	510,091	781,608	15,385,484
Home loans	33,741,442	2,305,080	487,577	937,797	1,305,843	436,697	99,189	408,621	626,088	13,366,915
Consumer loans	3,488,618	381,060	41,462	93,342	89,192	154,546	10,152	73,193	91,257	1,049,933
Other purposes	2,620,355	128,270	33,802	137,559	72,044	24,490	7,066	28,277	64,263	968,636
TOTAL	150,852,040	5,833,990	1,924,884	2,905,176	4,013,825	2,394,268	676,171	1,366,357	2,871,172	30,682,398

Thousand euro

	2022								
	AUTONOMOUS COMMUNITIES								
	Extremadura	Galicia	Madrid	Murcia	Navarre	Valencia	Basque Country	La Rioja	Ceuta and Melilla
Central banks and Credit institutions	—	11,345	32,841,524	2	—	100,128	499,374	—	—
General governments	73,251	660,025	2,464,005	53,136	308,543	693,533	709,949	56,001	24,659
Central governments	—	—	—	—	—	—	—	—	—
Other	73,251	660,025	2,464,005	53,136	308,543	693,533	709,949	56,001	24,659
Other financial corporations and individual entrepreneurs	93	3,729	778,585	3,310	488	24,084	29,769	7,130	16
Non-financial corporations and individual entrepreneurs	197,915	2,404,086	12,870,370	1,122,284	608,933	4,755,150	2,080,952	191,396	19,958
Construction and real estate development	1,948	94,226	969,667	31,131	11,134	151,009	80,439	9,611	553
Civil engineering construction	2,174	43,328	336,020	14,633	3,006	60,242	47,909	2,279	876
Other purposes	193,793	2,266,532	11,564,683	1,076,520	594,793	4,543,899	1,952,604	179,506	18,529
Large enterprises	51,207	756,107	5,625,249	236,223	236,299	1,469,595	812,271	58,931	239
SMEs and individual entrepreneurs	142,586	1,510,425	5,939,434	840,297	358,494	3,074,304	1,140,333	120,575	18,290
Other households	151,499	975,804	5,433,400	2,050,394	168,933	6,116,889	1,375,881	71,251	84,013
Home loans	116,510	734,267	4,494,023	1,734,407	139,664	5,177,257	1,233,510	59,076	78,921
Consumer loans	27,443	146,638	567,330	174,643	9,796	502,475	67,443	6,017	2,696
Other purposes	7,546	94,899	372,047	141,344	19,473	437,157	74,928	6,158	2,396
TOTAL	422,758	4,054,989	54,387,884	3,229,126	1,086,897	11,689,784	4,695,925	325,778	128,646

Thousand euro

	2021									
	TOTAL	AUTONOMOUS COMMUNITIES								
		Andalusia	Aragón	Asturias	Balearic Islands	Canary Islands	Cantabria	Castilla-La Mancha	Castilla y León	Catalonia
Central banks and Credit institutions	42,901,463	5,610	8	2	—	2	290,083	1	—	270,562
General governments	23,058,110	350,471	119,243	360,503	383,630	299,697	6,647	105,290	709,478	904,436
Central governments	15,386,550	—	—	—	—	—	—	—	—	—
Other	7,671,560	350,471	119,243	360,503	383,630	299,697	6,647	105,290	709,478	904,436
Other financial corporations and individual entrepreneurs	1,281,242	5,325	2,810	3,642	1,323	837	287	833	14,705	536,990
Non-financial corporations and individual entrepreneurs	48,323,248	2,477,885	1,027,327	1,490,319	2,294,312	1,261,855	201,262	625,905	1,106,996	14,226,345
Construction and real estate development	2,296,122	84,280	40,585	46,909	90,043	26,854	10,497	15,220	26,690	556,249
Civil engineering construction	872,392	33,172	9,461	20,230	7,502	3,639	5,580	6,740	17,163	143,110
Other purposes	45,154,734	2,360,433	977,281	1,423,180	2,196,767	1,231,362	185,185	603,945	1,063,143	13,526,986
Large enterprises	15,295,916	520,792	312,677	446,085	932,259	351,140	55,657	143,991	199,151	4,413,074
SMEs and individual entrepreneurs	29,858,818	1,839,641	664,604	977,095	1,264,508	880,222	129,528	459,954	863,992	9,113,912
Other households	39,304,626	2,764,232	547,729	1,163,902	1,435,534	596,049	114,198	496,557	773,274	15,321,766
For house purchase	33,274,507	2,285,812	470,373	929,102	1,276,716	424,622	96,902	401,705	617,482	13,241,197
Consumer loans	3,297,195	344,663	42,835	89,927	85,105	147,048	9,043	64,404	86,338	1,020,198
Other purposes	2,732,924	133,757	34,521	144,873	73,713	24,379	8,253	30,448	69,454	1,060,371
TOTAL	154,868,689	5,603,523	1,697,117	3,018,368	4,114,799	2,158,440	612,477	1,228,586	2,604,453	31,260,099

Thousand euro

	2021								
	AUTONOMOUS COMMUNITIES								
	Extremadura	Galicia	Madrid	Murcia	Navarre	Valencia	Basque Country	La Rioja	Ceuta and Melilla
Central banks and Credit institutions	—	5,136	42,024,234	2	180	116,748	188,895	—	—
General governments	87,251	419,626	1,876,784	55,766	291,266	701,521	859,215	110,090	30,646
Central governments	—	—	—	—	—	—	—	—	—
Other	87,251	419,626	1,876,784	55,766	291,266	701,521	859,215	110,090	30,646
Other financial corporations and individual entrepreneurs	99	4,380	655,805	3,107	477	27,658	22,862	84	18
Non-financial corporations and individual entrepreneurs	176,135	2,348,363	12,190,026	1,133,579	601,156	4,889,933	2,063,837	187,401	20,612
Construction and real estate development	2,071	64,311	1,023,028	35,361	20,977	146,930	96,077	9,698	342
Civil engineering construction	2,039	47,318	429,982	12,463	2,607	63,133	65,976	1,815	462
Other purposes	172,025	2,236,734	10,737,016	1,085,755	577,572	4,679,870	1,901,784	175,888	19,808
Large enterprises	19,967	726,793	4,587,849	235,642	205,908	1,392,587	705,700	46,124	520
SMEs and individual entrepreneurs	152,058	1,509,941	6,149,167	850,113	371,664	3,287,283	1,196,084	129,764	19,288
Other households	139,718	900,696	5,226,038	2,038,198	171,896	6,183,773	1,274,889	80,285	75,892
For house purchase	103,585	669,564	4,339,875	1,735,994	138,787	5,283,696	1,128,245	59,509	71,341
Consumer loans	28,185	137,929	533,090	157,659	12,085	451,813	69,924	14,684	2,265
Other purposes	7,948	93,203	353,073	144,545	21,024	448,264	76,720	6,092	2,286

Sectoral concentration

The breakdown by activity sector of loans and advances to non-financial corporations is shown below:

Thousand euro

	2022	
	Gross carrying amount	Allowances
Agriculture, livestock farming, forestry and fisheries	1,076,502	(42,865)
Mining and quarrying	369,936	(7,452)
Manufacturing	9,868,505	(256,971)
Electricity, gas, steam and air-conditioning supply	4,785,320	(86,295)
Water supply	352,310	(3,257)
Construction	4,233,888	(173,834)
Wholesale and retail trade	8,944,060	(256,582)
Transportation and storage	3,794,633	(79,969)
Hotel and catering	4,592,388	(143,964)
Information and communication	1,836,754	(25,602)
Financial and insurance activities	4,595,168	(83,165)
Real estate activities	6,779,311	(162,317)
Professional, scientific and technical activities	2,358,265	(95,985)
Administrative and auxiliary services	1,670,244	(36,732)
Public administration and defence; mandatory social security	378,164	(664)
Education	321,192	(10,179)
Healthcare and social services	937,181	(12,758)
Artistic, leisure and entertainment activities	511,259	(78,890)
Other services	1,043,584	(126,549)
Total	58,448,664	(1,684,030)

Thousand euro

	2021	
	Gross carrying amount	Allowances
Agriculture, livestock farming, forestry and fisheries	1,012,584	(42,464)
Mining and quarrying	493,468	(12,852)
Manufacturing	9,571,740	(295,943)
Electricity, gas, steam and air-conditioning supply	4,366,081	(90,250)
Water supply	525,395	(10,470)
Construction	4,337,141	(197,600)
Wholesale and retail trade	8,276,117	(289,990)
Transportation and storage	3,807,434	(123,248)
Hotel and catering	5,257,216	(177,921)
Information and communication	1,851,024	(36,135)
Financial and insurance activities	4,207,742	(111,808)
Real estate activities	7,093,051	(165,108)
Professional, scientific and technical activities	2,537,007	(125,444)
Administrative and auxiliary services	2,009,404	(36,096)
Public administration and defence; mandatory social security	347,411	(769)
Education	311,378	(10,631)
Healthcare and social services	747,882	(15,428)
Artistic, leisure and entertainment activities	545,161	(30,968)
Other services	323,455	(20,191)
Total	57,620,691	(1,793,316)

Sovereign risk exposure

Sovereign risk exposures, broken down by type of financial instrument and applying the criteria required by the EBA, as at 31 December 2022 and 2021, are as follows:

Thousand euro

Sovereign risk exposure by country (*)	2022											
	Sovereign debt securities					Loans and advances to customers (**)	Of which: Financial assets FVOCI or non-derivative and non-trading financial assets measured at fair value to equity	Derivatives		Total	Other off-balance sheet exposures (***)	%
	Financial assets held for trading	Financial liabilities held for trading - Short positions	Mandatorily at fair value through profit or loss	Measured at fair value through other comprehensive income	Financial assets at amortised cost			With positive fair value	With negative fair value			
Spain	6,434	(135,382)	—	3,196,334	14,028,933	11,113,371	—	1,903	(9,021)	28,202,572	—	76.6%
Italy	20,284	(79,404)	—	—	3,057,287	—	—	—	—	2,998,168	—	8.1%
United States	—	—	11,851	833,134	257,520	233	—	—	—	1,102,737	—	3.0%
United Kingdom	—	—	—	575,289	1,524,614	24,077	—	—	—	2,123,980	—	5.8%
Portugal	—	—	—	—	740,688	3,042	—	—	—	743,730	—	2.0%
Mexico	—	—	—	428,712	100,303	43,904	—	—	—	572,919	—	1.6%
Rest of the world	293,320	—	—	192,611	586,427	13,508	—	—	—	1,085,866	—	2.9%
Total	320,038	(214,786)	11,851	5,226,080	20,295,772	11,198,135	—	1,903	(9,021)	36,829,972	—	100%

(*) Sovereign exposure positions shown in accordance with EBA criteria.

(**) Includes undrawn balances of credit transactions and other contingent risks (1,041 million euros as at 31 December 2022).

(***) Relates to commitments for cash purchases and sales of financial assets.

Thousand euro

Sovereign risk exposure by country (*)	2021											
	Sovereign debt securities					Loans and advances to customers (**)	Of which: Financial assets FVOCI or non-derivative and non-trading financial assets measured at fair value to equity	Derivatives		Total	Other off-balance sheet exposures (***)	%
	Financial assets held for trading	Financial liabilities held for trading - Short positions	Mandatorily at fair value through profit or loss	Measured at fair value through other comprehensive income	Financial assets at amortised cost			With positive fair value	With negative fair value			
Spain	74,979	(46,751)	—	3,807,149	9,747,536	10,486,762	—	15,323	(16)	24,084,982	—	75.3%
Italy	202,456	—	—	49,021	2,135,300	—	—	—	—	2,386,777	—	7.5%
United States	—	—	2,727	887,114	197,875	233	—	—	—	1,087,949	—	3.4%
United Kingdom	—	—	—	1,284,232	1,921,159	34,011	—	—	—	3,239,402	—	10.1%
Portugal	5	—	—	—	355,552	1,949	—	—	—	357,506	—	1.1%
Mexico	—	—	—	311,831	100,194	12,499	—	—	—	424,524	—	1.3%
Rest of the world	261,156	—	—	106,623	—	22,704	—	—	—	390,483	—	1.2%
Total	538,596	(46,751)	2,727	6,445,970	14,457,616	10,558,158	—	15,323	(16)	31,971,623	—	100%

(*) Sovereign exposure positions shown in accordance with EBA criteria.

(**) Includes undrawn balances of credit transactions and other contingent risks (1,084 million euros as at 31 December 2021).

(***) Relates to commitments for cash purchases and sales of financial assets.

Exposure to construction and real estate development sector

Details of lending for construction and real estate development and the relevant allowances are set out below. The lending items shown have been classified in terms of their intended purpose, rather than by the debtor's NACE code. This implies, for example, that if a debtor is (a) a real estate company, but uses the financing for a purpose other than construction or real estate development, it is not included in this table. Alternatively, if the debtor is (b) a company whose primary activity is not construction or real estate, but where the loan is used for the financing of properties intended for real estate development, it is included in the table:

Million euro

	2022		
	Gross carrying amount	Surplus above value of collateral	Impairment allowances (*)
Lending for construction and real estate development (including land) (business in Spain)	2,527	578	123
<i>Of which: risks classified as stage 3</i>	<i>189</i>	<i>82</i>	<i>97</i>

Million euro

	2021		
	Gross carrying amount	Surplus above value of collateral	Impairment allowances (*)
Lending for construction and real estate development (including land) (business in Spain)	2,554	607	135
<i>Of which: risks classified as stage 3</i>	<i>218</i>	<i>93</i>	<i>111</i>

(*) Allowances for the exposure for which the Bank retains the credit risk. Does not include allowances for exposures with transferred risk.

Million euro

Gross carrying amount		
Memorandum Item:	2022	2021
Write-offs (*)	21	15

Million euro

Memorandum Item:	2022	2021
Loans to customers, excluding General Governments (business in Spain) (carrying amount)	91,064	90,569
Total assets (total business) (carrying amount)	251,380	251,947
Allowances and provisions for exposures classed as stage 2 or stage 1 (total operations)	908	942

(*) Refers to lending for construction and real estate development reclassified as write-offs during the year.

The breakdown of lending for construction and real estate development for transactions registered by credit institutions (business in Spain) is as follows:

Million euro

	Gross carrying amount 2022	Gross carrying amount 2021
Not secured with real estate	969	745
Secured with real estate	1,558	1,809
Buildings and other completed works	772	835
Housing	567	596
Other	205	239
Buildings and other works in progress	654	784
Housing	621	751
Other	34	33
Land	132	190
Consolidated urban land	95	154
Other land	37	36
Total	2,527	2,554

The figures presented do not show the total value of guarantees received, but rather the net carrying amount of the associated exposure.

Guarantees received associated with lending for construction and real estate development are shown hereafter, for both periods:

Million euro

Guarantees received	2022	2021
Value of collateral	1,506	1,727
<i>Of which: securing stage 3 loans</i>	<i>66</i>	<i>88</i>
Value of other guarantees	347	321
<i>Of which: securing stage 3 loans</i>	<i>19</i>	<i>13</i>
Total value of guarantees received	1,853	2,048

The breakdown of loans to households for home purchase for transactions recorded by credit institutions (business in Spain) is as follows:

Million euro		
2022		
	Gross carrying amount	Of which: stage 3 exposures
Loans for home purchase	35,934	780
Not secured with real estate	596	29
Secured with real estate	35,338	751

Million euro		
2021		
	Gross carrying amount	Of which: stage 3 exposures
Loans for home purchase	35,253	924
Not secured with real estate	553	44
Secured with real estate	34,700	880

The tables below show mortgage-secured lending to households for house purchases broken down by the loan-to-value ratio from the most recent appraisal available of transactions recorded by credit institutions (business in Spain):

Million euro		
2022		
	Gross value	Of which: stage 3 exposures
LTV ranges	35,338	751
LTV <= 40%	6,679	118
40% < LTV <= 60%	9,573	153
60% < LTV <= 80%	12,608	193
80% < LTV <= 100%	4,096	130
LTV > 100%	2,382	157

Million euro		
2021		
	Gross value	Of which: stage 3 exposures
LTV ranges	34,700	880
LTV <= 40%	6,500	120
40% < LTV <= 60%	9,112	180
60% < LTV <= 80%	11,783	210
80% < LTV <= 100%	4,443	160
LTV > 100%	2,862	210

Lastly, the table below gives details of assets foreclosed or received in lieu of debt by the consolidated Group entities, for transactions recorded by credit institutions within Spain, as at 31 December 2022 and 2021:

	2022			
	Gross carrying amount	Allowances	Gross value (*)	Allowances (*)
Real estate assets acquired through lending for construction and real estate development	487	158	531	215
Completed buildings	448	140	485	188
Housing	269	71	286	95
Other	179	69	199	93
Buildings under construction	4	1	5	3
Housing	3	1	5	3
Other	—	—	—	—
Land	35	16	41	24
Developed land	19	8	22	12
Other land	16	8	19	12
Real estate assets acquired through mortgage lending to households for home purchase	522	136	598	218
Other real estate assets foreclosed or received in lieu of debt	24	5	27	10
Capital instruments foreclosed or received in lieu of debt	—	—	—	—
Capital instruments of institutions holding assets foreclosed or received in lieu of debt	—	—	—	—
Financing to institutions holding assets foreclosed or received in lieu of debt	—	—	—	—
TOTAL	1,032	299	1,157	443

(*) Non-performing real estate assets including real estate located outside Spain and the coverage established in the original financing, and excluding the credit risk transferred in portfolio sales (see reconciliation between assets foreclosed or received in payment of debt and non-performing assets, below).

	2021			
	Gross carrying amount	Allowances	Gross value (*)	Allowances (*)
Real estate assets acquired through lending for construction and real estate development	639	204	686	264
Completed buildings	594	185	631	236
Housing	378	114	400	145
Other	216	71	230	91
Buildings under construction	5	2	7	4
Housing	5	2	6	4
Other	—	—	—	—
Land	40	17	48	24
Developed land	23	9	30	13
Other land	17	8	19	11
Real estate assets acquired through mortgage lending to households for home purchase	566	154	646	242
Other real estate assets foreclosed or received in lieu of debt	24	5	30	13
Capital instruments foreclosed or received in lieu of debt	3	—	—	—
Capital instruments of institutions holding assets foreclosed or received in lieu of debt	—	—	—	—
Financing to institutions holding assets foreclosed or received in lieu of debt	—	—	—	—
TOTAL	1,232	363	1,362	520

(*) Non-performing real estate assets including real estate located outside Spain and the coverage established in the original financing, and excluding the credit risk transferred in portfolio sales (see reconciliation between assets foreclosed or received in payment of debt and non-performing assets, below).

The table below sets out the reconciliation between assets foreclosed or received in lieu of debt and real estate assets considered non-performing by the Group as at 31 December 2022 and 2021:

	2022		
	Gross value	Allowances	Net book value
Total real estate portfolio in the national territory (in books)	1,032	299	734
Total operations outside the national territory and others	1	1	1
Provision allocated in original loan	174	174	—
Credit risk transferred in portfolio sales	(51)	(30)	(21)
Total non-performing real estate	1,157	443	713

	2021		
	Gross value	Allowances	Net book value
Total real estate portfolio in the national territory (in books)	1,229	363	867
Total operations outside the national territory and others	7	3	5
Provision allocated in original loan	194	194	—
Credit risk transferred in portfolio sales	(69)	(40)	(29)
Total non-performing real estate	1,362	520	842

Loans and advances subject to statutory and sector moratoria and financing granted subject to government guarantee schemes and operations modified in accordance with the Code of Good Practice

Information concerning loans and credit granted by the Group that are subject to statutory or sector moratoria, as well as financing granted that has benefited from the government guarantee schemes established to enable the Group's customers to cope with the impact of Covid-19, as at 31 December 2022 and 2021, is set out below:

	31/12/2022						
	Gross carrying amount	With no breaches	Of which: refinanced exposures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	With breaches	Of which: refinanced exposures	Of which: less than 90 days past due
Loans and advances subject to moratoria	—	—	—	—	—	—	—
<i>Of which: Households</i>	—	—	—	—	—	—	—
<i>Of which: Secured by residential property</i>	—	—	—	—	—	—	—
<i>Of which: Non-financial corporations</i>	—	—	—	—	—	—	—
<i>Of which: SMEs</i>	—	—	—	—	—	—	—
<i>Of which: Secured by commercial property</i>	—	—	—	—	—	—	—

	31/12/2022						
	Accumulated impairment, accumulated negative changes in fair value due to credit risk	With no breaches	Of which: refinanced exposures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	With breaches	Of which: refinanced exposures	Of which: less than 90 days past due
Loans and advances subject to moratoria	—	—	—	—	—	—	—
<i>Of which: Households</i>	—	—	—	—	—	—	—
<i>Of which: Secured by residential property</i>	—	—	—	—	—	—	—
<i>Of which: Non-financial corporations</i>	—	—	—	—	—	—	—
<i>Of which: SMEs</i>	—	—	—	—	—	—	—
<i>Of which: Secured by commercial property</i>	—	—	—	—	—	—	—

Thousand euro

	31/12/2021						
	Gross carrying amount	With no breaches	Of which: refinanced exposures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	With breaches	Of which: refinanced exposures	Of which: less than 90 days past due
Loans and advances subject to moratoria	197,135	195,611	52,126	53,927	1,524 (*)	1,394	1,408
<i>Of which: Households</i>	8,100	6,666	650	2,180	1,434	1,366	1,380
<i>Of which: Secured by residential property</i>	2,804	1,549	528	977	1,255	1,255	1,255
<i>Of which: Non-financial corporations</i>	189,034	188,945	51,476	51,747	90	29	29
<i>Of which: SMEs</i>	158,210	158,121	51,476	51,747	90	29	29
<i>Of which: Secured by commercial property</i>	51,936	51,875	40,532	40,649	61	—	—

(*) Of which 1.5 million euro correspond to stage 3 transactions.

Thousand euro

	31/12/2021						
	Accumulated impairment, accumulated negative changes in fair value due to credit risk	With no breaches	Of which: refinanced exposures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	With breaches	Of which: refinanced exposures	Of which: less than 90 days past due
Loans and advances subject to moratoria	(3,258)	(3,072)	(3,054)	(2,172)	(2,201)	(186)	(67)
<i>Of which: Households</i>	(210)	(48)	(29)	(5)	(34)	(163)	(44)
<i>Of which: Secured by residential property</i>	(129)	(14)	—	(1)	(14)	(115)	—
<i>Of which: Non-financial corporations</i>	(3,048)	(3,025)	(3,025)	(2,166)	(2,168)	(23)	(23)
<i>Of which: SMEs</i>	(2,964)	(2,941)	(2,941)	(2,166)	(2,168)	(23)	(23)
<i>Of which: Secured by commercial property</i>	(1,634)	(1,622)	(1,622)	(1,603)	(1,604)	(11)	(11)

Thousand euro

	31/12/2022							
	Gross carrying amount	Of which: subject to legislative moratoria	Of which: expired	Remaining validity period of moratoria				
				Less than 3 months	3 to 6 months	6 to 9 months	9 to 12 months	More than 12 months
Loans and advances subject to moratorium (granted)	6,794,789	4,374,169	6,794,789	—	—	—	—	—
<i>Of which: Households</i>	6,457,307	4,050,901	6,457,307	—	—	—	—	—
<i>Of which: Secured by residential property</i>	6,073,476	3,947,439	6,073,476	—	—	—	—	—
<i>Of which: Non-financial corporations</i>	337,217	323,004	337,217	—	—	—	—	—
<i>Of which: SMEs</i>	307,376	293,172	307,376	—	—	—	—	—
<i>Of which: Secured by commercial property</i>	282,878	271,431	282,878	—	—	—	—	—

Thousand euro

	31/12/2021							
	Gross carrying amount	Of which: subject to legislative moratoria	Of which: expired	Remaining validity period of moratoria				
				Less than 3 months	3 to 6 months	6 to 9 months	9 to 12 months	More than 12 months
Loans and advances subject to moratorium (granted)	8,544,562	5,641,866	8,347,428	171,892	25,243	—	—	—
<i>Of which: Households</i>	8,021,621	5,258,623	8,013,520	8,100	—	—	—	—
<i>Of which: Secured by residential property</i>	7,457,730	5,060,563	7,454,926	2,804	—	—	—	—
<i>Of which: Non-financial corporations</i>	522,591	382,892	333,557	163,791	25,243	—	—	—
<i>Of which: SMEs</i>	451,817	343,018	293,606	132,967	25,243	—	—	—
<i>Of which: Secured by commercial property</i>	329,570	317,178	277,634	26,693	25,243	—	—	—

Thousand euro

	31/12/2022		
	Gross carrying amount	Of which: refinanced	Maximum amount of the guarantee that can be considered
			Public financial guarantees received
Newly originated loans and advances subject to public guarantee schemes	7.824.731 (*)	783,440	5,978,744
<i>Of which: Households</i>	830,511	—	—
<i>Of which: Secured by residential property</i>	—	—	—
<i>Of which: Non-financial corporations</i>	6,991,468	740,600	5,320,481
<i>Of which: SMEs</i>	5,341,435	—	—
<i>Of which: Secured by commercial property</i>	26,901	—	—

(*) Of which 514 million euro correspond to stage 3 transactions.

Thousand euro

	31/12/2021		
	Gross carrying amount	Of which: refinanced	Maximum amount of the guarantee that can be considered
			Public financial guarantees received
Newly originated loans and advances subject to public guarantee schemes	9.362.892 (*)	909,670	7,189,136
<i>Of which: Households</i>	1,014,618	—	—
<i>Of which: Secured by residential property</i>	—	—	—
<i>Of which: Non-financial corporations</i>	8,345,090	859,706	6,371,037
<i>Of which: SMEs</i>	6,345,176	—	—
<i>Of which: Secured by commercial property</i>	34,650	—	—

(*) Of which 341 million euro correspond to stage 3 transactions.

In 2022, in accordance with the Code of Good Practice, Banco Sabadell has modified a total of 1,520 ICO Covid transactions that had an outstanding principal amount of 173 million euros on the date of modification. Of these modifications, 1,517 consisted of loan term extensions, for an amount of 173 million euros, and 3 write-offs, for an amount of 217 thousand euros, with no conversions of profit participation loans having been carried out.

As at 31 December 2021, in accordance with the Code of Good Practice, Banco Sabadell had modified a total of 718 transactions that had an outstanding principal amount of 127 million euros on the date of modification. The total amount corresponded to loan term extensions, with no conversion of profit participation loans and/or write-downs carried out.

Schedule VI – Annual banking report

INFORMATION REQUIRED UNDER ARTICLE 89 OF DIRECTIVE 2013/36/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 26 JUNE 2013

This information has been prepared pursuant to Article 89 of Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, and the transposition thereof into Spanish national legislation in accordance with Article 87 and Transitional Provision 12 of Law 10/2014 of 26 June on the organisation, supervision and solvency of credit institutions, published in the Official State Gazette of 27 June 2014.

In accordance with the above regulations, the following information is presented on a consolidated basis and corresponds to the end of the 2022 financial year:

Thousand euro

	Turnover	No. of employees on a full time equivalent basis	Profit or loss before tax	Corporation tax
Spain	3,635,992	12,541	844,000	(223,405)
United Kingdom	1,166,902	5,157	196,267	(101,533)
Mexico	147,110	432	42,705	(9,856)
United States	184,299	240	144,311	(34,614)
Other	45,735	88	15,363	(3,848)
Total	5,180,038	18,458	1,242,646	(373,256)

As at 31 December 2022, the return on Group assets, calculated by dividing the consolidated gains/(losses) for the year by total assets on the consolidated balance sheet, amounts to 0.34%.

The name, geographical location and nature of the business activity of the companies operating in each jurisdiction are set out in Schedule I to these Group consolidated annual financial statements.

As can be seen in Schedule I, the main activity carried out by the Group in the different jurisdictions in which it operates is banking, and fundamentally commercial banking through a wide range of products and services for large and medium-sized enterprises, SMEs, retailers and self-employed workers, professional groups, other individuals and bancassurance.

For the purposes of this information, business turnover is regarded as the gross income recognised on the consolidated income statement at 2022 year-end. Data on full-time equivalent staff have been obtained from the workforce of each company/country as at the end of 2022.

The amount of public subsidies and aid received is not material.

Glossary of terms on alternative performance measures

In the presentation of its results to the market, and for the purpose of monitoring the business and decision-making processes, the Group uses performance indicators pursuant to the generally accepted accounting regulations (EU-IFRS), and also uses other unaudited measures commonly used in the banking industry (Alternative Performance Measures, or APMs) as monitoring indicators for the management of assets and liabilities, and the financial and economic situation of the Group, which facilitates its comparison with other institutions.

Following the ESMA guidelines on APMs (ESMA/2015/1415 of October 2015), the purpose of which is to promote the use and transparency of information for the protection of investors in the European Union, the Group presents in this section the definition, calculation and reconciliation for each APM.

Performance measure	Definition and calculation	Use or purpose
Gross performing loans to customers	Includes gross customer loans and advances, excluding repos, accrual adjustments and stage 3 assets.	Key figure among the main indicators of a financial institution's business, the performance of which is monitored.
Gross loans to customers	Includes loans and advances to customers excluding impairment allowances.	Key figure among the main indicators of a financial institution's business, the performance of which is monitored.
On-balance sheet customer funds	Includes customer deposits (ex-repos) and other liabilities sold by the branch network (Banco Sabadell straight bonds, commercial paper and others).	Key figure in the Group's consolidated balance sheet, the performance of which is monitored.
On-balance sheet funds	Includes the following accounting sub-headings: customer deposits, debt securities issued (borrowings, other marketable securities and subordinated liabilities).	Key figure among the main indicators of a financial institution's business, the performance of which is monitored.
Off-balance sheet customer funds	Includes mutual funds, asset management, pension funds and insurance products sold.	Key figure among the main indicators of a financial institution's business, the performance of which is monitored.
Funds under management and third-party funds	The sum of on-balance sheet funds and off-balance sheet customer funds.	Key figure among the main indicators of a financial institution's business, the performance of which is monitored.
Customer spread	Difference between yield and costs of customer-related assets and liabilities, i.e. the contribution of exclusively customer-related transactions to net interest income. Calculated as the difference between the average rate that the Bank charges its customers for loans and the average rate that the Bank pays its customers for deposits. The average rate on customer loans and advances is the annualised ratio, in percentage terms, between financial revenues booked on customer loans and advances and the average daily balance of customer loans and advances. The average rate on customer funds is the annualised ratio, in percentage terms, between the financial cost booked on customer funds and the average daily balance of customer funds.	It reflects the profitability of purely banking activity.
Other assets	Comprises the following accounting items: derivatives - hedge accounting, fair value changes of the hedged items in portfolio hedge of interest rate risk, tax assets, other assets, assets under insurance or reinsurance contracts and non-current assets and disposal groups classified as held for sale.	Key figure among the main indicators of a financial institution's business, the performance of which is monitored.
Other liabilities	Comprises the following accounting items: derivatives - hedge accounting, fair value changes of the hedged items in portfolio hedge of interest rate risk, tax liabilities, other liabilities and liabilities included in disposal groups classified as held for sale.	Key figure among the main indicators of a financial institution's business, the performance of which is monitored.
Other operating income and expenses	Comprises the following accounting items: other operating income and other operating expenses as well as income from assets and expenses from liabilities under insurance or reinsurance contracts.	Grouping of items used to explain part of the performance of the Group's consolidated results.
Pre-provisions income	Comprises the following accounting items: gross income plus administrative expenses and depreciation/amortisation.	It is one of the key figures that reflects the performance of the Group's consolidated results.

Total provisions and impairments	Comprises the following accounting items: (i) impairment or reversal of impairment of financial assets not measured at fair value through profit or loss and net modification losses or gains, (ii) provisions or reversal of provisions, (iii) impairment or reversal of impairment of investments in joint ventures or associates, (iv) impairment or reversal of impairment of non-financial assets, (v) profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (excluding gains or losses on the sale of equity holdings and other items), and (vi) gains or losses on derecognition of non-financial assets, net (including only gains or losses on the sale of investment properties).	Grouping of items used to explain part of the performance of the Group's consolidated results.
Capital gains on asset sales and other revenue	Comprises the following accounting items: (i) gains or (-) losses on derecognition of non-financial assets, net (excluding gains or (-) losses on the sale of investment properties), and (ii) profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (including only gains or losses on the sale of equity holdings and other items).	Grouping of items used to explain part of the performance of the Group's consolidated results.
ROA	Consolidated profit or loss for the year / average total assets. The numerator considers the annualisation of the profit earned to date. The numerator also accrues to date the expense relating to contributions to the Deposit Guarantee Fund (DGF) and the Single Resolution Fund (SRF) and the Spanish tax on deposits of credit institutions (IDEC), except at year-end. Average total assets: arithmetic mean calculated as the sum of the daily balances for the reference period and divided by the number of days in said period.	A measure commonly used in the financial sector to determine the accounting return on Group assets.
RORWA	Profit attributable to the Group / risk-weighted assets (RWAs). The numerator considers the annualisation of the profit earned to date. The numerator also accrues to date the expense relating to contributions to the Deposit Guarantee Fund (DGF) and the Single Resolution Fund (SRF) and the Spanish tax on deposits of credit institutions (IDEC), except at year-end. Risk-weighted assets: total assets of a credit institution, multiplied by its respective risk factors (risk weights). Risk factors reflect the perceived level of risk of a particular asset class.	A measure commonly used in the financial sector to determine the accounting return on risk-weighted assets.
ROE	Profit attributable to the Group / average shareholders' equity. The numerator considers the annualisation of the profit earned to date. The numerator also accrues to date the expense relating to contributions to the Deposit Guarantee Fund (DGF) and the Single Resolution Fund (SRF) and the Spanish tax on deposits of credit institutions (IDEC), except at year-end. Average shareholders' equity: average shareholders' equity calculated using the month-end balance since December of the previous year.	A measure commonly used in the financial sector to determine the accounting return on the Group's shareholders' equity.

ROTE	Profit attributable to the Group / average shareholders' equity. The numerator considers the annualisation of the profit earned to date. The numerator also accrues to date the expense relating to contributions to the Deposit Guarantee Fund (DGF) and the Single Resolution Fund (SRF) and the Spanish tax on deposits of credit institutions (IDEC), except at year-end. The denominator excludes intangible assets and goodwill of investees. Average shareholders' equity: average shareholders' equity calculated using the month-end balance since December of the previous year.	Additional measure of the accounting return on shareholders' equity, but excluding goodwill from its calculation.
Cost-to-income ratio	Administrative expenses / adjusted gross income. The denominator includes the accrual on a straight-line basis of contributions to the Deposit Guarantee Fund and the Single Resolution Fund and the Spanish tax on deposits of credit institutions, except at year-end.	Main indicator of efficiency or productivity of banking activity.
Cost-to-income ratio with amortisation/ depreciation	Administrative expenses, amortisations and depreciations / adjusted gross income. The denominator includes the accrual on a straight-line basis of contributions to the Deposit Guarantee Fund and the Single Resolution Fund and the Spanish tax on deposits of credit institutions, except at year-end.	One of the main indicators of efficiency or productivity of banking activity.
Exposures classified as stage 3	These include: (i) assets classified as stage 3 including other valuation adjustments (accrued interests, fees and commissions, and other) classified as stage 3 of loans and advances not classified as non-current assets held for sale and (ii) guarantees given classified as stage 3.	It is one of the main indicators used in the banking industry to monitor the status and evolution of the quality of credit risk undertaken with customers and to assess its management.
Stage 3 coverage ratio, with total provisions	Percentage of stage 3 exposures that is covered by total provisions. Calculated as impairment of loans and advances to customers (including provisions for guarantees given) / total exposures classified as stage 3 (including guarantees given classified as stage 3).	It is one of the main indicators used in the banking sector to monitor the status and evolution of the quality of credit risk undertaken with customers and shows the stage 3 provisions that the Institution has allocated for loans classified as stage 3.
Stage 3 coverage ratio	Percentage of stage 3 exposures that is covered by stage 3 provisions. Calculated as impairment of stage 3 customer loans and advances (including provisions for stage 3 guarantees given) / total stage 3 exposures (including guarantees given classified as stage 3).	It is one of the main indicators used in the banking industry to monitor the status and evolution of the quality of credit risk undertaken with customers and shows the provisions that the Institution has allocated for loans classified as stage 3.
Non-performing assets	The sum of risks classified as stage 3 plus non-performing real estate assets. Non-performing real estate assets are foreclosed properties or properties accepted in payment of debt and properties classified in the portfolio of non-current assets and disposal groups classified as held for sale, except for investment properties with significant unrealised capital gains and those under lease for which there is a final agreement for a sale to take place following refurbishment.	Indicator of total exposure to risks classified as stage 3 and to non-performing real estate assets.
Non-performing real estate coverage ratio	The non-performing real estate coverage ratio is obtained by dividing provisions for non-performing real estate assets by total non-performing real estate assets. Non-performing real estate assets: foreclosed properties or properties accepted in payment of debt and properties classified in the portfolio of non-current assets and disposal groups classified as held for sale, except for investment properties with significant unrealised capital gains and those under lease for which there is a final agreement for a sale to take place following refurbishment.	It is one of the main indicators used in the banking industry to monitor the status and evolution of the quality of real estate risk and shows the provisions that the Institution has allocated for real estate exposure.

NPA coverage ratio	This ratio considers the impairment fund of customer loans and advances (including provisions of guarantees given) plus the provisions associated with non-performing real estate in the numerator, while the denominator considers total non-performing assets.	It is one of the main indicators used in the banking industry to monitor the status and evolution of the quality of credit risk and real estate risk, and it shows the provisions that the Institution has allocated for non-performing exposures.
NPL ratio	Calculated as a ratio, whose numerator includes: (i) assets classified as stage 3 including other valuation adjustments (accrued interests, fees and commissions, and other) classified as stage 3 of loans and advances not classified as non-current assets held for sale, and (ii) guarantees given classified as stage 3. The denominator includes: (i) gross loans to customers, excluding repos or loans and advances to customers, excluding ATAs and without impairment allowances, and (ii) guarantees given.	It is one of the main indicators used in the banking industry to monitor the status and evolution of the quality of credit risk undertaken with customers and to assess its management.
Credit cost of risk (bps)	The ratio between provisions for loan losses / loans to customers and guarantees given. The numerator considers the straight-line annualisation of loan loss provisions. It is also adjusted to account for costs associated with managing assets classified as stage 3.	A relative measure of risk, being one of the main indicators used in the banking industry to monitor the status and evolution of the quality of credit risk through the cost or loss due to financial asset impairments that have taken place in one year.
Total cost of risk (bps)	The ratio between total provisions and impairments / loans to customers, guarantees given and non-performing real estate assets. The numerator considers the straight-line annualisation of total provisions and impairments.	A relative measure of risk, being one of the main indicators used in the banking industry to monitor the status and evolution of the quality of credit risk through the cost or loss due to financial asset impairments that have taken place in one year.
Loan-to-deposit ratio	Net loans and receivables / retail funding. Brokered loans are subtracted from the numerator to calculate this ratio. The denominator considers retail funding or customer funds, defined in this table.	Measures a Bank's liquidity as the ratio of the funds at its disposal relative to the volume of lending items granted to customers. Liquidity is one of the key aspects that define the structure of an institution.
Market capitalisation	Calculated by multiplying the share price by the average number of shares outstanding as at the reporting date.	It is an economic market measurement or market ratio that indicates the total value of a company according to its market price.
Earnings per share (EPS)	Calculated by dividing the net profit (or loss) attributable to the Group by the average number of shares outstanding as at the reporting date. The numerator considers the straight-line annualisation of profit (or loss) earned to date adjusted by the amount of the Additional Tier 1 coupon recognised in shareholders' equity, after tax. The numerator also accrues to date the expense relating to contributions to the Deposit Guarantee Fund (DGF) and the Single Resolution Fund (SRF) and the Spanish tax on deposits of credit institutions (IDEC), except at year-end.	It is an economic measurement or market ratio that indicates a company's profitability, and it is one of the measurements used most frequently to assess institutions' performance.
Book value per share	Book value / average number of shares as at the reporting date. The book value is the sum of shareholders' equity, adjusted to account for the accrual to date of contributions to the Deposit Guarantee Fund (DGF) and the Single Resolution Fund (SRF) and the Spanish tax on deposits of credit institutions (IDEC), except at year-end.	It is an economic market measurement or market ratio that indicates the book value per share.

TBV per share	Tangible book value / average number of shares outstanding as at the reporting date. The tangible book value is the sum of shareholders' equity adjusted to account for intangible assets and goodwill of investees, as well as the accrual to date of contributions to the Deposit Guarantee Fund (DGF) and the Single Resolution Fund (SRF) and the Spanish tax on deposits of credit institutions (IDEC), except at year-end.	It is an economic market measurement or market ratio that indicates the tangible book value per share.
P/TBV (price/tangible book value per share)	Share price or value / tangible book value per share.	Economic measurement or market ratio commonly used by the market, which represents the listed price of a share relative to its book value.
Price/earnings ratio (P/E)	Share price or value / net earnings per share.	Economic measurement or market ratio commonly used by the market to determine a company's ability to generate future earnings.

Equivalence of headings from the income statement of businesses and management units that appear in Note 38 on “Segment information” and in the Directors’ Report with those of the consolidated income statement (*)

Net fees and commissions:

- Fee and commission income.
- (Fee and commission expenses).

Core revenue:

- Net interest income.
- Fee and commission income.
- (Fee and commission expenses).

Other operating income and expenses:

- Other operating income.
- (Other operating expenses).

Operating expenses, depreciation and amortisation:

- (Administrative expenses).
- (Depreciation and amortisation).

Pre-provisions income:

- Gross income.
- (Administrative expenses).
- (Depreciation and amortisation).

Provisions and impairments:

- (Impairment or (-) reversal of impairment on financial assets not measured at fair value through profit or loss and net modification losses or (-) gains).
- (Provisions or (-) reversal of provisions).
- (Impairment or (-) reversal of impairment on investments in joint ventures and associates).
- (Impairment or (-) reversal of impairment on non-financial assets).
- Profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (excluding gains or (-) losses on the sale of equity holdings and other items).
- Gains or (-) losses on derecognition of non-financial assets and equity holdings, net (including only gains or losses on sale of investment properties).

Provisions for loan losses:

- (Impairment or (-) reversal of impairment on financial assets not measured at fair value through profit or loss and net modification losses or (-) gains).
- (Provisions or (-) reversal of provisions) (including only commitments and guarantees given).

Provisions for other financial assets:

- (Provisions or (-) reversal of provisions) (excluding commitments and guarantees given).

Other provisions and impairments:

- (Impairment or (-) reversal of impairment on investments in joint ventures and associates).
- (Impairment or (-) reversal of impairment on non-financial assets).
- Profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (excluding gains or (-) losses on the sale of equity holdings and other items).
- Gains or (-) losses on derecognition of non-financial assets and equity holdings, net (including only gains or losses on sale of investment properties).

Capital gains on asset sales and other revenue:

- Gains or (-) losses on derecognition of non-financial assets and equity holdings, net (excluding gains or losses on sale of investment properties).
- Profit or (-) loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (including only gains or (-) losses on the sale of equity holdings and other items).

(*) Headings in the consolidated income statement expressed in brackets denote negative figures.

APMs reconciliation (data in million euros, with the exception of those shown in percentages).

BALANCE SHEET	31/12/2022	31/12/2021
Gross loans to customers / Gross performing loans to customers		
Loans and credit secured with mortgages	89,340	90,718
Loans and credit secured with other collateral	3,412	3,596
Commercial loans	7,489	6,050
Finance leases	2,227	2,106
Overdrafts, etc.	53,663	52,443
Gross performing loans to customers	156,130	154,912
Stage 3 assets (customers)	5,461	5,698
Accrual adjustments	159	58
Gross loans to customers, excluding repos	161,750	160,668
Repos	—	—
Gross loans to customers	161,750	160,668
Impairment allowances	(3,020)	(3,302)
Loans and advances to customers	158,730	157,366
On-balance sheet customer funds		
Financial liabilities at amortised cost	232,530	235,179
Non-retail financial liabilities	68,390	73,159
Deposits - central banks	27,844	38,250
Deposits - credit institutions	11,373	8,817
Institutional issues	22,514	21,270
Other financial liabilities	6,659	4,822
On-balance sheet customer funds	164,140	162,020
On-balance sheet funds		
Customer deposits	164,076	162,239
Sight deposit accounts	147,540	147,268
Deposits with agreed maturity including deposits redeemable at notice and hybrid financial liabilities	16,141	14,813
Reverse repos	405	60
Accrual adjustments and hedging derivatives	(9)	98
Borrowings and other marketable securities	19,100	16,822
Subordinated liabilities (*)	3,478	4,229
On-balance sheet funds	186,654	183,290
Off-balance sheet customer funds		
Mutual funds	22,581	24,593
Assets under management	3,532	3,795
Pension funds	3,182	3,525
Insurance products sold	9,197	9,765
Off-balance sheet customer funds	38,492	41,678
Funds under management and third-party funds		
On-balance sheet funds	186,654	183,290
Off-balance sheet customer funds	38,492	41,678
Funds under management and third-party funds	225,146	224,968

(*) Subordinated liabilities in connection with debt securities.

BALANCE SHEET	31/12/2022	31/12/2021
Other assets		
Derivatives - Hedge accounting	3,072	525
Fair value changes of the hedged items in portfolio hedge of interest rate risk	(1,546)	(4)
Tax assets	6,851	7,027
Other assets	480	620
Non-current assets and disposal groups classified as held for sale	738	778
Other assets	9,596	8,946
Other liabilities		
Derivatives - Hedge accounting	1,242	512
Fair value changes of the hedged items in portfolio hedge of interest rate risk	(959)	19
Tax liabilities	227	205
Other liabilities	872	768
Liabilities included in disposal groups classified as held for sale	—	—
Other liabilities	1,382	1,505

INCOME STATEMENT	31/12/2022	31/12/2021
Customer spread		
Loans and advances to customers (net)		
Average balance	157,870	152,176
Profit/(loss)	3,966	3,513
Rate (%)	2.51	2.31
Customer deposits		
Average balance	162,393	154,610
Profit/(loss)	(309)	(135)
Rate (%)	(0.19)	(0.09)
Customer spread	2.32	2.22
Other operating income and expenses		
Other operating income	122	155
Other operating expenses	(459)	(467)
Income from assets under insurance or reinsurance contracts	—	—
Expenses on liabilities under insurance or reinsurance contracts	—	—
Other operating income and expenses	(337)	(313)

	31/12/2022	31/12/2021
Pre-provisions income		
Gross income	5,180	5,026
Administrative expenses	(2,337)	(2,781)
Staff expenses	(1,392)	(1,777)
Other general administrative expenses	(946)	(1,004)
Depreciation and amortisation	(545)	(527)
Pre-provisions income	2,298	1,719
Total provisions and impairments		
Impairment or reversal of impairment on investments in joint ventures and associates	(12)	(9)
Impairment or reversal of impairment on non-financial assets, adjusted	(58)	(106)
Impairment or reversal of impairment on non-financial assets	(61)	(106)
Gains or losses on sale of investment properties	3	—
Profit or loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations, adjusted	(26)	(63)
Profit or loss from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations	(28)	(7)
Gains or losses on the sale of equity holdings and other items	2	(55)
Other provisions and impairments	(96)	(178)
Provisions or reversal of provisions	(97)	(88)
Impairment or reversal of impairment and gains or losses on changes in cash flows from financial assets not measured at fair value through profit or loss and net modification losses or gains	(840)	(960)
Provisions for loan losses and other financial assets	(936)	(1,047)
Total provisions and impairments	(1,032)	(1,225)
Capital gains on asset sales and other revenue		
Gains or losses on derecognition of non-financial assets, net	(17)	71
Gains or losses on the sale of equity holdings and other items	(2)	55
Gains or losses on sale of investment properties	(3)	—
Capital gains on asset sales and other revenue	(23)	126

PROFITABILITY AND EFFICIENCY

	31/12/2022	31/12/2021
ROA		
Average total assets	257,692	245,313
Consolidated profit or loss for the year	869	539
ROA (%)	0.34	0.22
RORWA		
Risk-weighted assets (RWAs)	79,554	80,646
Net profit attributable to the Group	859	530
RORWA (%)	1.08	0.66
ROE		
Average shareholders' equity	13,598	13,106
Net profit attributable to the Group	859	530
ROE (%)	6.31	4.05
ROTE		
Average shareholders' equity (excluding intangible assets)	11,061	10,508
Net profit attributable to the Group	859	530
ROTE (%)	7.76	5.05
Cost-to-income ratio		
Gross income	5,180	5,026
Administrative expenses	(2,337)	(2,781)
Cost-to-income ratio (%)	45.12	55.33
Depreciation and amortisation	(545)	(527)
Cost-to-income ratio with amortisation/depreciation (%)	55.65	65.80

RISK MANAGEMENT	31/12/2022	31/12/2021
Stage 3 exposures		
Assets classified as stage 3 (including other valuation adjustments)	5,491	5,729
Guarantees given classified as stage 3 (off-balance sheet)	324	475
Stage 3 exposures	5,814	6,203
Stage 3 coverage ratio, with total provisions		
Provisions for loan losses	3,200	3,495
Exposures classified as stage 3	5,814	6,203
Stage 3 coverage ratio, with total provisions (%)	55.0 %	56.3 %
Stage 3 coverage ratio		
Provisions for stage 3 loan losses	2,292	2,553
Exposures classified as stage 3	5,814	6,203
Stage 3 coverage ratio (%)	39.4 %	41.2 %
Non-performing assets		
Exposures classified as stage 3	5,814	6,203
Non-performing real estate assets	1,157	1,362
Non-performing assets	6,971	7,565
NPA coverage ratio		
Provisions for non-performing assets	3,644	4,014
Non-performing assets	6,971	7,565
NPA coverage ratio (%)	52.3 %	53.1 %
Non-performing real estate coverage ratio		
Provisions for non-performing real estate assets	443	520
Non-performing real estate assets	1,157	1,362
Non-performing real estate coverage ratio (%)	38.3 %	38.2 %
NPL ratio		
Exposures classified as stage 3	5,814	6,203
Gross loans to customers, excluding repos	161,750	160,668
Guarantees given (off-balance sheet)	9,003	9,268
NPL ratio (%)	3.4 %	3.7 %
Credit cost of risk		
Gross loans to customers, excluding repos	161,750	160,668
Guarantees given (off-balance sheet)	9,003	9,268
Provisions for loan losses	(825)	(950)
NPL expenses	(82)	(118)
Credit cost of risk (bps)	44	49
Total cost of risk		
Gross loans to customers, excluding repos	161,750	160,668
Guarantees given (off-balance sheet)	9,003	9,268
Non-performing real estate assets	1,157	1,362
Total provisions and impairments	(1,032)	(1,225)
Total cost of risk (bps)	60	72

LIQUIDITY MANAGEMENT

31/12/2022

31/12/2021

Loan-to-deposit ratio

Net loans and advances excluding ATAs, adjusted for brokered loans	156,924	156,076
On-balance sheet customer funds	164,140	162,020
Loan-to-deposit ratio (%)	95.6 %	96.3 %

SHAREHOLDERS AND SHARES

31/12/2022

31/12/2021

Average number of shares (million)	5,594	5,586
Listed price	0.881	0.592
Market capitalisation (million euros)	4,927	3,306
Profit attributable to the Group, adjusted	748	430
Profit attributable to the Group	859	530
Adjustment for accrued AT1	(110)	(101)
Average number of shares (million)	5,594	5,586
Earnings per share (euros)	0.13	0.08
Shareholders' equity	13,841	13,357
Average number of shares (million)	5,594	5,586
Book value per share (euros)	2.47	2.39
Shareholders' equity	13,841	13,357
Intangible assets	2,484	2,607
Tangible book value (shareholders' equity, adjusted)	11,357	10,750
Average number of shares (million)	5,594	5,586
TBV per share (euros)	2.03	1.92
Listed price	0.881	0.592
TBV per share (euros)	2.03	1.92
P/TBV (price/tangible book value per share)	0.43	0.31
Listed price	0.881	0.592
Earnings per share (euros)	0.13	0.08
Price/earnings ratio (P/E)	6.58	7.69



Auditor's Report on Banco de Sabadell, S.A. and Subsidiaries

(Together with the consolidated annual financial statements and consolidated directors' report of Banco de Sabadell, S.A. and subsidiaries for the year ended 31 December 2022)

(Translation from the original in Spanish. In the event of discrepancy, the Spanish-language version prevails.)



KPMG Auditores, S.L.
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(Barcelona)

Independent Auditor's Report on the Consolidated Annual Financial Statements

(Translation from the original in Spanish. In the event of discrepancy, the Spanish-language version prevails.)

To the shareholders of Banco de Sabadell, S.A.

REPORT ON THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS

Opinion

We have audited the consolidated annual financial statements of Banco de Sabadell, S.A. (the "Bank") and its subsidiaries that, together with the Bank, form the Banco de Sabadell Group (hereinafter the "Group"), which comprise the consolidated balance sheet at 31 December 2022, and the consolidated income statement, consolidated statement of recognised income and expenses, consolidated statement of total changes in equity and consolidated cash flow statement for the year then ended, and consolidated notes.

In our opinion, the accompanying consolidated annual financial statements give a true and fair view, in all material respects, of the consolidated equity and consolidated financial position of the Group at 31 December 2022 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union (IFRS-EU) and other provisions of the financial reporting framework applicable in Spain.

Basis for Opinion

We conducted our audit in accordance with prevailing legislation regulating the audit of accounts in Spain. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Annual Financial Statements* section of our report.

We are independent of the Group in accordance with the ethical requirements, including those regarding independence, that are relevant to our audit of the consolidated annual financial statements pursuant to the legislation regulating the audit of accounts in Spain. We have not provided any non-audit services, nor have any situations or circumstances arisen which, under the aforementioned regulations, have affected the required independence such that this has been compromised.

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

(Translation from the original in Spanish. In the event of discrepancy, the Spanish-language version prevails.)

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the consolidated annual financial statements of the current period. These matters were addressed in the context of our audit of the consolidated annual financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Impairment of loans and advances to customers

See notes 1.3.4.1, 4.4.2 and 11 to the consolidated annual financial statements

<i>Key audit matter</i>	<i>How the matter was addressed in our audit</i>
<p>The Group's portfolio of loans and advances to customers reflects a net balance of Euros 158,730 million at 31 December 2022, while allowances and provisions recognised at that date for impairment total Euros 3,020 million.</p> <p>For the purposes of estimating impairment, financial assets measured at amortised cost are classified into three categories (Stage 1, 2 or 3) according to whether a significant increase in credit risk since their initial recognition has been identified (Stage 2), whether the financial assets are credit-impaired (Stage 3) or whether neither of the foregoing circumstances apply (Stage 1). For the Group, establishing this classification is a relevant process inasmuch as the calculation of allowances and provisions for credit risk varies depending on the category in which the financial asset has been included.</p> <p>Impairment is calculated based on models for estimating expected losses, which the Group estimates on both an individual and a collective basis. This calculation entails a considerable level of judgement as this is a significant and complex estimate.</p> <p>Allowances and provisions for credit risk determined individually consider estimates of future business performance and the market value of collateral provided for credit transactions.</p> <p>In the case of allowances and provisions calculated collectively, expected losses are estimated using internal models that use large databases, different macroeconomic scenarios, parameters to estimate provisions, segmentation criteria and automated processes, which are complex in their design and implementation and require past and present information and future forecasts to be considered. The Group regularly conducts tests of its internal models in order to improve their predictive capabilities based on actual historical experience.</p>	<p>Our audit approach in relation to the Group's estimate of impairment of loans and advances to customers due to credit risk mainly consisted of assessing the methodology applied to calculate expected losses, particularly as regards the methods and assumptions used to estimate exposure at default, probability of default and loss given default; and determining the future macroeconomic scenarios. We also assessed the mathematical accuracy of the calculations of expected losses and the reliability of the data used. To this end, we brought in our credit risk specialists.</p> <p>Our procedures related to the control environment focused on the following key areas:</p> <ul style="list-style-type: none"> – Identifying the credit risk management framework and assessing the compliance of the Group's accounting policies with the applicable regulations. – Evaluating the appropriateness of the classification of the loans and advances to customers portfolio based on credit risk, in accordance with the criteria defined by the Group, particularly the criteria for identifying and classifying refinancing and restructuring transactions. – Assessing the relevant controls relating to the monitoring of transactions. – Evaluating whether the internal models for estimating both individual and collective allowances and provisions for credit risk, and for the management and valuation of collateral, are functioning correctly. – Assessing whether the aspects observed by the Internal Validation Unit in its periodic reviews and in the tests of the models used to estimate collective allowances and provisions for impairment have been taken into consideration. – Evaluating the integrity, accuracy and updating of the data used and of the control and management process in place.

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Impairment of loans and advances to customers
 See notes 1.3.4.1, 4.4.2 and 11 to the consolidated annual financial statements

<i>Key audit matter</i>	<i>How the matter was addressed in our audit</i>
<p>The conflict between Russia and Ukraine, the current levels of inflation, the energy crisis across Europe and central banks’ present monetary policy, inter alia, have considerably changed the current geopolitical and macroeconomic backdrop, thus heightening uncertainty as to future developments and impacting on the economy and business activities of the countries where the Group operates. Calculating expected credit risk losses therefore entails greater uncertainty and requires a higher degree of judgement, primarily as regards estimating macroeconomic scenarios, and the Group has supplemented the estimates of expected losses obtained from its credit risk models with certain additional temporary adjustments.</p> <p>The consideration of this matter as a key audit matter is based both on the significance of the Group’s loans and advances to customers portfolio, and thus of the related allowance and provision for impairment, as well as on the relevance of the process for classifying these financial assets for the purpose of estimating impairment thereon and the subjectivity and complexity of calculating expected losses.</p>	<p>Our tests of detail on the estimated expected losses included the following:</p> <ul style="list-style-type: none"> – With regard to the impairment of individually significant transactions, we analysed the appropriateness of the discounted cash flow models used by the Group. We also selected a sample from the population of significant transactions and assessed the appropriateness of both the credit risk classification and the corresponding allowance and provision recognised. – With respect to the allowances and provisions for impairment estimated collectively, we evaluated the methodology used by the Group, assessing the integrity and accuracy of the input balances for the process and whether the calculation engine is functioning correctly by replicating the calculation process, taking into account the segmentation and assumptions used by the Group. – We evaluated the methods and assumptions used to estimate exposure at default, probability of default and loss given default. – We considered the macroeconomic scenario variables used by the Group in its internal models to estimate expected losses. To this end, we brought in our corporate business valuation specialists. – We evaluated the additional adjustments to the internal models used to estimate the expected losses recognised by the Group at 31 December 2022. <p>Likewise, we analysed whether the disclosures in the notes to the consolidated annual financial statements were prepared in accordance with the criteria set out in the financial reporting framework applicable to the Group.</p>

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Recoverability of goodwill

See notes 1.3.12 and 16 to the consolidated annual financial statements

<i>Key audit matter</i>	<i>How the matter was addressed in our audit</i>
<p>At 31 December 2022 the Group has recognised goodwill totalling Euros 1,027 million, from the acquisition of certain entities and businesses in Spain. This goodwill is allocated to the group of cash-generating units (CGUs) that comprise the Banking Business Spain operating segment.</p> <p>At 31 December 2022 the Group's assessment determined that there was no impairment of recognised goodwill.</p> <p>Testing of goodwill for impairment requires the cash-generating units (or groups of cash-generating units) to which goodwill is allocated to be determined, and also requires identification of indications of impairment in each of the CGUs comprising a group of CGUs, calculation of their carrying amount and estimation of the recoverable amount of the CGUs (or groups of CGUs).</p> <p>Among other aspects, this estimate entails financial projections that take into account, inter alia, expected trends in macroeconomic variables and their impact on the future business of the CGUs (or groups of CGUs), the internal circumstances of the Group and its competitors, and trends in discount rates.</p> <p>Due to the high level of judgement and subjectivity of the assumptions and valuation techniques used for its estimate, the recoverability of goodwill has been considered a key audit matter.</p>	<p>Our audit procedures included analysing the key processes and controls established by management relating to the Group's process for identifying the group of CGUs to which goodwill is allocated, and to management's assessment of potential goodwill, which has been subject to review by an independent expert engaged by the Group.</p> <p>With the collaboration of our specialists in corporate business valuation and financial projections, we performed procedures of detail including the following:</p> <ul style="list-style-type: none"> – Assessing the existence of indications of impairment of each of the CGUs that comprise the group of CGUs to which goodwill is allocated. – Evaluating the reasonableness of the methodology used by management to analyse goodwill impairment, performing procedures on the reliability of the information used to calculate the recoverable amount of the group of CGUs comprising the Banking Business Spain operating segment. We also evaluated the reasonableness of the main assumptions considered, including the financial projections used by the Group. – Analysing the sensitivity of certain assumptions to changes that are considered reasonable. <p>Likewise, we analysed whether the disclosures in the notes to the consolidated annual financial statements were prepared in accordance with the criteria set out in the financial reporting framework applicable to the Group.</p>

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Risks associated with information technology

<i>Key audit matter</i>	<i>How the matter was addressed in our audit</i>
<p>The Group operates in a complex technological environment that is constantly evolving and which must efficiently and reliably meet business requirements. The high level of dependence on these systems with regard to the processing of the Group's financial and accounting information make it necessary to ensure that these systems function correctly.</p> <p>In this context, it is critical to ensure that management of the technological risks that could affect information systems is adequately coordinated and harmonised, in relevant areas such as data and program security, systems operation, or development and maintenance of IT applications and systems used to prepare financial information. We have therefore considered the risks associated with information technology to be a key audit matter.</p>	<p>With the assistance of our specialists in information systems, we carried out tests, at each of the Group entities that are considered relevant for the purpose of the audit, relating to the internal control over the processes and systems involved in generating financial information in the following areas:</p> <ul style="list-style-type: none"> – Understanding of the information flows and identification of the key controls that ensure the appropriate processing of the financial information. – Testing of the key automated processes that are involved in generating the financial information. – Testing of the controls over the applications and systems related to accessing and processing the information and those related to the security settings of those applications and systems. – Testing of the controls over the operation, maintenance and development of applications and systems.

Other Information: Consolidated Directors' Report

Other information solely comprises the 2022 consolidated directors' report, the preparation of which is the responsibility of the Bank's Directors and which does not form an integral part of the consolidated annual financial statements.

Our audit opinion on the consolidated annual financial statements does not encompass the consolidated directors' report. Our responsibility regarding the information contained in the consolidated directors' report is defined in the legislation regulating the audit of accounts, as follows:

- a) Determine, solely, whether the consolidated non-financial information statement and certain information included in the Annual Corporate Governance Report and the Annual Report on Directors' Remuneration, as specified in the Spanish Audit Law, have been provided in the manner stipulated in the applicable legislation, and if not, to report on this matter.
- b) Assess and report on the consistency of the rest of the information included in the consolidated directors' report with the consolidated annual financial statements, based on knowledge of the Group obtained during the audit of the aforementioned consolidated annual financial statements. Also, assess and report on whether the content and presentation of this part of the consolidated directors' report are in accordance with applicable legislation. If, based on the work we have performed, we conclude that there are material misstatements, we are required to report them.

Based on the work carried out, as described above, we have observed that the information mentioned in section a) above has been provided in the manner stipulated in the applicable legislation, that the rest of the information contained in the consolidated directors' report is consistent with that disclosed in the consolidated annual financial statements for 2022, and that the content and presentation of the report are in accordance with applicable legislation.

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Responsibilities of the Bank's Directors' and the Audit and Control Committee for the Consolidated Annual Financial Statements

The Bank's Directors are responsible for the preparation of the accompanying consolidated annual financial statements in such a way that they give a true and fair view of the consolidated equity, consolidated financial position and consolidated financial performance of the Group in accordance with IFRS-EU and other provisions of the financial reporting framework applicable to the Group in Spain, and for such internal control as they determine is necessary to enable the preparation of consolidated annual financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated annual financial statements, the Bank's Directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Bank's Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Bank's Audit and Control Committee is responsible for overseeing the preparation and presentation of the consolidated annual financial statements.

Auditor's Responsibilities for the Audit of the Consolidated Annual Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with prevailing legislation regulating the audit of accounts in Spain will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated annual financial statements.

As part of an audit in accordance with prevailing legislation regulating the audit of accounts in Spain, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated annual financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Bank's Directors.

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- Conclude on the appropriateness of the Bank's Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated annual financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated annual financial statements, including the disclosures, and whether the consolidated annual financial statements represent the underlying transactions and events in a manner that achieves a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated annual financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Bank's Audit and Control Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Bank's Audit and Control Committee with a statement that we have complied with the applicable ethical requirements, including those regarding independence, and to communicate with them all matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated to the Bank's Audit and Control Committee, we determine those that were of most significance in the audit of the consolidated annual financial statements of the current period and which are therefore the key audit matters.

We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

European Single Electronic Format

We have examined the digital files of Banco de Sabadell, S.A. and its subsidiaries for 2022 in European Single Electronic Format (ESEF), which comprise the XHTML file that includes the consolidated annual financial statements for the aforementioned year and the XBRL files tagged by the Bank, which will form part of the annual financial report.

The Directors of Banco de Sabadell, S.A. are responsible for the presentation of the 2022 annual report in accordance with the format and mark-up requirements stipulated in Commission Delegated Regulation (EU) 2019/815 of 17 December 2018 (hereinafter the "ESEF Regulation"). In this regard, they have incorporated the Annual Corporate Governance Report and the Annual Report on Directors' Remuneration by means of a reference thereto in the consolidated directors' report.



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Our responsibility consists of examining the digital files prepared by the Directors of the Bank, in accordance with prevailing legislation regulating the audit of accounts in Spain. This legislation requires that we plan and perform our audit procedures to determine whether the content of the consolidated annual financial statements included in the aforementioned digital files fully corresponds to the consolidated annual financial statements we have audited, and whether the consolidated annual financial statements and the aforementioned files have been formatted and marked up, in all material respects, in accordance with the requirements of the ESEF Regulation.

In our opinion, the digital files examined fully correspond to the audited consolidated annual financial statements, and these are presented and marked up, in all material respects, in accordance with the requirements of the ESEF Regulation.

Additional Report to the Bank's Audit and Control Committee

The opinion expressed in this report is consistent with our additional report to the Bank's Audit and Control Committee dated 16 February 2023.

Contract Period

We were appointed as auditor of the Group by the shareholders at the ordinary general meeting on 28 March 2019 for a period of three years, from the year ended 31 December 2020.

KPMG Auditores, S.L.

On the Spanish Official Register of Auditors ("ROAC") with No. S0702

(Signed on original in Spanish)

Francisco Gibert Pibernat

On the Spanish Official Register of Auditors ("ROAC") with No. 15,586

16 February 2023