

31.12.2022

CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited figures)

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1. CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEET - ASSETS

<i>(In EUR m)</i>		31.12.2022	31.12.2021
Cash, due from central banks		207,013	179,969
Financial assets at fair value through profit or loss	Notes 3.1, 3.2 and 3.4	329,437	342,714
Hedging derivatives	Notes 3.2 and 3.4	32,850	13,239
Financial assets at fair value through other comprehensive income	Notes 3.3 and 3.4	37,463	43,450
Securities at amortised cost	Notes 3.5 and 3.8	21,430	19,371
Due from banks at amortised cost	Notes 3.5 and 3.8	66,903	55,972
Customer loans at amortised cost	Notes 3.5 and 3.8	506,529	497,164
Revaluation differences on portfolios hedged against interest rate risk	Note 3.2	(2,262)	131
Investments of insurance companies	Note 4.3	158,415	178,898
Tax assets	Note 6	4,696	4,812
Other assets	Note 4.4	85,072	92,898
Non-current assets held for sale	Note 2.4	1,081	27
Deferred profit-sharing	Note 4.3	1,175	-
Investments accounted for using the equity method		146	95
Tangible and intangible fixed assets	Note 8.4	33,089	31,968
Goodwill	Note 2.2	3,781	3,741
Total		1,486,818	1,464,449

CONSOLIDATED BALANCE SHEET - LIABILITIES

<i>(In EUR m)</i>		31.12.2022	31.12.2021
Due to central banks		8,361	5,152
Financial liabilities at fair value through profit or loss	Notes 3.1, 3.2 and 3.4	300,618	307,563
Hedging derivatives	Notes 3.2 and 3.4	46,164	10,425
Debt securities issued	Notes 3.6	133,176	135,324
Due to banks	Notes 3.6	132,988	139,177
Customer deposits	Notes 3.6	530,764	509,133
Revaluation differences on portfolios hedged against interest rate risk	Note 3.2	(9,659)	2,832
Tax liabilities	Note 6	1,638	1,577
Other liabilities	Note 4.4	107,553	106,305
Non-current liabilities held for sale	Note 2.4	220	1
Insurance contracts related liabilities	Note 4.3	141,688	155,288
Provisions	Note 8.3	4,579	4,850
Subordinated debts		15,946	15,959
Total liabilities		1,414,036	1,393,586
Shareholder's equity			
Shareholders' equity, Group share			
Issued common stocks and capital reserves	Note 7.1	21,248	21,913
Other equity instruments		9,136	7,534
Retained earnings		34,267	30,631
Net income		2,018	5,641
Sub-total		66,669	65,719
Unrealised or deferred capital gains and losses	Note 7.3	(218)	(652)
Sub-total equity, Group share		66,451	65,067
Non-controlling interests		6,331	5,796
Total equity		72,782	70,863
Total		1,486,818	1,464,449

CONSOLIDATED INCOME STATEMENT

<i>(In EUR m)</i>		2022	2021
Interest and similar income	Note 3.7	28,838	20,590
Interest and similar expense	Note 3.7	(17,552)	(9,872)
Fee income	Note 4.1	9,335	9,162
Fee expense	Note 4.1	(4,161)	(3,842)
Net gains and losses on financial transactions		6,691	5,723
<i>o/w net gains and losses on financial instruments at fair value through profit or loss</i>	Note 3.1	6,715	5,704
<i>o/w net gains and losses on financial instruments at fair value through other comprehensive income</i>		(10)	44
<i>o/w net gains and losses from the derecognition of financial instruments at amortised cost</i>		(14)	(25)
Net income from insurance activities	Note 4.3	2,211	2,238
Income from other activities	Note 4.2	13,221	12,237
Expenses from other activities	Note 4.2	(10,524)	(10,438)
Net banking income		28,059	25,798
Personnel expenses	Note 5	(10,052)	(9,764)
Other operating expenses	Note 8.2	(7,009)	(6,181)
Amortisation, depreciation and impairment of tangible and intangible fixed assets	Note 8.4	(1,569)	(1,645)
Gross operating income		9,429	8,208
Cost of risk	Note 3.8	(1,647)	(700)
Operating income		7,782	7,508
Net income from investments accounted for using the equity method		15	6
Net income / expense from other assets	Note 2.1	(3,290)	635
Value adjustments on goodwill		-	(114)
Earnings before tax		4,507	8,035
Income tax	Note 6	(1,560)	(1,697)
Consolidated net income		2,947	6,338
Non-controlling interests		929	697
Net income, Group share		2,018	5,641
Earnings per ordinary share	Note 7.2	1.73	5.97
Diluted earnings per ordinary share	Note 7.2	1.73	5.97

STATEMENT OF NET INCOME AND UNREALISED OR DEFERRED GAINS AND LOSSES

<i>(In EUR m)</i>	2022	2021
Consolidated net income	2,947	6,338
Unrealised or deferred gains and losses that will be reclassified subsequently into income	(111)	930
Translation differences	1,820	1,457
<i>Revaluation differences for the period</i>	1,278	1,458
<i>Reclassified into income</i>	542	(1)
Revaluation of debt instruments at fair value through other comprehensive income	(731)	(318)
<i>Revaluation differences for the period</i>	(771)	(294)
<i>Reclassified into income</i>	40	(24)
Revaluation of available-for-sale financial assets	(1,223)	(292)
<i>Revaluation differences for the period</i>	(1,244)	(269)
<i>Reclassified into income</i>	21	(23)
Revaluation of hedging derivatives	(380)	(36)
<i>Revaluation differences of the period</i>	(252)	6
<i>Reclassified into income</i>	(128)	(42)
Related tax	403	119
Unrealised or deferred gains and losses that will not be reclassified subsequently into income	539	191
Actuarial gains and losses on defined benefit plans	92	236
Revaluation of own credit risk of financial liabilities at fair value through profit or loss	671	8
Revaluation of equity instruments at fair value through other comprehensive income	(26)	11
Related tax	(198)	(64)
Total unrealised or deferred gains and losses	428	1,121
Net income and unrealised or deferred gains and losses	3,375	7,459
<i>o/w Group share</i>	2,592	6,719
<i>o/w non-controlling interests</i>	783	740

CHANGES IN SHAREHOLDERS' EQUITY

Shareholders' equity, Group share								
<i>(In EUR m)</i>	Issued common stocks and capital reserves	Other equity instruments	Retained earnings	Net income, Group share	Unrealised and deferred gains and losses	Total	Non-controlling interests	Total consolidated shareholder's equity
At 1 January 2021	22,333	9,295	31,812	-	(1,730)	61,710	5,302	67,012
Increase in common stock and issuance / redemption and remuneration of equity instruments	-	(1,761)	(627)	-	-	(2,388)	(33)	(2,421)
Elimination of treasury stock	(468)	-	(36)	-	-	(504)	-	(504)
Equity component of share-based payment plans	48	-	-	-	-	48	-	48
2021 Dividends paid (see Note 7.2)	-	-	(468)	-	-	(468)	(193)	(661)
Effect of changes of the consolidation scope	-	-	(41)	-	-	(41)	(18)	(59)
Sub-total of changes linked to relations with shareholders	(420)	(1,761)	(1,172)	-	-	(3,353)	(244)	(3,597)
2021 Net income	-	-	-	5,641	-	5,641	697	6,338
Change in unrealised or deferred gains and losses	-	-	-	-	1,078	1,078	43	1,121
Other changes	-	-	(9)	-	-	(9)	(2)	(11)
Sub-total	-	-	(9)	5,641	1,078	6,710	738	7,448
At 31 December 2021	21,913	7,534	30,631	5,641	(652)	65,067	5,796	70,863
Allocation to retained earnings	-	-	5,781	(5,641)	(140)	-	-	-
At 1 January 2022	21,913	7,534	36,412	-	(792)	65,067	5,796	70,863
Increase in common stock and issuance / redemption and remuneration of equity instruments (see Note 7.1)	(233)	1,602	(590)	-	-	779	(33)	746
Elimination of treasury stock (see Note 7.1)	(524)	-	(66)	-	-	(590)	-	(590)
Equity component of share-based payment plans	92	-	-	-	-	92	-	92
2022 Dividends paid (see Note 7.2)	-	-	(1,371)	-	-	(1,371)	(754)	(2,125)
Effect of changes of the consolidation scope (see Note 7.1)	-	-	(88)	-	-	(88)	543	455
Sub-total of changes linked to relations with shareholders	(665)	1,602	(2,115)	-	-	(1,178)	(244)	(1,422)
2022 Net income	-	-	-	2,018	-	2,018	929	2,947
Change in unrealised or deferred gains and losses	-	-	-	-	574	574	(146)	428
Other changes	-	-	(30)	-	-	(30)	(4)	(34)
Sub-total	-	-	(30)	2,018	574	2,562	779	3,341
At 31 December 2022	21,248	9,136	34,267	2,018	(218)	66,451	6,331	72,782

CASH FLOW STATEMENT

<i>(In EUR m)</i>	2022	2021
Consolidated net income (I)	2,947	6,338
Amortisation expense on tangible and intangible fixed assets (including operational leasing)	5,359	5,444
Depreciation and net allocation to provisions	6,608	684
Net income/loss from investments accounted for using the equity method	(15)	(6)
Change in deferred taxes	286	425
Net income from the sale of long-term assets and subsidiaries	(18)	(41)
Other changes *	4,830	957
Non-cash items included in net income and other adjustments excluding income on financial instruments at fair value through profit or loss (II) *	17,050	7,463
Income on financial instruments at fair value through profit or loss	11,230	4,619
Interbank transactions *	(13,899)	(2,154)
Customers transactions *	3,855	3,841
Transactions related to other financial assets and liabilities *	29,906	(10,144)
Transactions related to other non-financial assets and liabilities *	(11,997)	11,043
Net increase/decrease in cash related to operating assets and liabilities (III) *	19,095	7,205
Net cash inflow (outflow) related to operating activities (A) = (I) + (II) + (III) *	39,092	21,006
Net cash inflow (outflow) related to acquisition and disposal of financial assets and long term investments *	582	(3,532)
Net cash inflow (outflow) related to tangible and intangible fixed assets	(9,594)	(6,466)
Net cash inflow (outflow) related to investment activities (B) *	(9,012)	(9,998)
Cash flow from/to shareholders	(712)	(4,894)
Other net cash flow arising from financing activities *	498	436
Net cash inflow (outflow) related to financing activities (C) *	(214)	(4,458)
Effect of changes in foreign exchange rates on cash and cash equivalents (D)	2,354	2,154
Net inflow (outflow) in cash and cash equivalents (A) + (B) + (C) + (D)	32,220	8,704
Cash, due from central banks (assets)	179,969	168,179
Due to central banks (liabilities)	(5,152)	(1,489)
Current accounts with banks (see Notes 3.5 and 4.3)	28,205	26,609
Demand deposits and current accounts with banks (see Note 3.6)	(12,373)	(11,354)
Cash and cash equivalents at the start of the year	190,649	181,945
Cash, due from central banks (assets)	207,013	179,969
Due to central banks (liabilities)	(8,361)	(5,152)
Current accounts with banks (see Notes 3.5 and 4.3)	34,672	28,205
Demand deposits and current accounts with banks (see Note 3.6)	(10,455)	(12,373)
Cash and cash equivalents at the end of the year	222,869	190,649
Net inflow (outflow) in cash and cash equivalents	32,220	8,704

* Amounts restated compared to the financial statements published for 2021 in order to reclassify items from the Other changes line.

2. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Board of Directors on 7 February 2023.

NOTE 1 - SIGNIFICANT ACCOUNTING PRINCIPLES

1. INTRODUCTION



ACCOUNTING STANDARDS

In accordance with European Regulation 1606/2002 of 19 July 2002 on the application of International Accounting Standards, the Societe Generale Group (“the Group”) prepared its consolidated financial statements for the year ended 31 December 2022 in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and in force at that date. The Group includes the parent company Societe Generale (including the Societe Generale foreign branches) and all of the entities in France and abroad that it controls either directly or indirectly (subsidiaries and joint arrangements) or on which it exercises significant influence (associates).

These standards are available on the European Commission website.

In accordance with the transitional measures provided by IFRS 9, the Group has elected to recognise hedging transactions under IAS 39 as adopted by the European Union, including measures related to macro-fair value hedge accounting (IAS 39 “carve-out”).



FINANCIAL STATEMENTS PRESENTATION

As the IFRS accounting framework does not specify a standard model, the format of the primary financial statements used is consistent with the format proposed by the French Accounting Standard Setter, the *Autorité des Normes Comptables* (ANC), under Recommendation No. 2017-02 of 2 June 2017.

The disclosures provided in the notes to the consolidated financial statements focus on information that is both relevant and material to the financial statements of the Societe Generale group, its activities, and the circumstances in which it conducted its operations of the period.

The Group publishes its Annual Financial Report 2023 using the European Single Electronic Format (ESEF) as defined by the European Delegated Regulation 2019/815 amended by Commission Delegated Regulation (EU) 2022/352.



PRESENTATION CURRENCY

The presentation currency of the consolidated financial statements is the euro.

The figures presented in the financial statements and in the notes are expressed in millions of euros, unless otherwise specified. The effect of rounding may generate discrepancies between the figures presented in the financial statements and those presented in the notes.

2. NEW ACCOUNTING STANDARDS APPLIED BY THE GROUP AS OF 1 JANUARY 2022



Amendments to IAS 37 – “Onerous Contracts — Cost of Fulfilling a Contract”

Amendments to IFRS 16 “Property, Plant and Equipment — Proceeds before Intended Use”

Annual Improvements to IFRS (2018-2020 cycle)

AMENDMENTS TO IAS 37 – “ONEROUS CONTRACTS — COST OF FULFILLING A CONTRACT”

These amendments clarify the costs to include to calculate the cost of fulfilling a contract when assessing whether a contract is onerous.

These amendments have no impact on the Group’s consolidated financial statements.

AMENDMENTS TO IAS 16 “PROPERTY, PLANT AND EQUIPMENT — PROCEEDS BEFORE INTENDED USE”

These amendments prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to its operating location or preparing that asset for its intended use. Instead, a company will recognise such sales proceeds and related production cost in profit or loss.

These amendments do not apply to the Group.

ANNUAL IMPROVEMENTS TO IFRS (2018-2020 CYCLE)

As part of the annual improvement to IFRS, the IASB published minor changes to IFRS 1 “First-time Adoption of International Financial Reporting Standards”, IFRS 9 “Financial Instruments”, IAS 41 “Agriculture” and IFRS 16 “Leases”.

These changes have no significant impact on the Group financial statements.

FOLLOW-UP OF THE DECISION OF THE IFRS INTERPRETATIONS COMMITTEE (IFRS IC) DATED 27 APRIL 2021 ON IAS 38

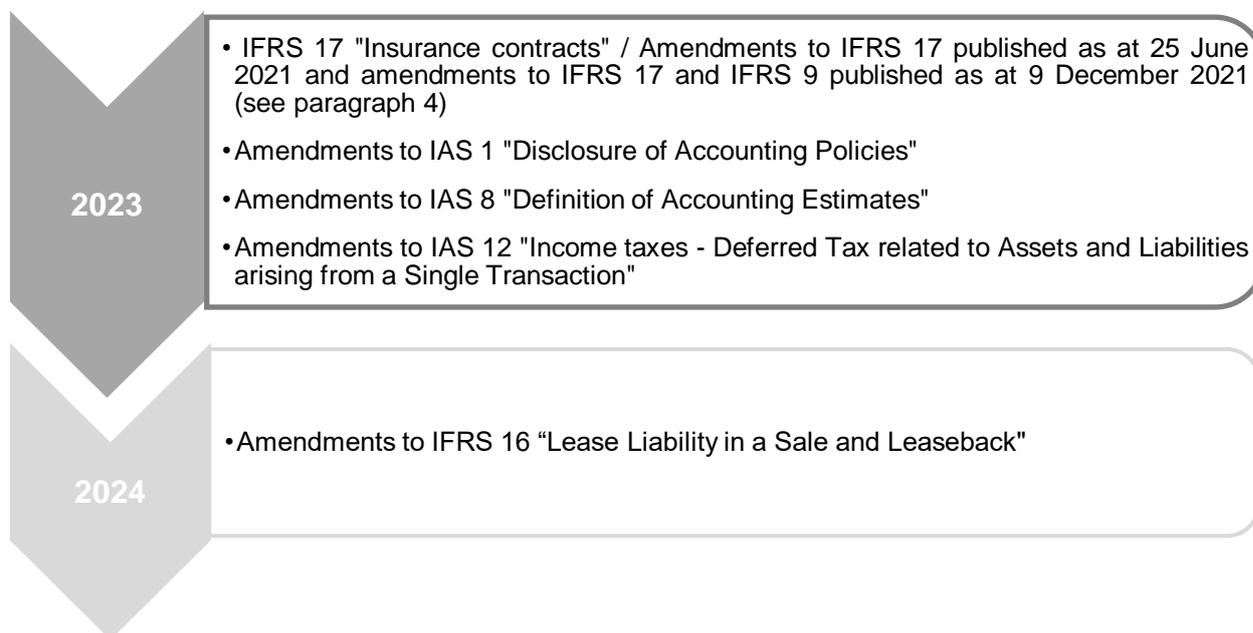
During its 27 April 2021 meeting, the IFRS IC reiterated the rules relating to the accounting by the customer of the costs of configuring or customising the supplier’s application software used under a Software as a Service (SaaS) arrangement.

A study was conducted within the Group. The IFRS IC decision has no significant impact on the processing of the contracts existing as at 31 December 2022. The provisions of this decision will be applied in the Group to account for costs of configuring or customising any new application software used as a SaaS application.

3. ACCOUNTING STANDARDS, AMENDMENTS OR INTERPRETATIONS TO BE APPLIED BY THE GROUP IN THE FUTURE

The IASB published accounting standards and amendments, some of which have not been adopted by the European Union as at 31 December 2022. Their application is required for the financial years beginning on or after 1 January 2023 at the earliest or on the date of their adoption by the European Union. They have thus not been applied to the Group as at 31 December 2022.

The provisional application timeframe for the standards with the most impact on the Group is as follows:



AMENDMENTS TO IAS 1 "DISCLOSURE OF ACCOUNTING POLICIES"

Adopted by the European Union on 2 March 2022.

The aim of these amendments is to help companies improve the materiality of the information on accounting policies disclosed in the Notes to the financial statements and the usefulness of that information to investors and financial statement users.

AMENDMENTS TO IAS 8 "DEFINITION OF ACCOUNTING ESTIMATES"

Adopted by the European Union on 2 March 2022.

The aim of these amendments is to facilitate distinguishing between changes in accounting methods and changes in accounting estimates.

AMENDMENTS TO IAS 12 "INCOME TAXES" - DEFERRED TAX RELATED TO ASSETS AND LIABILITIES ARISING FROM A SINGLE TRANSACTION

Adopted by the European Union on 11 August 2022.

These amendments clarify and narrow the scope of the exemption provided by the IAS 12 standard allowing institutions to not recognise any deferred tax during the initial recognition of an asset and a liability. Are excluded from the exemption scope all leases and decommissioning obligations for which companies recognise both an asset and a liability and will now have to recognise deferred taxes.

The aim of these amendments is to reduce heterogeneity in the recognition of the deferred tax related to leases and decommissioning obligations.

Since the date of first application of IFRS 16, the Group has been considering the rights of use and the lease-related debt as a single transaction. Consequently, on the initial recognition date, the amount of deferred tax asset offsets the amount of deferred tax liability. The net temporary differences resulting from later variations in the right of use and lease debt subsequently result in the recognition of a deferred tax. This amendment thus has no impact on the Group's consolidated financial statements.

AMENDMENTS TO IFRS 16 “LEASE LIABILITY IN A SALE AND LEASEBACK”

Published on 22 September 2022.

These amendments clarify the subsequent assessment of sale and leaseback transactions when the initial transfer of the property, plant or equipment meets the criteria of IFRS 15 for recognition as a sale. These amendments specify in particular how to subsequently assess the lease liability resulting from this sale and leaseback transactions, made of payments of variable leases that do not depend on an index or a rate.

The impact of these amendments is currently being analysed.

4. PREPARATION FOR THE FIRST-TIME APPLICATION OF IFRS 17 “INSURANCE CONTRACTS” AND OF IFRS 9 “FINANCIAL INSTRUMENTS” TO THE LEGAL ENTITIES OPERATING IN THE INSURANCE SECTOR

IFRS 17 “Insurance contracts”, issued on 18 May 2017 and modified by the 25 June 2020 and 9 December 2021 Amendments, will replace IFRS 4 “Insurance contracts” which allows, in particular, insurance contracts to be recognised using methods required by the local accounting regulations.

On 23 November 2021, the European Commission (EC) published in the Official Journal Regulation (EU) 2021/2036 of 19 November 2021 adopting IFRS 17 “Insurance contracts “. This adoption included the possibility for European companies not to implement the requirement stated in the standard to group some insurance contracts by annual cohort for their measurement (see paragraph: “Grouping of contracts”); this exemption will be reassessed by the European Commission at the latest on 31 December 2027.

IFRS 17 applies from 1 January 2023. On the same date, the Group’ subsidiaries operating in the insurance sector will apply IFRS 9 “Financial Instruments” for the first time; this application has been delayed as a result of the possibilities offered by the Amendments to IFRS 17 and to IFRS 4 issued by the IASB on 25 June 2020 and expanded by Regulations (EU) 2017/1988 and 2020/2097 of the European Commission.

On 9 September 2022, the European Union adopted the amendment to IFRS 17 published by the IASB on 9 December 2021 with the aim of improving the usefulness of the comparative information about financial assets presented on the initial application of IFRS 17 and IFRS 9.

The main consequences of the application of IFRS 17 concern:

- the measurement of insurance contracts, materialised mainly as liabilities on the balance sheet: their value will be updated on each closing date based on a reestimate of the future cash flows related to their execution. This reestimate will take account, in particular, of market data in relation to financial elements and the behaviour of policyholders;
- the recognition of the margin: although the profitability of the insurance contracts remains unchanged, the pace of recognition in the income statement will be modified. Any expected profit will be deferred in the balance sheet and spread in the income statement over the coverage period of the insurance contracts. Conversely any expected loss will immediately be recognised in the income statement upon its initial recognition or in subsequent measurements; and
- the presentation of the income statement: the operating expenses attributable to the execution of insurance contracts will hence be presented in reduction of the Net Banking Income as Insurance services expenses and will thus not impact the total operating expenses on the consolidated income statement anymore.

SCOPE OF THE CONTRACTS

The insurance contracts to which IFRS 17 applies are the same as those to which IFRS 4 currently applies. These are the insurance contracts issued, the reinsurance contracts issued or held, as well as the investment contracts issued which include a discretionary participation feature provided they are issued by an entity which also issues insurance contracts. Like IFRS 4, IFRS 17 does not apply to the insurance contracts for which the Group is the insured beneficiary except for the contracts identified as reinsurance treaties.

GROUPING OF CONTRACTS

To assess the insurance contracts issued, IFRS 17 requires that the latter be grouped into homogeneous portfolios. Within these portfolios all contracts have to be exposed to similar risks and managed together.

In each portfolio, three groups of contracts shall be distinguished upon initial recognition: onerous contracts, contracts with no significant possibility of becoming subsequently onerous, and other contracts.

Furthermore, IFRS 17 stipulates that each group of contracts has to be subdivided into annual cohorts (no more than twelve months interval between the dates of issue of the contracts). In the context of the adoption of IFRS 17, the European Commission offered to European companies the option not to apply this provision to the contracts with intergenerational mutualisation of the returns of the underlying assets in the countries where the Group markets insurance contracts.

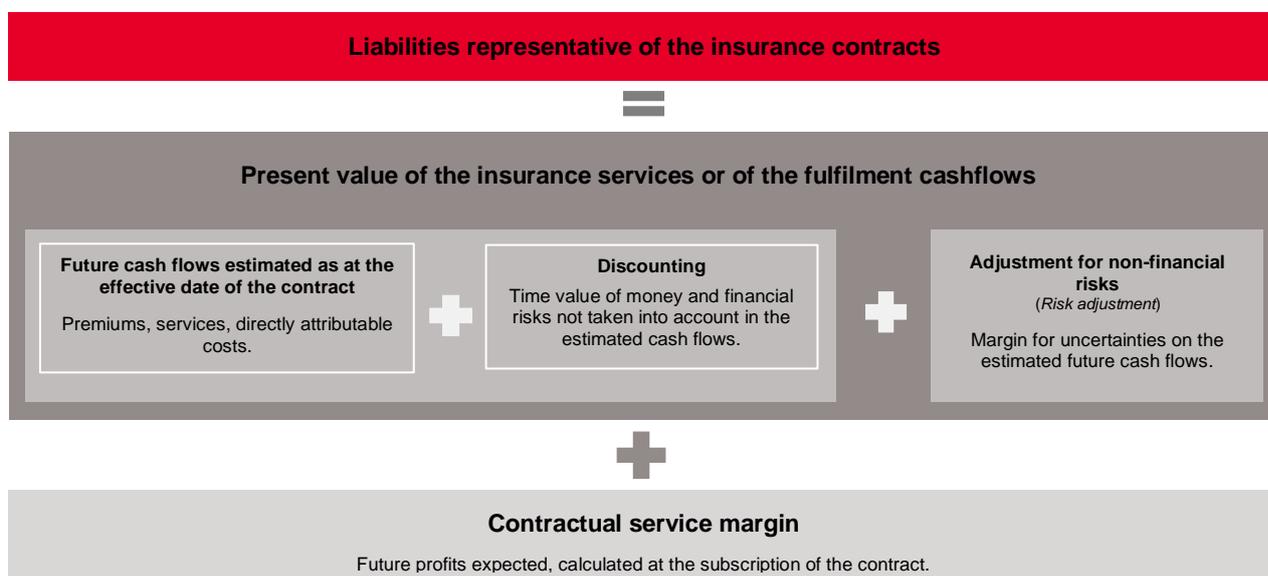
The Group will use this optional exemption for all the saving life insurance contracts issued as they include direct or discretionary profit-sharing elements for which both risks and cashflows are shared between different generations of policyholders. These savings life insurance contracts are also managed on an intergenerational basis in order to mitigate the exposure to interest rate and longevity risks.

MEASUREMENT MODELS

General Model applicable to the insurance contracts issued

Initial measurement

On initial recognition, the value of a group of insurance contracts issued corresponds to the sum of the following items:



The contractual service margin (CSM) represents the unearned profit that the entity will recognise in the income statement as the insurance services are provided in the future. Its amount is determined at the time of initial recognition on the group of insurance contracts so that, at that date, no income or expense is recorded, except in the particular case of groups of onerous contracts the loss of which, corresponding to the net expected cash outflow, has to be immediately recognised in profit or loss.

The yield curve used to discount the estimated future cash flows is determined through a bottom-up approach: this approach consists in adding to a risk-free yield curve (swap rate curve) an illiquidity premium to represent the differences in characteristics between liquid risk-free financial instruments and insurance contracts.

The adjustment for non-financial risk is determined from an approach by quantile based on a level of confidence of 90% for the Savings life insurance activity and 80% to 90% for the Protection activity. Accordingly, the calculation method of the adjustment for non-financial risk has not benefited from a diversification effect between these different insurance activities.

Subsequent measurement (excluding onerous contracts)

On each closing date, the carrying amount in the balance sheet of the group of insurance contracts issued is remeasured. It is then equal to the sum of the following amounts:

- the liability for remaining coverage, which encompasses the value of the fulfilment cash flows reestimated at that date (present value of the premiums receivable and of the cost of future insurance services over the remaining coverage period) and the contractual service margin reestimated at the same date as described above;
- the liability for incurred claims, for an amount equal to the present value of the estimated cashflows necessary to settle the valid claims for past events.

On the same closing date, the amount of contractual service margin is reestimated to take account notably, for all contracts, of:

- the effect of the new contracts added to the group of contracts,
- the interest capitalised at the discount rate used to determine the initial value of the margin,
- the reestimate of the fulfilment cash flows (discounted value of the premiums receivable and of the cost of future insurance services on the remaining coverage period, excluding the estimated cashflows necessary to settle the valid claims for past events, that are measured separately).

To determine the amount of CSM for the time elapsed to be recognised in profit or loss for each IFRS 17 portfolio, it is necessary to define coverage units. Coverage units correspond to the quantity of coverage provided by the contracts making up the group, taking account of the volume of services provided and of the expected coverage duration.

Protection activity

The Group will primarily apply the General Model to measure its provident contracts (borrower insurance, funeral, dependency... contracts).

For the Protection – provident activity, the insured value (for example the outstanding principal due in the context of a borrower contract) will be used to measure the quantity of service (or coverage units) provided or to be provided, with a view to allocating the CSM to the net income of the time period.

General Model modified for the contracts with direct participation features (Variable Fee Approach)

To measure the insurance contracts issued with direct participation features, the General Model provided for by IFRS 17 is adjusted to take account of the participation of policyholders to the returns on investments underlying the contracts.

This approach, known as the Variable Fee Approach (VFA), has to be used to measure the groups of insurance contracts for which:

- the contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items;
- the entity expects to pay to the policyholder an amount equal to a substantial share of the fair value returns on the underlying items; and
- the entity expects a substantial proportion of any change in the amounts to be paid to the policyholder to vary with the change in fair value of the underlying items.

Eligibility to this measurement model is analysed on the issuance date of the contracts and may subsequently be reassessed only in case of modification of said contracts.

The major modifications to the General Model concern:

- the portion of changes in the fair value of the underlying investments that is due to the insurer. At each closing date, this portion of changes during the period is incorporated into the contractual service margin in order to be recognised in profit or loss over the remaining coverage period provided for by the contracts;
- the interest on the contractual service margin whose changes are implicit in the periodic review of the contractual service margin.

Savings life insurance activities

The Group has established that almost all the savings life insurance contracts issued by its insurance subsidiaries meet the definition of contracts with direct participation. These contracts, which represent the predominant part of the Group's insurance business (about 99% of the estimated cash flows discounted as at 1 January 2022), will be assessed using the General Model adjusted for the Variable Fee Approach (VFA). The other contracts of these categories are assessed based on the General Model or under IFRS 9 if they meet the definition of an investment contract.

For the savings life insurance activity, the quantity of service (or coverage units) used to allocate the CSM to net income will be determined based on the stocks of future cash flows estimated over the period and at future periods. An adjustment will be made with a view to correcting the so-called bow wave effect, using the financial performance expected over the forecast period.

Simplified approach (Premium Allocation Approach)

The standard also allows, under some conditions, for the application of a simplified approach to contracts with an insurance coverage period lower or equal to 12 months or for which the measurement of the liability for remaining coverage of the group resulting from the application of this simplified method will not differ significantly from the measurement resulting from the application of the general model.

The premiums receivable during the contractual insurance period are recognised in profit on a straight-line basis over this contractual period (or according to the expected pattern of release of risk even if this pattern vastly differs from a straight-line pattern).

As in the General Model, claims are provisioned upon their occurrence through a profit or loss account for an amount equal to the estimated value of the cash flows necessary to settle the valid claims (it is however not necessary, in order to account for the time value of money, to discount the amount of indemnification if its payment is expected within one year after the date of the claim).

Protection activity

The Group will primarily apply the simplified approach to assess its property and casualty insurance (personal injury, means of payment, multi-risk home insurance...) contracts.

PRESENTATION OF THE FINANCIAL PERFORMANCE

On the consolidated income statement, the incomes and expenses relating to the insurance contracts issued and the reinsurance contracts will be presented under Net banking income, distinguishing between, on one side:

- the income from the insurance and reinsurance contracts issued,
- the service expenses relating to the insurance and reinsurance contracts issued, and
- the income and expenses relating to the reinsurance contracts held;

and on the other side:

- the financial income and expenses of the insurance and reinsurance contracts issued, and
- the financial income and expenses of the reinsurance contracts held.

The service expenses relating to the insurance and reinsurance contracts issued as well as the expenses relating to the reinsurance contracts held will then include the share of operating expenses directly attributable to the fulfilment of the contracts which will then be deducted from the Net banking income.

Many insurance contracts include an investment component in the form of a deposit paid by the policyholder and which the insurer is contractually bound to repay to him even if the insured event does not occur. Even if they may take the contractual form of insurance premiums and services, the collection and repayment flows of these deposits do not constitute either income or expenses in relation to these contracts.

The execution cash flows and the contractual service margin are recognised on a discounted basis that reflects the cash flow schedule.

For the insurance contracts issued, the impact of the time value of money decreases over time and this decrease is reflected in the comprehensive income statement as an insurance financial expense. To put it simply, insurance financial expenses are similar to the interest paid on an early payment and reflect the fact that subscribers usually pay premiums from the start and receive services only at a later date.

The insurance financial expenses or income also include the impact on the carrying amount of insurance contracts of some changes in financial assumptions (*i.e.*, the discounting rate and other financial variables)

The impacts of these changes in the discounting rate and other financial variables are recognised in the period when the changes occur.

The Group has chosen, as provided for in the standard, to break these impacts down between the net income and the equity for all of its groups of contracts. This choice allows it to align the accounting treatment of the contract portfolios with the accounting treatment of the assets held as coverage.

Application of IFRS 17

The initial application of IFRS 17 as at 1 January 2023 will be retrospective and the comparative data of the 2022 financial year will be restated.

The differences in measurement of the insurance assets and liabilities resulting from the retrospective application of IFRS 17 as at 1 January 2022 will be presented directly in equity.

The retrospective measurement of these assets and liabilities, and in particular of the different insurance contract portfolios, may be subject to simplified alternate approaches when the historical data necessary for a fully retrospective application are not available. The standard then allows for the use of:

- either a modified retrospective approach that will provide, based on reasonable information available at no cost or undue effort, measurements that are as close as possible to those that would result from the retrospective application of the standard;
- or an approach based on the fair value of the insurance contracts portfolios as at 1 January 2022.

The Group will apply a modified retrospective approach for the savings life insurance contracts which make for the large majority of its contracts. Protection – property and casualty contracts will be subject to a full retrospective approach. For Protection - provident contracts a retrospective approach, either full or modified, will be applied on a case-by-case basis.

The assessment of the insurance contracts made on a current basis, taking into account the time value of money and the financial risks relating to future cash flows, will require to review the modalities for measuring some assets regarded as backing the contracts with a view to removing the possible accounting mismatch.

From the initial application of IFRS 17, the Group will measure at fair value the investment properties held by insurance companies regarded as backing the insurance contracts issued.

Transitioning to IFRS 17 requires including in the assessment of the insurance contracts the administrative costs (personnel expenses, amortisation expenses for fixed assets ...) directly attributable to the fulfilment of contracts and present them as Insurance services expenses in the Net banking income.

The Group's insurance entities will systematically identify in the fulfilment cash flows of their contracts the amount of administrative costs they expect to bear. These administrative costs will be presented under the "Insurance services expenses in the Net banking income" item. Consequently, the administrative costs presented by nature on the income statement will be reduced by the amounts allocated to the fulfilment of the insurance contracts.

Furthermore, the Group's banking entities are required to market, through their retail branch networks, the insurance contracts issued by the Group's insurance entities and thus invoice fees to these entities. These fees cover the costs borne by the banking entities plus a margin. In the case of invoicing between Group-controlled entities, the internal margin received by the banking entity and borne by the insurance entity will be eliminated in the consolidated accounts. The administrative costs borne by the banking entities for the distribution of contracts will be regarded as expenses directly attributable to the fulfilment of the contracts and will thus be incorporated into the measurement of the contracts and presented under the Insurance services expenses item. The contractual service margin of the insurance contracts distributed by the Group's banking entities will thus be determined by taking into account both the costs borne by the distributing banking entity (excl. internal margin) and the other directly attributable costs borne by the insurance entity.

Application of IFRS 9 by the Group's insurance entities

The initial application of IFRS 9 by the Group's insurance entities as at 1 January 2023 will be retrospective.

For the sake of consistency with the IFRS 17 transition arrangements, and in order to provide more relevant and useful information, the Group will restate the comparative data of the 2022 financial year relating to the relevant financial instruments of its insurance entities (including the financial instruments derecognised during the 2022 financial year).

Following the retrospective application of IFRS 9 as at 1 January 2022, differences resulting mainly from the measurement of the financial assets and liabilities concerned and of the impairment for credit risk will be recognised directly in equity.

The treatment of the financial assets currently measured at fair value through profit or loss will not be modified. The other financial assets (mainly Financial assets available for sale) comprise:

- basic financial instruments – whose cash flows correspond solely to repayments of principal and payments of interest on the principal due – (see Note 4.3.2):*
 - held within a "Collect and sell" business model: these instruments, which correspond to investments negotiated in relation to the management of insurance contracts, will be reclassified as Financial assets at fair value through equity.*
 - held within a "Collect" business model: these instruments, primarily held for the reinvestment of own funds, will be reclassified as Financial assets at amortised cost;*
- non-basic financial instruments: these instruments will be reclassified as Financial assets at fair value through Profit or Loss. The unrealised Gains and losses recognised directly in equity will be reclassified under Retained earnings (with no impact on the Group's equity).*

Owing to the credit quality of the assets held (see Note 4.3.4), the application of the IFRS 9 provisions to the recognition of expected credit losses should only result in a limited increase in their impairment.

Impacts on the Group's financial statements of the application of IFRS 17 and IFRS 9 by insurance entities

The retrospective application of IFRS 17 and IFRS 9 by the Group's insurance entities results as at 1st January 2022 (transition date) in a EUR 46 million increase of the Group's consolidated equity and the recording on the balance sheet of a contractual service margin (deferred income) determined for the insurance and reinsurance contracts issued totalling EUR 8,404 million.

In keeping with the possibility offered by Recommendation n° 2022-01 dated 8 April 2022 of the French ANC on the format of the consolidated accounts of the institutions of the banking sector under the International Accounting Standards which will supersede Recommendation n° 2017-02 from the initial application of IFRS 17 on, the Group will present the financial investments of its insurance business under the same accounting items than those used for the financial assets held in the context of the other businesses of the Group.

ORGANISATION OF THE IFRS 17 IMPLEMENTATION PROGRAMME

A project structure has been set up under the joint governance of the Group's Finance Division and the Insurance Business Line.

This governance is articulated around the following main themes with a view to implementing IFRS 9 and IFRS 17 in the Group's insurance entities, in France and abroad:

- accounting treatments and calculation models;
- presentation in the Financial statements and the Notes, and financial communication;
- adaptation of the closing process;
- selection and deployment of the IT solution.

In 2019 and 2020, the work primarily consisted in reviewing the different types of contracts, analysing their accounting treatment under IFRS 17 and their presentation in the consolidated financial statements, and lastly, examining and selecting solutions in terms of Information system and processes.

In 2021, the work focused on the implementation of new processes and the approval and deployment of the IT solution.

In 2022, the preparatory work continued with the validation of the tools and processes, the finalisation of the accounting treatments and calculation models, and the production of the opening data as at 1 January 2022 and of the comparative information on this financial year.

5. USE OF ESTIMATES AND JUDGMENT

To prepare the Group's consolidated financial statements, in application of the accounting principles described in the Notes, the Management makes assumptions and estimates that may impact on the amounts recognised in the income statement or as Unrealised or deferred capital gains and losses, on the valuation of assets and liabilities in the balance sheet, and on the information disclosed in the related notes to the consolidated financial statements.

In order to make these assumptions and estimates, the Management uses the information available at the date of preparation of the consolidated financial statements and may exercise its judgment. Valuations based on estimates innately involve risks and uncertainties relating to their occurrence in the future. Consequently, the actual future results may differ from these estimates and have a significant impact on the financial statements.

The assumptions and estimates made for the preparation of these consolidated financial statements take account of both the uncertainties about the economic consequences of the war in Ukraine and those that remain with regard to the Covid-19 pandemic, as well as of the current macroeconomic conditions. The effects of these events on the assumptions and estimates used are specified in the 6th paragraph of this Note.

Estimates and judgment are applied in particular with regard to the following items:

- the fair value in the balance sheet of financial instruments not listed on an active market which are recognised as Financial assets and liabilities at fair value through profit or loss, Hedging derivatives, Financial assets at fair value through other comprehensive income or Investments of insurance companies (described in Notes 3.1, 3.2, 3.3, 3.4 and 4.3), as well as the fair value of the instruments measured at amortised cost for which this information must be disclosed in the Notes to the financial statements;
- the impairment and provisions for credit risk related to financial assets measured at amortised cost or at fair value through other comprehensive income and loan commitments and guarantee commitments granted measured using models or internal assumptions based on historical, current and prospective data (see Note 3.8). The use of estimates and judgment relates in particular to the assessment of the deterioration in credit risk observed since the initial recognition of financial assets and the measurement of the amount of expected credit losses on these same financial assets;
- the assumptions and amortisation conventions used to determine the maturities of financial assets and liabilities for the purpose of measuring and monitoring structural interest rate risk and documenting the related macro fair value hedge accounting (see Note 3.2);
- the impairment of Goodwill (see Note 2.2);
- the provisions recorded under liabilities on the balance sheet, the underwriting reserves of insurance companies and the deferred profit-sharing (see Notes 4.3, 5.2 and 8.3);
- the tax assets and liabilities recognised on balance sheet (see Note 6);
- the analysis of the characteristics of the contractual cash flows of financial assets (see Note 3);
- the assessment of control for the determination of the scope of consolidated entities, especially with regard to structured entities (see Note 2.3);
- the determination of the lease period to be applied for recognising the right-of-use assets and the lease liabilities (see Note 8.4).

CLIMATE RISKS



The Group continues its work to gradually integrate climate risks in the preparation of its consolidated accounts. Climate change-related risks are not a new risk category but rather an aggravating factor for categories already covered by the Group's risk management system. In this regard, the impact of transitional risk on the credit risk of the corporate customers of Societe Generale remains the primary climate risk for the Group.

As at 31 December 2022, the determination of the expected credit losses includes the possible impact of climate risks considered when assessing individual risks and sectoral risks, provided it is compatible with the provisioning horizon; and the impact of the Group's commitments in favour of the energy and environmental transition and the development of the territories are still taken into account in the estimated budgets to determine the recoverable amount of the cash-generating units (CGU) and the recoverability of the deferred tax assets.

In addition, the Group analyses the provisions of the draft ESRS (European Sustainability Reporting Standards) prepared and subjected to public consultation by the EFRAG (European Financial Reporting Advisory Group), in particular those relating to connectivity between these future disclosure requirements and the consolidated financial statements.

The Group continues its work to gradually integrate climate risks in the preparation of its consolidated accounts (see Notes 2.2, 3, 3.8 and 6).

6. CRISES: COVID-19, WAR IN UKRAINE AND ECONOMIC CONSEQUENCES

The lifting of the Covid-19-related restrictions in several major economies has supported economic activity even if the lockdowns in Mainland China have hampered it.

However, 2022 has been marked by the war in Ukraine. The conflict, with its loss of human life and the suffering caused, has significant economic costs and is accompanied with a very high degree of uncertainty.

In the euro area, the supply difficulties, the increase in energy costs, the decline in purchasing power with high inflation and the tightening of economic policies are the main bottlenecks to growth. If pandemic-related risks have decreased significantly in the short-term, the strong uncertainties related to the war in Ukraine jeopardise these prospects and a more pronounced slowdown is anticipated in 2023.

Furthermore, the Group announced in April 2022, the cessation of its banking and insurance business in Russia. In May 2022, the Group completed the transfer of Rosbank and its insurance subsidiaries in Russia (see Note 2.1).

In this context, the Group has updated the macroeconomic scenarios selected to prepare the consolidated financial statements and has continued applying certain adjustments to its models (adjustments to the GDP as described in Note 3.8).

These macro-economic scenarios are taken into account in the credit loss measurement models including forward-looking data (see Note 3.8) and are also used in some tests regarding goodwill impairment (see Note 2.2) and deferred tax assets recovery (see Note 6).

6.1 MACROECONOMIC SCENARIOS

As at 31 December 2022, the Group has selected three scenarios to factor in the uncertainties relating to the war in Ukraine, the ongoing Covid-19 pandemic and the current macro-economic context. The SG Extended scenario, drafted specifically in the context of the sanitary crisis, has become obsolete owing to the management and evolution of the crisis during 2022.

The assumptions selected to draw up the scenarios are listed below:

- The central scenario (SG Central) predicts a sharp economic slowdown in 2023, and only a modest rebound in growth in 2024. In 2023, inflation will remain high, close to 5.5% before dropping below 3% in 2024 and returning to target in the mid-term. The ECB will continue tightening its monetary policy in the short term; but a possible easing might start at the end of 2023.
- The favourable scenario (SG Favourable) describes an accelerated economic growth compared to the trajectory projected in the central scenario; this growth may result from improved supply conditions owing to a positive shock on productivity or from unexpectedly improved demand conditions (situation observed in several economies in 2021/2022 following releases from lockdowns). In both cases, stronger growth will have a positive impact on employment and/or the profitability of companies.
- The stressed scenario (SG Stress) corresponds to a crisis situation leading to a negative deviation in GDP compared to the central scenario. This scenario may result from a financial crisis (2008 crisis, Euro area crisis...), an exogenous crisis (Covid-19-like pandemic) or a combination of both.

These scenarios are developed by the Economic and Sector Research Division of Societe Generale for all the entities of the Group based on the information published by the statistical institutes in each country.

Forecasts from institutions (IMF, Global Bank, ECB, OECD...) and the consensus among market economists serve as a reference to challenge the Group's forecasts in order to ensure the relevance and consistency of the thus-constructed scenarios.

6.2 FINANCIAL INSTRUMENTS: EXPECTED CREDIT LOSSES

The scenarios provided by the Group economists are incorporated into the credit loss provisioning models over a three-year horizon, followed by a two-year period to gradually return by the fifth year to the average probability of default observed during the calibration period. The assumptions made by the Group with a view to developing these macro-economic scenarios are updated to account for the uncertainties about the

economic consequences of the war in Ukraine and the remaining uncertainties regarding the Covid-19 pandemic.

VARIABLES

The GDP growth rate, the profit margin of businesses in France, the unemployment rates, the inflation rate in France and the yield on France 10-year government bonds are the main variables used in the expected credit losses valuation models.

The variables with the stronger impact on the determination of expected credit losses (GDP growth percentage for the major countries in which the Group operates and profit margin of businesses in France) for each scenario are detailed hereinafter:

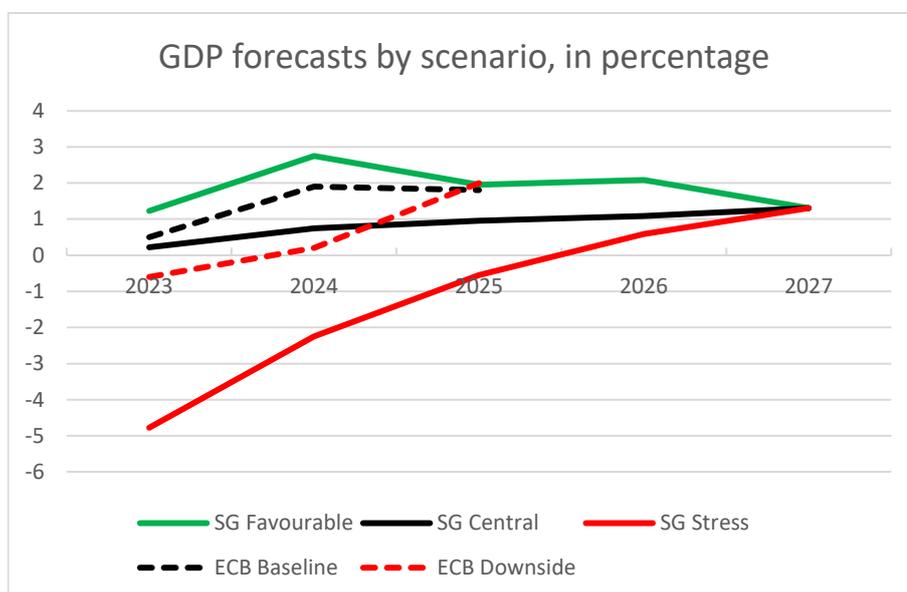
<i>SG Favourable scenario</i>	2023	2024	2025	2026	2027
France GDP	1.5	2.8	2.0	2.1	1.3
Profit margin of French companies	32.7	32.7	32.9	32.9	32.3
Euro area GDP	1.2	2.7	2.0	2.1	1.3
United States GDP	1.0	2.6	2.8	2.8	2.3
China GDP	5.5	6.3	5.1	5.2	4.4
Czech Republic GDP	1.4	4.0	3.0	3.1	2.3
Romania GDP	2.9	4.5	3.8	3.8	3.2

<i>SG Central scenario</i>	2023	2024	2025	2026	2027
France GDP	0.5	0.8	1.0	1.1	1.3
Profit margin of French companies	32.1	32.4	32.4	32.4	32.3
Euro area GDP	0.2	0.7	1.0	1.1	1.3
United States GDP	0.0	0.6	1.8	1.8	2.3
China GDP	4.5	4.3	4.1	4.2	4.4
Czech Republic GDP	0.4	2.0	2.0	2.1	2.3
Romania GDP	1.9	2.5	2.8	2.8	3.2

<i>SG Stress scenario</i>	2023	2024	2025	2026	2027
France GDP	(4.5)	(2.2)	(0.5)	0.6	1.3
Profit margin of French companies	29.9	30.2	30.2	30.2	32.3
Euro area GDP	(4.8)	(2.3)	(0.5)	0.6	1.3
United States GDP	(5.0)	(2.4)	0.3	1.3	2.3
China GDP	(0.5)	1.3	2.6	3.7	4.4
Czech Republic GDP	(4.6)	(1.0)	0.5	1.6	2.3
Romania GDP	(3.1)	(0.5)	1.3	2.3	3.2

These simulations assume that the historical relationships between the key economic variables and the risk parameters remain unchanged. In practice, these correlations may be impacted by geopolitical or climatic events, changes in behaviour, legal environment or granting policy.

The illustration below compares the GDP forecasts in the euro area used by the Group for each scenario with the scenarios published by the ECB in December 2022.



WEIGHTING OF THE MACROECONOMIC SCENARIOS

The probabilities used are based on the differences observed over the past 25 years between the forecasts made by a consensus of economists regarding the US GDP and the actual scenario that occurred (forecast similar to the actual scenario, significantly optimistic or pessimistic).

In order to better account for a possible reversal of the cycle, the Group applies a methodology for weighting scenarios and assigns a higher weight to the Central scenario when the economy is depressed. Conversely, the methodology provides for a higher weight to be assigned to the SG Stress scenario when the economy moves towards the peak of the cycle. Accordingly, the weighting applied to the Central scenario is set at 60% as at 31 December 2022 in relation to the cancellation of the SG Extended scenario.

Presentation of the changes in weightings:

	31.12.2022	30.06.2022	31.12.2021
SG Central	60%	60%	50%
SG Extended	NA	NA	10%
SG Stress	30%	30%	30%
SG Favourable	10%	10%	10%

CALCULATION OF EXPECTED CREDIT LOSSES AND SENSITIVITY ANALYSIS

The Cost of risk as at 31 December 2022 amounts to a net expense of EUR 1,647 million, increasing by EUR 947 million (+135%) compared to 31 December 2021 (EUR 700 million).

Sensitivity tests have been conducted to measure the impact of the changes in weightings on the models. The sectoral adjustments (see Note 3.8) have been taken into account in the sensitivity tests. The scope of this exercise concerns the outstanding amounts classified as Stage 1 and Stage 2 subject to a statistical modelling of the impacts of the macro-economic variables (72% of the outstanding amounts in Stage 1/Stage 2).

The results of these tests, with no impact on the classification of the outstanding amounts concerned, show that, in the event of a 100% weighting:

- of the SG Stress scenario, the impact would be an additional allocation of EUR 627 million;
- of the SG Favourable scenario, the impact would be a reversal of EUR 407 million;
- of the SG Central scenario, the impact would be a reversal of EUR 272 million.

COVID-19 CRISIS: FRENCH STATE GUARANTEED LOANS (*PGE*)

Until 30 June 2022, the Group offered to its crisis-impacted customers (professionals and corporate customers) the allocation of State Guaranteed Loan facilities (*PGE*) within the framework of the 2020 French Amending Finance Act and the conditions set by the French decree of 23 March 2020. These are financings granted at cost price and guaranteed by the government for a share of the borrowed amount between 70 to 90% depending on the size of the borrowing enterprise (with a waiting period of two months after disbursement at the end of which the guarantee period begins).

With a maximum amount corresponding, in the general case, to three months of turnover before tax, these loans come with a one-year repayment exemption. At the end of that year, the customer may either repay the loan or amortise it over one to five more years, with the possibility of extending the grace period for the repayment of principal for one year (in line with the announcements made by the French “*Ministre de l’Economie, des Finances et de la Relance*” on 14 January 2021) without extending the total duration of the loan. The remuneration conditions of the guarantee are set by the State and are applicable by all French banking institutions: the Bank keeps only a share of the guarantee premium paid by the borrower (the amount of which depends on the size of the Company and the maturity of the loan) remunerating the risk it bears, which corresponds to the part of the loan not guaranteed by the State (*i.e.*, between 10% and 30% of the loan depending on the size of the borrowing company).

The contractual characteristics of *PGE* are those of basic loans (SPPI criterion) and these loans are held by the Group as part of a business model whose objective is to collect their contractual cash flows until their maturity; as a result, these loans have been recorded in the consolidated balance sheet under Customer loans at amortised cost.

As at 31 December 2022, the balance sheet outstanding amount of State Guaranteed Loans (*PGE*) granted by the Group is approximately EUR 13.3 billion after the first repayments made in 2022 at the end of the moratorium period, (of which EUR 4.1 billion classified as Stage 2 and EUR 1 billion as Stage 3). The *PGE* granted by the Retail Banking networks In France amount, as at 31 December 2022, to EUR 11.5 billion (of which EUR 3.8 billion classified as Stage 2 and EUR 0.9 billion as Stage 3), without predominance of a specific sector; the State guarantee for these loans covers, on average, 90% of their amount.

The expected credit losses recognised as at 31 December 2022 for *PGE* (French State Guaranteed Loans) amount to some EUR 210 million including EUR 130 million booked by the French retail networks (including EUR 50 million in Stage 2 and EUR 70 million in Stage 3).

A French decree published on 19 January 2022, amending the decree published on 23 March 2020, allows some companies to benefit, under certain conditions, from an extension of their *PGE* repayment deadlines from 6 to 10 years; these extensions have not had any significant impact on the Group’s financial statements as at 31 December 2022.

CONSEQUENCES OF THE WAR IN UKRAINE

The table below presents the changes in balance sheet and off-balance sheet exposures (measured at amortised cost or at fair value through equity) booked by the Group entities located in Russia, on one side, and by the Group entities outside Russia on Russian counterparties or Russian Group entities, on the other side.

	31.12.2022		30.06.2022		31.12.2021	
<i>In EUR billion</i>	Exposure at default	Gross outstanding	Exposure at default	Gross outstanding	Exposure at default	Gross outstanding
Onshore exposures on consolidated subsidiaries ⁽¹⁾	0.3	0.3	0.3	0.3	15.4	19.0
Offshore exposures ⁽²⁾	1.8	2	2.6	2.9	3.2	4.4
Rosbank residual exposures	0.1	0.1	0.5	0.5	-	-
Total	2.2	2.4	3.4	3.7	18.6	23.4

(1) The onshore exposures correspond to Rosbank, Rosbank Insurance and ALD Automotive OOO Russia.

(2) The offshore exposures (excl. Private Banking and residual exposures relating to the sale of Rosbank) correspond to exposures on Russian counterparties or on Russian Group subsidiaries booked outside Russia.

Russia and Ukraine exposures

In May 2022, the Group sold both its Rosbank subsidiary and its Russian insurance subsidiaries. The impact of these sales on the Group's financial statements are described in Note 2.1.

As at 31 December 2022, the Group is present in Russia through ALD subsidiaries (see onshore exposures on consolidated subsidiaries). On 11 April 2022, ALD announced that it would no longer conclude any new commercial transactions in Russia, Kazakhstan and Belarus, without challenging the ongoing concern status over the 12 next months of ALD Automotive OOO in Russia and ALD Automotive LLC in Belarus, both entities continuing to serve their customers and manage the existing vehicle fleet without encountering any specific difficulties in relation to business activities.

The Group is also present in Ukraine through its ALD subsidiary whose total balance sheet as at 31 December 2022 is equal to EUR 67.7 million.

Offshore exposures

Outside Russia, the Group still holds Russian counterparty credit exposures. All of these outstanding amounts (EUR 2 billion) have been classified as "sensitive" (see Note 3.8) and transferred to Stage 2 of impairment for credit risk or to Stage 3 when necessary.

The consequences of these different events (sale of Rosbank, classification as "sensitive" of the offshore Russian counterparties) as well as the account taken of the new macroeconomic scenarios to determine the expected credit losses as at 31 December 2022 are described in Note 3.8.

Other information

Legal, regulatory, statutory or contractual constraints or obligations may restrict the Group's ability to freely transfer assets between Group entities.

In May 2022, Russia published legislation providing for temporary restrictions and a special procedure on cash and capital movements initiated by Russian limited companies in favour of their foreign stakeholders related to "unfriendly countries".

7. HYPERINFLATION IN TURKEY

On 16 March 2022, the International Practices Task Force of the Center for Audit Quality, a standard reference for identifying countries with hyperinflation, published a working paper including Turkey in the list of hyperinflationary economies.

Consequently, as from 1 January 2022 on, the Group applied the provisions of IAS 29 (“Financial Reporting in Hyperinflationary Economies”) to prepare the individual financial statements in Turkish lira of the ALD entity located in Turkey (prior to their conversion in euros as part of the consolidation process). However, the financial statements of the SG Istanbul branch have not been restated, as the expected effects are not significant.

Under these provisions, the accounting value of some balance sheet items presented at cost is adjusted, at closing date, for the effects of inflation recorded over the period. In ALD Turkey's accounts, these adjustments were applied to the tangible fixed assets representative of the vehicle fleet, as well as to the various components of equity.

On the date of first application of this hyperinflation treatment (1 January 2022), the impact of these adjustments has been recorded in Consolidated reserves and non-controlling interests; on that date, the translation differences on the entities concerned have been reclassified as the same financial aggregates. For the subsequent closing periods, inflation adjustments for the eligible assets and equity items, as well as for expenses and income for the period, are to be recorded as income or expenses on foreign exchange transactions in the Net gains and losses on financial transactions.

Thus restated, the Turkish lira financial statements of ALD Turkey are to be converted into euro on the basis of the exchange rate applicable at the balance sheet date.

As at 1 January 2022, the total consolidated equity was increased by EUR 41.3 million, including a reduction in consolidated reserves of EUR -8.4 million after tax for the various adjustments and the reclassification of translation differences recorded on that date.

As at 31 December 2022, a gain of EUR 59.9 million was recorded as Net gains and losses on financial transactions for the inflation adjustments for the period. After tax and adjustment of other income and expense lines for the period, the effect of hyperinflation restatements on the consolidated net income amounted to EUR 37.6 million.

NOTE 2 – CONSOLIDATION



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The various activities of the Societe Generale group in France and abroad are carried out by Societe Generale – Parent company (which includes the Societe Generale foreign branches) and by all of the entities that it controls either directly or indirectly (subsidiaries and joint arrangements) or on which it exercises significant influence (associates). All of these entities make up the scope of the Group consolidation.

Consolidation uses a standardised accounting process to give an aggregated presentation of the accounts of Societe Generale – Parent company and its subsidiaries, joint arrangements and associates, presented as if they were a single entity.

To do so, the individual accounts of the entities that make up the Group are restated so that they are in accordance with IFRS, as adopted by the European Union, in order to present consistent information in the consolidated financial statements.

In addition, the accounting balances (assets, liabilities, income and expense) generated by transactions between Group entities are eliminated through the consolidation process so that the consolidated financial statements present only the transactions and results made with third parties outside of the Group.

ACCOUNTING PRINCIPLES

The consolidated financial statements of Societe Generale include the financial statements of the parent company and of the main French and foreign companies as well as foreign branches over which the Group exercises control as well as a portion of the financial statements of the companies over which the Group exercises joint control or significant influence.

CONSOLIDATED ENTITIES

▪ Subsidiaries

Subsidiaries are the entities over which the Group has exclusive control. The Group controls an entity if and only if the three following conditions are met:

- the Group has power over the entity (ability to direct its relevant activities, *i.e.* the activities that significantly affect the entity's returns), through the holding of voting rights or other rights; and
- the Group has exposure or rights to variable returns from its involvement with the entity; and
- the Group has the ability to use its power over the entity to affect the amount of the Group's returns.

Power

When determining voting rights for the purpose of establishing the Group's degree of control over an entity and the appropriate consolidation method, potential voting rights are taken into account where they can be freely exercised at the time the assessment is made or at the latest when decisions about the direction of the relevant activities need to be made. Potential voting rights are instruments such as call options on ordinary shares outstanding on the market or rights to convert bonds into new ordinary shares.

Some rights are designed to protect the interests of their holder (protective rights) without giving that party power over the investee to which those rights relate.

If there are several investors, each with substantive rights that give them the unilateral ability to direct different relevant activities, the investor with that has the current ability to direct the activities that most significantly affect the variable returns of the investee is presumed to have power over the investee.

Exposure to variable returns

Control exists only if the Group is significantly exposed to the variability of variable returns generated by its investment or its involvement in the entity. These returns, which could be dividends, interest, fees, etc., can be only positive, only negative or both positive and negative.

Link between power and variable returns

To assess the link between power and variable returns, if the Group has been delegated decision-making rights that it exercises on behalf and for the benefit of third parties (the principals), it is presumed to act as an agent for these principals, and therefore it does not control the entity when it exercises its decision-making power. In asset management activities, an analysis shall be performed in order to determine whether the asset manager is acting as agent or principal when managing the net assets of a fund; the fund is presumed to be controlled by the asset manager if the latter is considered as a principal.

Special case of structured entities

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Such is the case, for example, when the relevant activities are directed by means of contractual arrangements.

A structured entity often presents certain characteristics such as a limited business activity, a specific and carefully defined purpose, or insufficient capital to fund its activities without the use of subordinated financing. Structured entities may assume different legal forms: stock companies, partnerships, securitisation vehicles, mutual funds, unincorporated entities, etc.

When assessing the existence of control over a structured entity, all facts and circumstances shall be considered among which:

- the purpose and design of the entity;
- the structuring of the entity;
- risks to which the entity is exposed by way of its design and the Group's exposure to some or all of these risks;
- potential returns and benefits for the Group.

Unconsolidated structured entities are those that are not exclusively controlled by the Group.

▪ Joint arrangements

Through a joint arrangement (either a joint operation or a joint venture) the Group exercises joint control over an entity if decisions about the direction of its relevant activities require the unanimous consent of the parties that collectively control the entity. Assessing joint control requires an analysis of the rights and obligations of all the parties. In the case of a joint operation, the parties to the arrangement have rights to the assets and obligations for the liabilities.

In the case of a joint venture, the parties have rights to the net assets of the entity.

▪ Associates

Associates are companies over which the Group exercises significant influence and are accounted for using the equity method in the Group's consolidated financial statements. Significant influence is the power to participate in the financial and operating policies of an entity without exercising control. In particular, significant influence can result from Societe Generale being represented on the Board of Directors or Supervisory Board, from its involvement in strategic decisions, from the existence of significant intercompany transactions, from the exchange of management staff, or from the company's technical dependency on Societe Generale. The Group is assumed to exercise significant influence over the financial and operating policies of an entity when it directly or indirectly holds at least 20% of the voting rights in this entity.

CONSOLIDATION RULES AND METHODS

The consolidated financial statements are built up from the financial statements of the entities that are included in the consolidation scope. Companies with a fiscal year ending more than three months before or after that of Societe Generale prepare pro-forma statements for a twelve-month period ended 31 December. All significant balances, profits and transactions between Group companies are eliminated.

The results of newly acquired subsidiaries are included in the consolidated financial statements from their effective acquisition date while the results of subsidiaries disposed of during the fiscal year are included up to the date where the Group relinquished control.

▪ Consolidation methods

The subsidiaries, including the structured entities over which the Group has exclusive control, are fully consolidated.

In the consolidated balance sheet, full consolidation consists in replacing the value of the subsidiary's equity securities held by the Group with each of the subsidiary's assets and liabilities, in addition to the goodwill recognised when the Group assumed control over the entity (see Note 2.2). In the income statement and the statement of net income and unrealised or deferred gains and losses, the subsidiary's expense and income items are aggregated with those of the Group.

The portion of non-controlling interests in the subsidiary is presented separately in the consolidated balance sheet and income statement. However, in consolidated structured entities that are controlled by the Group, the portions of these entities not owned by the Group are recognised as Debt in the balance sheet.

In the case of a joint operation, the Group distinctly recognises in its consolidated financial statements its share in the assets and liabilities as well as its share in the related revenue and expense.

Associates and joint ventures are accounted for using the equity method in the consolidated financial statements of the Group. Under the equity method, the investment in an associate is recognised, on initial recognition, under Investments accounted for using the equity method at the cost of the Group's investment in the joint venture or associate, including goodwill and after the date of acquisition the carrying amount is increased or decreased to recognise the changes in the investor's share in the net asset value of the investee.

These investments are tested for impairment if there is objective evidence of impairment. If the recoverable amount of the investment (value in use or market value net of selling costs, whichever is higher) is lower than its carrying amount, an impairment loss is recorded on the balance sheet at the carrying amount of the investment. Impairment allowances and reversals are recorded under Net income from investments accounted for using the equity method.

The Group's share in the entity's net income and unrealised or deferred gains and losses is presented on separate lines in the consolidated income statement and the consolidated statement of net income and unrealised or deferred gains and losses. If the Group's share in the losses of an entity consolidated using the equity method becomes greater than or equal to its ownership interest in the company, the Group ceases to recognise its share in subsequent losses unless it is required to do so by legal or implied obligations, in which case it records a provision for said losses. Capital gains and losses generated on the disposal of companies accounted for using the equity method are recorded under Net income/expense from other assets

▪ Translation of foreign entity financial statements

The balance sheet items of consolidated companies reporting in foreign currencies are translated into euro at the official exchange rates prevailing at the closing date. Income statement items of these companies are translated into euros, at the average month-end exchange rates. Gains and losses arising from the translation of capital, reserves, retained earnings and income are recognised under Unrealised or deferred gains and losses – Translation differences. Gains and losses arising from the translation of the capital contribution of foreign branches of Group banks are also included in changes in consolidated shareholders' equity under the same heading.

In accordance with the option allowed under IFRS 1, the Group allocated all differences arising on translation of foreign entity financial statements at 1 January 2004 to consolidated reserves. As a result, if any of these entities are sold, the proceeds from the sale will only include write-backs of those translation differences arising since 1 January 2004.

▪ **Changes in Group's ownership interest in a consolidated entity**

In the event of an increase in Group's ownership interest in a subsidiary over which it already exercises control, the differences between the price paid for the additional stake and the assessed fair value of the proportion of net assets acquired at this date is recorded under Retained earnings, Group share.

Also, in the event of a reduction in the Group's ownership interest in a subsidiary over which it keeps control, the difference between the selling price and the carrying amount of the share of interests sold is recorded under Retained earnings, Group share.

The costs related to these transactions are recognised directly in equity.

When the Group loses control of a consolidated subsidiary, any investment retained in the former subsidiary is remeasured at fair value through profit or loss, at the same time the capital gain or loss is recorded under Net income/expense from assets in the consolidated income statement. The gains or losses on disposals include a share of goodwill previously allocated to the cash-generating units to which the subsidiary belongs. This share's determination is based on a normative capital allocated to the subsidiary that is sold and to the portion of cash-generating unit that is retained.

COMMITMENTS TO BUY OUT MINORITY SHAREHOLDERS IN FULLY CONSOLIDATED SUBSIDIARIES

In some fully consolidated Group subsidiaries, the Group has awarded minority shareholders commitments to buy out their stakes. For the Group, these buyout commitments are put option sales (put options without transfer of the risks and advantages associated with the ownership interest before the option's exercise). The exercise price for these options can be established using a formula agreed upon at the time of the acquisition of the shares in the subsidiary that takes into account its future performance. It can also be set as the fair value of these shares at the exercise date of the options.

The commitments are recorded as follows:

- in accordance with IAS 32, the Group records a financial liability for the put options granted to minority shareholders of the subsidiaries over which it exercises control. This liability is initially recognised at the present value of the estimated exercise price of the put options under Other liabilities;
- the obligation to recognise a liability even though the put options have not been exercised means that, in order to be consistent, the Group must use the same accounting treatment as the one applied to transactions in Non-controlling interests. As a result, the counterpart of this liability is a write-down in value of non-controlling interests underlying the options, with any balance deducted from Retained earnings, Group share;
- subsequent variations in this liability (linked to changes in the estimated exercise price of the options and the carrying value of Non-controlling interests) are recorded in full in Retained earnings, Group share;
- if the buy-out takes place, the liability is settled by the cash payment linked to the acquisition of non-controlling interests in the subsidiary. However if, when the commitment reaches its term, the buy-out has not occurred, the liability is written off against Non-controlling interests and Retained earnings, Group share for their respective portions;
- as long as the options have not been exercised, the results linked to Non-controlling interests with a put option are recorded under Non-controlling interests on the Group's consolidated income statement.

NOTE 2.1 - CONSOLIDATION SCOPE

The consolidation scope includes subsidiaries and structured entities under the Group's exclusive control, joint arrangements (joint ventures and joint operations) and associates whose financial statements are significant relative to the Group's consolidated financial statements, notably regarding Group consolidated total assets and gross operating income.

The main change to the consolidation scope at 31 December 2022, compared with the scope applicable at the closing date of 31 December 2021, is as follows:

SALE OF ROSBANK AND INSURANCE SUBSIDIARIES IN RUSSIA

Societe Generale announced on 18 May 2022 the closing of the sale of Rosbank group and the Group's Russian insurance subsidiaries to Interros Capital.

The financial consequences of this sale are presented below:

- A reduction in the Group's total balance sheet of EUR 16 billion mainly including a decrease in Customers loans at amortised cost of EUR 10 billion and a decrease in Customers deposits of EUR 13 billion.
- A loss on this disposal, reported in Net income / expense from other assets in 2022, of EUR -3.3 billion. This loss includes a translation difference reclassified into income for EUR -0.5 billion, cumulated amount at 18 May after an increase of EUR 0.5 billion following the appreciation of the ruble between 1 January 2022 and the date of sale.

ACQUISITION OF LEASEPLAN BY ALD

On 6 January 2022, the Group announced that Société Générale and ALD had signed two agreements for ALD to acquire 100% of LeasePlan's capital. The completion of this acquisition is expected by the end of the first half-year of 2023.

The acquisition price totalling EUR 4.5 billion will be paid in cash and in securities. LeasePlan shareholders will receive EUR 1.8 billion in cash and securities representing a pro forma stake of 30.75% of ALD's capital upon completion of the transaction, as well as shares with warrants attached for an equivalent of 3.12% of the consolidated entity's capital on a fully diluted basis.

On 16 December 2022, ALD announced that it had successfully carried out a capital increase with the preservation of the shareholders' preferential subscription right for approximately EUR 1.2 billion as part of the LeasePlan acquisition project.

Before this increase, Société Générale held 79.8% of ALD's social capital. In accordance with its commitment to remain ALD's majority shareholder in the long term, Société Générale subscribed to new shares for approximately EUR 803 million representing about 66.3% of the capital increase and now holds 75.9% of ALD's social capital.

As a result, after the completion of the LeasePlan acquisition, Société Générale will remain the majority shareholder of ALD with a stake of 52.6%. This stake may be reduced to 51% in the event of the exercise of the shares with warrants attached that will be granted to LeasePlan shareholders to allow them to increase their pro forma stake up to 32.9% of ALD's social capital.

NOTE 2.2 - GOODWILL



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When the Group acquires a company, it integrates in its consolidated balance sheet all of the new subsidiary's assets and liabilities at fair value.

But the acquisition price of a company is generally higher than the net revalued amount of its assets and liabilities. The excess value, called goodwill, can represent part of the company's intangible capital (reputation, quality of its personnel, market shares, etc.) which contributes to its overall value, or the value of the future synergies that the Group hopes to develop by integrating the new subsidiary in its existing activities.

In the consolidated balance sheet, the goodwill is recognised as an intangible asset, the useful life of which is presumed to be unlimited; it is not amortised and therefore does not generate any recurring expense in the Group's future results.

However, every year, the Group assesses whether the value of its goodwill has not depreciated. If it has, an irreversible expense is immediately recognised in the Group results, which indicates that the profitability of the intangible capital of the acquired entity is inferior to initial expectations, or that the anticipated synergies have not been fulfilled.

ACCOUNTING PRINCIPLES

The Group uses the acquisition method to recognise its business combinations in accordance with IFRS 3 "Business Combinations".

On the acquisition date, the acquisition cost is calculated as the total fair value of all assets given, liabilities incurred or assumed and equity instruments issued in exchange for the control of the acquired entity. The costs directly linked to business combinations are recognised in profit or loss for the period except those related to the issuance of equity or debt instruments.

Any contingent consideration is included in the acquisition cost at its fair value on the acquisition date, even if its occurrence is only potential. It is recognised under equity or debt in the balance sheet depending on the settlement alternatives. If recognised as debt, any subsequent adjustment is recorded under income for financial liabilities in accordance with IFRS 9 and within the scope of the appropriate standards for other debts. If recognised as equity instruments, these subsequent adjustments are not recorded.

On the acquisition date, as required by IFRS 3, all assets, liabilities, off-balance sheet items and contingent liabilities of this new subsidiary (even if they were not recognised before the combination) are measured individually at their fair value regardless of their purpose. At the same time, non-controlling interests are valued according to their share of the fair value of the identifiable assets and liabilities of the acquired entity. However, for each business combination, the Group may also choose to measure non-controlling interests initially at their fair value, in which case a fraction of goodwill is allocated.

Any excess of the price paid over the assessed fair value of the proportion of net assets acquired is recorded on the asset side of the consolidated balance sheet under Goodwill. Any deficit is immediately recognised in profit or loss.

On the acquisition date, any stake in this entity already held by the Group is remeasured at fair value through profit or loss. In the case of a step acquisition, goodwill is therefore determined by referring to the fair value on the acquisition date.

The analyses and professional appraisals required for this initial valuation must be carried out within 12 months as from the acquisition date, as must any corrections to the value based on new information related to facts and circumstances existing at the acquisition date. Goodwill and non-controlling interests initially recorded are consequently adjusted. On the acquisition date, each item of goodwill is allocated to one or more cash-generating units expected to derive benefits from the acquisition. When the Group reorganises its reporting structure in a way that changes the composition of one or more cash-generating units, goodwill previously allocated to modified units is reallocated to the units affected (new or existing). This reallocation is generally performed using a relative approach based on the normative capital requirements of each cash-generating unit (CGU) affected.

Goodwill is reviewed regularly by the Group and tested for impairment whenever there is any indication that its value may have diminished, and at least once a year. Any impairment of goodwill is calculated based on the recoverable value of the relevant cash-generating unit(s).

If the recoverable amount of the cash-generating unit(s) is less than its (their) carrying amount, an irreversible impairment is recorded in the consolidated income statement for the period under Value adjustment on goodwill.

As at 31 December 2022, goodwill is split into the following 8 CGUs:

Table 2.2.A

Pillars	Activities
French Retail Banking	
France Networks *	Societe Generale's retail banking network, Boursorama online banking activities, wealth Management Solutions, consumer and equipment financing in France, retail banking network of Crédit du Nord and its 7 regional banks
International Retail Banking and Financial Services **	
Europe	Retail banking and consumer finance services in Europe, notably in Germany (Hanseatic Bank, BDK), Italy (Fiditalia), France (CGL), Czech Republic (KB, Essox), Romania (BRD)
Africa, Mediterranean Basin and Overseas	Retail banking and consumer finance in Africa, the Mediterranean Basin and Overseas, including in Morocco (SGMA), Algeria (SGA), Tunisia (UIB), Cameroon (SGBC), Côte d'Ivoire (SGBCI) and Senegal (SGBS)
Insurance	Life and non-life insurance activities in France and abroad (including Sogécap, Sogessur, Oradéa Vie and Antarius)
Equipment and Vendor Finance	Financing of sales and professional equipment by Societe Generale Equipment Finance
Auto Leasing Financial Services	Operational vehicle leasing and fleet management services (ALD Automotive)
Global Banking and Investor Solutions	
Global Markets and Investor Services	Market solutions for businesses, financial institutions, the public sector, family offices and a full range of securities services, clearing services, execution, prime brokerage and custody
Financing and Advisory	Advisory and financing services for businesses, financial institutions, the public sector and transaction and payment management services

* Following the steering changes at the end of 2021 resulting from the sale of Lyxor, SG Private Banking has been reporting to the French Retail Banking operating segment since 1 January 2022. The existing synergies between the SG Private Banking and the Retail Banking business also led the Group to combine the two CGUs under the French Networks CGU, SG Private Banking being an extension of Retail Banking to a specific customer segment.

** Following the disposal of Rosbank and the insurance subsidiaries in Russia in May 2022, the Russia CGU has been eliminated. No Goodwill was allocated to this CGU as of December 31, 2021.

The table below shows the changes by operating segment (Note 8.1) over the year 2022 in the values of goodwill of CGUs:

Table 2.2.B

<i>(In EUR m)</i>	Value as at 31.12.2021	Acquisitions and other increases	Disposals and other decreases	Transfers	Impairment	Value as at 31.12.2022
French Retail Banking	831	-	-	237	-	1,068
French Networks *	831	-	-	237	-	1,068
International Retail Banking	1,475	-	(2)	-	-	1,473
Europe	1,361	-	(2)	-	-	1,359
Russia	-	-	-	-	-	-
Africa, Mediterranean Basin and Overseas	114	-	-	-	-	114
Insurance	335	-	(1)	-	-	334
Insurance	335	-	(1)	-	-	334
Financial Services	806	72	(29)	-	-	849
Equipment and Vendor Finance	228	-	-	-	-	228
Auto Leasing Financial Services	578	72	(29)	-	-	621
Global Markets and Investor Services	-	-	-	-	-	-
Global Markets and Investor Services	-	-	-	-	-	-
Financing and Advisory	57	-	-	-	-	57
Financing and Advisory	57	-	-	-	-	57
Asset and Wealth Management	237	-	-	(237)	-	-
Asset and Wealth Management *	237	-	-	(237)	-	-
Total	3,741	72	(32)	-	-	3,781

* Following the steering changes at the end of 2021 resulting from the sale of Lyxor, SG Private Banking has been reporting to the French Retail Banking operating segment since 1 January 2022. The existing synergies between the SG Private Banking and the Retail Banking business also led the Group to combine the two CGUs under the French Networks CGU, SG Private Banking being an extension of Retail Banking to a specific customer segment.

IMPAIRMENT TEST OF CGU

The Group performed an annual impairment test at 31 December 2022 for each CGU to which goodwill had been allocated.

A CGU is defined as the smallest identifiable group of assets that generates cash inflows, which are largely independent of the cash inflows from the Group's other assets or groups of assets. Impairment tests consist into assessing the recoverable value of each CGU and comparing it with its carrying value. An irreversible impairment loss is recorded in the income statement if the carrying value of a CGU, including goodwill, exceeds its recoverable value. This loss is booked under value adjustment on goodwill.

The recoverable amount of a CGU is calculated using the discounted cash flow (DCF) method applied to the entire CGU.

The key principles retained for the implementation of annual tests for the assessment of the recoverable value of CGUs are as follows:

- For each CGU, estimates of future distributable dividends are determined over a five-year period, on the basis of a three-year budget trajectory (2023 – 2025) extrapolated to 2026 and 2027, the latter year being used to calculate the terminal value.

- These estimates take into account the equity target allocated to each CGU, unchanged compared to 31 December 2021 (11% of the risk-weighted assets of each CGU).
- The growth rates used to calculate the terminal value are determined using forecasts on sustainable long-term economic growth and inflation. These rates are estimated using two main sources, namely the International Monetary Fund and the economic analyses produced by SG Cross Asset Research which provides 2026 or 2027 forecasts.
- The projected dividends are then discounted on the basis of a rate equal to the risk-free rate grossed up by a risk premium based on the CGU's underlying activities. This risk premium, specific to each activity, is calculated from a series of equity risk premiums published by SG Cross Asset Research and from its specific estimated volatility (beta). Where appropriate, the risk-free rate is also grossed up by a sovereign risk premium, representing the difference between the risk-free rate available in the area of monetary assignment (mainly US dollar area or Euro area) and the interest rate observed on liquid long-term treasury bonds issued (mainly US dollar area or Euro area), in proportion with risk-weighted assets for CGUs covering several countries. The updated discount rates as at 31 December 2022 are detailed below.

The table below presents discount rates and long-term growth rates specific to the CGUs of the Group's three core businesses:

Table 2.2.C

Assumptions as at 31 December 2022	Discount rate	Long-term growth rate
French Retail Banking		
French Networks	8.4%	2.0%
International Retail Banking		
Retail Banking and Consumer Finance	11.3% to 12.9%	2% to 3%
Insurance		
Insurance	9.5%	2.5%
Financial Services		
Equipment and Vendor Finance and Auto Leasing Financial Services	10.0%	2.0%
Global Markets and Investor Services		
Global Markets and Investor Services	11.5%	2.0%
Financing and Advisory		
Financing and Advisory	10.0%	2.0%



The budget trajectories take into account in particular the impacts of the commitments in favor of the energy and environmental transition and the development of the territories detailed in the Declaration of Non-Financial Performance (DNFP).

These budgets are based on the following main business and macro-economic assumptions:

Table 2.2.D

Pillars	
French Retail Banking	
	<ul style="list-style-type: none"> ▪ Ongoing efforts to shift operations and relationship banking at Societe Generale and Crédit du Nord towards a digital model, and implementation of the project to merge the two retail banking networks
France Networks	<ul style="list-style-type: none"> ▪ Consolidation of commercial and operational efficiency in Wealth Management and continued development of synergies with retail banking network ▪ Confirmation of Boursorama's customer acquisition plan, with in particular the transfer of customers from ING France
International Retail Banking & Financial Services	
Europe	<ul style="list-style-type: none"> ▪ Continued adaptation of our models to capture growth potential in the region and consolidate the competitive positions of our operations ▪ Strict discipline applied to operating expenses and normalisation of cost of risk
Africa, Mediterranean Basin and Overseas	<ul style="list-style-type: none"> ▪ Continued development of Societe Generale's sales network ▪ Continued focus on operating efficiency (automatisation, dematerialisation, digitalisation and mutualisation initiatives) and gradual reduction cost of risk
Insurance	<ul style="list-style-type: none"> ▪ Reinforcement of integrated bank insurance model and continued dynamic growth in France and abroad in synergy with the retail banking network, Private Banking and financial services to businesses ⁽¹⁾
Equipment and Vendor Finance	<ul style="list-style-type: none"> ▪ Consolidation of leadership in these corporate financing businesses ▪ Strict discipline applied to operating expenses and scarce resources
Auto Leasing Financial Services	<ul style="list-style-type: none"> ▪ Creation of a leading global player in mobility with the integration of LeasePlan ▪ Continued growth for strategic partners and for long-time leasing to retail customers ▪ Continued focus on operating efficiency
Global Banking and Investor Solutions	
Global Markets and Investor Services	<ul style="list-style-type: none"> ▪ Thanks to the restructuring initiated in 2019, better balance of the portfolio of businesses securing future revenues and enabling an optimisation of the use of resources in a standardised market context. ▪ Consolidation of market-leading franchises (equities) and growth mainly supported by financing and investment solutions activities. ▪ Continued of optimisation measures and investments in information systems
Financing and Advisory	<ul style="list-style-type: none"> ▪ Consolidation of origination momentum of financing activities ▪ Consolidation of market-leading franchises (commodity and structured financing)

(1) The impacts of the new IFRS 17 standard, which came into force on 1 January 2023, are incorporated into the budget trajectory of the Insurance CGU.

For CGUs, the tests carried out at 31 December 2022 show that the recoverable amount remains higher than the book value.

Sensitivity tests were performed to measure the impact of the change in the discount rate and in the long-term growth rate on the recoverable amount of each CGU. The results of these tests show that:

- a 50 basis point increase applied to all CGU discount rates shown in the table above would result in a decrease in the total recoverable amount of 7.2% without requiring additional impairment of any CGU;
- a 50 basis point reduction in long-term growth rates would result in a 1.4% decrease in the total recoverable amount without requiring additional depreciation of any CGU.
- by combining these two sensitivity cases, the total recoverable amount would result in a 8.3% decrease without requiring additional depreciation of any CGU.

NOTE 2.3 - UNCONSOLIDATED STRUCTURED ENTITIES

The information provided hereafter concerns entities structured but not controlled by the Group. This information is grouped by main type of similar entities, such as Financing activities, Asset management and Others (including Securitisation and Issuing vehicles).

Asset financing includes lease finance partnerships and similar vehicles that provide aircraft, rail, shipping or real estate finance facilities.

Asset management includes mutual funds managed by the Group's asset management subsidiaries.

Securitisation includes securitisation funds or similar vehicles issuing financial instruments that can be subscribed for by investors and that generate credit risks inherent in an exposure or basket of exposures which can be divided into tranches.

The Group's interests in unconsolidated entities that have been structured by third parties are classified among financial instruments in the consolidated balance sheet according to their nature.

1. INTERESTS IN UNCONSOLIDATED STRUCTURED ENTITIES

The Group's interests in an unconsolidated structured entity refer to contractual and non-contractual involvements that expose the Group to the variability of returns from the performance of this structured entity.

Such interests can be evidenced by:

- the holding of equity or debt instruments regardless of their rank of subordination;
- other funding (loans, cash facilities, loan commitments, liquidity facilities);
- credit enhancement (guarantees, subordinated instruments, credit derivatives...);
- issuance of guarantees (guarantee commitments);
- derivatives that absorb all or part of the risk of variability of the structured entity's returns, except Credit Default Swap (CDS) and options purchased by the Group;
- contracts remunerated by fees indexed to the structured entity's performance;
- tax consolidation agreements.

Table 2.3.A

<i>(In EUR m)</i>	Asset financing		Asset management		Others	
	31.12.2022	31.12.2021	31.12.2022	31.12.2021	31.12.2022	31.12.2021
Total balance sheet ⁽¹⁾ of the entity	5,898	6,018	18,090	17,635	23,085	23,932
Net carrying amount of Group interests in unconsolidated structured entities						
Assets	2,646	2,650	2,579	4,659	8,719	8,512
Financial assets at fair value through profit or loss	138	269	2,377	4,445	1,181	979
Financial assets at fair value through other comprehensive income	-	-	-	-	51	52
Financial assets at amortised cost	2,503	2,377	43	54	7,486	7,480
Others	5	4	159	160	1	1
Liabilities	1,419	1,490	2,941	4,242	1,410	1,814
Financial liabilities at fair value through profit or loss	99	115	2,530	3,715	175	973
Due to banks and customer deposits	1,257	1,338	384	498	1,235	841
Others	63	37	27	29	-	-

(1) For Asset management: NAV (Net Asset Value) of funds.

The group may grant to these entities repayable advances related to the establishment of working capital, which remain insignificant.

However, this year, the Group has not provided any financial support to these entities, except if bound to by contract, and, as of 31 December 2022, does not intend to provide such support.

The maximum exposure to loss related to interests in unconsolidated structured entities is measured as:

Table 2.3.B

	Asset financing		Asset management		Others	
	31.12.2022	31.12.2021	31.12.2022	31.12.2021	31.12.2022	31.12.2021
<i>(In EUR m)</i>						
Amortised cost or fair value (according to the measurement of the financial instrument) of non-derivative financial assets entered into with the structured entity	2,538	2,475	4,340	5,096	1,932	1,851
Fair value of derivative financial assets recognised in the balance sheet	59	195	620	1,838	346	372
Notional amount of CDS sold (maximum amount to be paid)	-	-	-	-	-	-
Notional amount of loan or guarantee commitments granted	367	112	112	461	1,498	2,331
Maximum exposure to loss	2,964	2,782	5,072	7,395	3,776	4,554

The amount of maximum exposure to loss can be mitigated by:

- the notional amount of guarantee commitments received;
- the fair value of collateral received;
- the carrying amount of surety deposits received.

These mitigating amounts must be capped in case of legal or contractual limitation of their realisable or recoverable amounts. They amounted to EUR 1,289 million and mainly concern Others (including Securitisation and Issuing vehicles).

2. INFORMATION ON UNCONSOLIDATED STRUCTURED ENTITIES SPONSORED BY THE GROUP

The Group may have no ownership interest in a structured entity, but still be considered as a sponsor of this structured entity if it acts or has acted as:

- a structurer;
- an originator for potential investors;
- an asset manager;
- an implicit or explicit guarantor of the entity's performance (in particular via capital or return guarantees granted to mutual fund unit holders).

A structured entity is also considered to be sponsored by the Group if its name includes the name of the Group or the name of one of its subsidiaries.

Conversely, entities that are structured by the Group according to specific needs expressed by one or more customers or investors are considered to be sponsored by said customers or investors.

As at 31 December 2022, the total amount of the balance sheet of these unconsolidated structured entities, sponsored by the Group, and in which the Group does not have any interest, was EUR 4,275 million.

In 2022, no significant revenue has been recognised for these structured entities.

NOTE 2.4 - NON-CURRENT ASSETS HELD FOR SALE AND RELATED DEBT

ACCOUNTING PRINCIPLES

A non-current asset or group of assets and liabilities is deemed to be “held for sale” if its carrying value will primarily be recovered through a sale and not through its continuing use. For this classification to apply, the asset or group of assets and liabilities must then be immediately available-for-sale in its present condition and it must be highly probable that the sale will occur within twelve months.

For this to be the case, the Group must be committed to a plan to sell the asset (or disposal group if assets and liabilities) and have begun actively searching for a buyer. Furthermore, the asset or group of assets and liabilities must be measured at a price that is reasonable in relation to its current fair value.

Assets and liabilities into this category are classified as Non-current assets held for sale and Non-current liabilities held for sale, with no netting.

If the fair value less selling costs of non-current assets and groups of assets and liabilities held for sale is less than their net carrying value, an impairment is then recognised in profit or loss. Moreover, Non-current assets held for sale are no longer amortised or depreciated.

Table 2.4.A

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Assets	1,081	27
Fixed assets and Goodwill	839	26
Financial assets	95	-
<i>Due from banks</i>	93	-
<i>Customer loans</i>	2	-
Other assets	147	1
Liabilities	220	1
Allowances	-	1
Financial liabilities	57	-
<i>Financial liabilities at fair value through profit or loss</i>	1	-
<i>Due to banks</i>	56	-
Other liabilities	163	-

As at 31 December 2022, the Non-current assets held for sale and Non-current liabilities held for sale items encompass the assets and liabilities related to motor vehicle rental activity, of which mainly those of entities SGALD AUTOMOTIVE SOCIEDADE GERAL DE COMERCIO E ALUGUER DE BENS SA in Portugal, ALD AUTOMOTIVE AS in Norway and MERRION FLEET MANAGEMENT LIMITED in Ireland. Indeed, the acquisition of LeasePlan by ALD has been approved by the European Commission subject to the sale of the motor vehicle rental activities of ALD Automotive in Portugal, Norway, Ireland and LeasePlan in Czech Republic, in Finland and in Luxembourg.

NOTE 3 - FINANCIAL INSTRUMENTS



The financial instruments represent the contractual rights or obligations to receive or to pay cash or other financial assets. The Group's banking activities generally take the form of financial instruments covering a broad spectrum of assets and liabilities, such as loans, investment portfolios (equity, bonds, etc.), deposits, regulated savings accounts, debt securities issued and derivative instruments (swaps, options, forward contracts, credit derivatives, etc.).

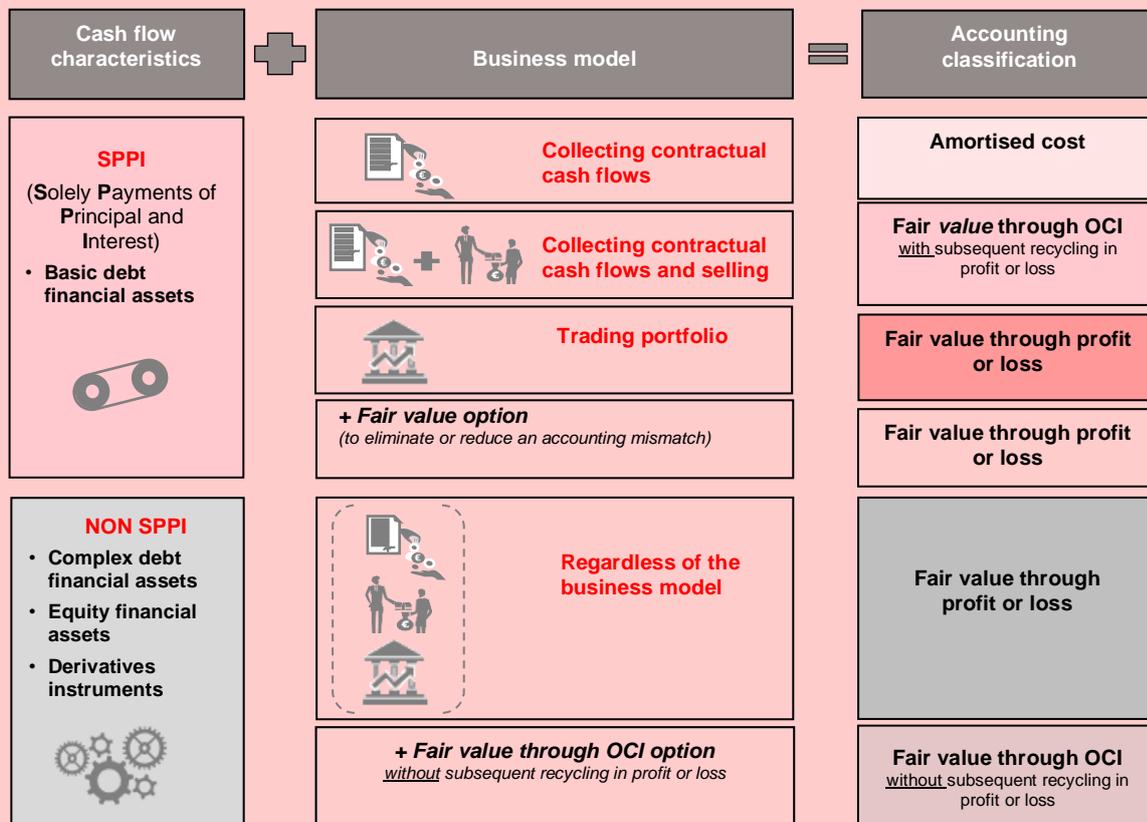
In the financial statements, the classification and valuation of financial assets and liabilities depend on their contractual characteristics and the way the entity manages those financial instruments.

However, this distinction is not applicable to derivative instruments, which are always measured at fair value in the balance sheet, no matter what their purpose is (market activities or hedging transactions).

ACCOUNTING PRINCIPLES

CLASSIFICATION OF FINANCIAL ASSETS

At initial recognition, financial instruments are classified in the Group balance sheet in one of three categories (amortised cost, fair value through profit or loss, and fair value through other comprehensive income) that determine their accounting treatment and subsequent measurement method. Classification is based on their contractual cash flow characteristics and the entity's business model for managing the assets.



The accounting principles for classifying the financial assets require the entity to analyse the contractual cash flows generated by the financial instruments and to analyse the business model for managing the financial instruments.

Analysis of contractual cash flow characteristics

The aim of the analysis of contractual cash flow characteristics is to limit the option of recognising revenues from financial assets using the effective interest method exclusively to the instruments whose characteristics are similar to those of a basic lending arrangement, meaning their associated cash flows are highly predictable. All other financial instruments that do not share these characteristics are measured at fair value through profit or loss, regardless of the business model used to manage them.

The contractual inflows that represent Solely Payments of Principal and Interest (SPPI) on the principal amount outstanding are consistent with a basic lending arrangement.

In a basic lending arrangement, interest predominantly consists of a consideration for the time value of money and for credit risk. Interest may also include a consideration for liquidity risk, administrative costs, and a commercial profit margin. Negative interest is not inconsistent with this definition.

All financial assets that are not basic will be mandatorily measured at fair value through profit or loss, regardless of the business model for managing them.

Derivatives qualifying as hedging instruments for accounting purposes are recorded on a separate line in the balance sheet (see Note 3.2).

The Group can make the irrevocable decision on a security-by-security basis, to classify and measure any equity instrument (shares and other equity securities) that is not held for trading purposes at fair value through other comprehensive income. Subsequently, the profit or loss accumulated in other comprehensive income will never be reclassified to profit or loss (only dividends on these instruments will be recognised as income).

Analysis of the business model

The business model represents how the financial instruments are managed in order to generate cash flows and income.

The Group uses several business models in the course of exercising its different business lines. Business models are assessed on how groups of financial instruments are managed together to achieve a particular business objective. The business model is not assessed on an instrument-by-instrument basis, but at a portfolio level, considering relevant evidence such as:

- how the performance of the portfolio is evaluated and reported to the Group's Management;
- how risks related to financial instruments within that business model are managed;
- how managers of the business are compensated;
- sales of assets realised or expected (value, frequency, purpose).

To determine the classification and measurement of financial assets, three different business models shall be distinguished:

- a business model whose objective is to collect contractual cash flows ("Collect" business model);
- a business model whose objective is achieved by both collecting contractual cash flows on financial assets and selling these financial assets ("Collect and Sell" business model);
- a separate business model for other financial assets, especially those that are held for trading purposes, where collecting contractual cash flows is only incidental.

Fair value option

SPPI financial assets that are not held for trading purposes can be designated, at initial recognition, at fair value through profit or loss if such designation eliminates or significantly reduces discrepancies in the accounting treatment of the related financial assets and liabilities (accounting mismatch).

CLASSIFICATION OF FINANCIAL LIABILITIES

Financial liabilities are classified into one of the following two categories:

- Financial liabilities at fair value through profit or loss: these are financial liabilities held for trading purposes, which by default include derivative financial liabilities not qualifying as hedging instruments and non-derivative financial liabilities designated by the Group upon initial recognition to be measured at fair value through profit or loss using the fair value option;
- Debts: these include the other non-derivative financial liabilities and are measured at amortised cost.

Derivative financial assets and liabilities qualifying as hedging instruments are presented on separate lines of the balance sheet (see Note 3.2).

RECLASSIFICATIONS OF FINANCIAL ASSETS

Reclassifications of financial assets are only required in the exceptional event that the Group changes the business model used to manage these assets.

These reclassifications are applied prospectively (no restatement of previously recognised profits, losses or interests).

FAIR VALUE

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The valuation methods used by the Group to establish the fair value of financial instruments are detailed in Note 3.4.

INITIAL RECOGNITION

Financial assets are recognised on the balance sheet:

- as at the settlement/delivery date for securities;
- as at the trade date for derivatives;
- as at the disbursement date for loans.

For instruments measured at fair value, changes in fair value between the trade date and the settlement-delivery date are recorded in net income or in other comprehensive income, depending on the accounting classification of the financial assets in question. The trade date is the date on which the contractual commitment becomes binding and irrevocable for the Group.

Upon initial recognition, the financial assets and liabilities are measured at fair value including the transaction costs directly attributable to their acquisition or issuance, except for the financial instruments recognised at fair value through profit or loss, for which these costs are booked directly to the income statement.

If the initial fair value is exclusively based on observable market data, any difference between the fair value and the transaction price, *i.e.* the sales margin, is immediately recognised in profit or loss. However, if one of the valuation inputs is not observable or if the used valuation model is not recognised by the market, the recognition of the sales margin is then generally deferred in profit or loss. For some instruments, due to their complexity, this margin is recognised at their maturity or upon disposal in the event of an early sale. When valuation inputs become observable, any portion of the sales margin that has not yet been recorded is then recognised in profit or loss (see Note 3.4.7).

DERECOGNITION OF FINANCIAL ASSETS AND LIABILITIES

The Group derecognises all or part of a financial asset (or group of similar assets) when the contractual rights to the cash flows on the asset expire or when the Group has transferred the contractual rights to receive the cash flows and substantially all of the risks and rewards linked to ownership of the asset.

The Group also derecognises financial assets over which it has retained the contractual rights to the associated cash flows but is contractually obligated to pass these same cash flows through to a third party ("pass-through agreement") and for which it has transferred substantially all of the risks and rewards.

Where the Group has transferred the cash flows of a financial asset but has neither transferred nor retained substantially all of the risks and rewards of its ownership and has effectively not retained control of the financial asset, the Group derecognises it and, where necessary, recognises a separate asset or liability to cover any rights and obligations created or retained as a result of the transfer of the asset. If the Group has retained control of the asset, it continues to recognise it in the balance sheet to the extent of its continuing involvement in said asset.

When a financial asset is derecognised in its entirety, a gain or loss on disposal is recorded in the income statement for an amount equal to the difference between the carrying value of the asset and the payment received for it, adjusted where necessary for any unrealised profit or loss previously recognised directly in equity and for the value of any servicing asset or servicing liability. Indemnities billed to borrowers following the prepayment of their loan are recorded in profit or loss on the prepayment date in Interest and similar income.

The Group derecognises all or part of a financial liability when it is extinguished, *i.e.* when the obligation specified in the contract is discharged, cancelled or expired.

A financial liability may also be derecognised in the event of a substantial amendment to its contractual conditions or where an exchange is made with the lender for an instrument whose contractual conditions are substantially different.

FOREIGN EXCHANGE TRANSACTIONS

At the balance sheet date, monetary assets and liabilities denominated in foreign currencies are translated into the entity's functional currency at the prevailing spot exchange rate. Realised or unrealised foreign exchange losses or gains are recognised under Net gains and losses on financial instruments at fair value through profit or loss.

Forward foreign exchange transactions are recognised at fair value based on the forward exchange rate for the remaining maturity. Spot foreign exchange positions are valued using the official spot rates prevailing at the end of the period. Unrealised gains and losses are recognised in the income statement under Net gains and losses on financial instruments at fair value through profit or loss (see Note 3.1), except when hedge accounting is applied to a cash-flow hedge transaction or to a hedge of a net investment in a foreign currency operation (see Note 3.2).

At the balance sheet date, non-monetary assets and liabilities denominated in foreign currencies measured at fair value (in particular, shares and other equity instruments) are translated into the entity's functional currency at the prevailing spot exchange rate. Foreign exchanges losses or gains are recognised either in profit or loss under Net gains and losses on financial instruments at fair value through profit or loss, or under other comprehensive income (Unrealised and deferred gains and losses), depending on the accounting of the gains or losses relative to these assets/liabilities.

At the balance sheet date, non-monetary assets and liabilities denominated in foreign currencies measured at historical cost are translated into the entity's functional currency at the historical exchange rate on initial recognition.

TREATMENTS OF THE CHANGES IN THE BASIS FOR DETERMINING THE CONTRACTUAL CASH FLOWS OF FINANCIAL ASSETS AND LIABILITIES – IBOR REFORM

In the context of the reference interest rates reform (IBOR reform) the basis for determining the contractual cash flows of a financial asset or liability may be modified:

- either by amending the contractual terms and conditions set during the initial recognition of the financial instrument (example: when the agreement is renegotiated, the contractual terms and conditions are amended to replace the initial reference interest rate by an alternative one),
- either by applying the appropriate external disposals without requiring a change in contractual terms (example: the adoption of European regulations requiring the migration of all contracts still indexed to Libor CHF and Eonia in the European Union respectively on 1 January and 3 January 2022),
- or as a result of the activation of an existing contractual term or condition (example: application of the contractual rate replacement provision, or "Fallback").

If, in the context of the reference interest rates reform (IBOR reform), there is a change in the basis for determining the contractual cash flows of a financial asset or liability at amortised cost or of a financial asset

at fair value through other comprehensive income, the modification is considered a simple forward-looking update of the interest rate applied to determine the interest income or expense and does not generate a gain or loss in the income statement.

This treatment depends on compliance with the following conditions:

- a change in the basis for determining the contractual cash flows is required and results directly from the IBOR reform; and
- the new basis for determining the contractual cash flows is economically equivalent to the former basis used before the change.

The cases giving rise to a new basis for determining the contractual cash flows considered economically equivalent to the former basis are, for example:

- the replacement of an existing reference interest rate used to determine the contractual cash flows of a financial asset or liability by an alternative reference interest rate (or by changing the method used to determine the reference interest rate in question) and the addition of a fixed spread necessary to compensate for the difference in basis between the existing reference interest rate and the alternative one;
- the addition of a Fallback provision to the contractual terms and conditions of a financial asset or liability to allow for the implementation of the changes described above;
- changes in the determination of the amount of interest resulting from the use of a new reference interest rate (rate revision procedure, number of days between interest payment dates ...).

Changes to a financial asset or liability, in addition to those deriving directly from the application of the IBOR reform, are treated according to the principles usually applicable to changes in financial instruments.

METHOD OF ANALYSIS OF CONTRACTUAL CASH FLOWS OF FINANCIAL ASSETS

The Group has established procedures for determining if financial assets pass the SPPI test at initial recognition (loans granting, acquisition of securities, etc.).

All contractual terms shall be analysed, particularly those that could change the timing or amount of contractual cash flows. A contractual term that permits the borrower or the lender to prepay or to return the debt instrument to the issuer before maturity remains consistent with SPPI cash flows, provided the prepayment amount primarily represents the principal remaining due and accrued but unpaid contractual interest, which may include a reasonable compensation. The fact that such compensation can be either positive or negative is not inconsistent with the SPPI nature of cash flows.

The prepayment compensation is considered as reasonable especially when:

- the amount is calculated as a percentage of the outstanding amount of the loan and is capped by regulations (in France, for example, compensation for the prepayment of mortgage loans by individuals is legally capped at an amount equal to six months of interest or 3% of the principal outstanding), or is limited by competitive market practices;
- the amount is equal to the difference between contractual interest that should have been received until the maturity of the loan and the interest that would be obtained by the reinvestment of the prepaid amount at a rate that reflects the relevant benchmark interest rate.

Some loans are prepayable at their current fair value, while others can be prepayable at an amount that includes the fair value cost to terminate an associated hedging swap. It is possible to consider such prepayment amounts as SPPI provided that they reflect the effect of changes in the relevant benchmark interest rate.



Basic financial assets (SPPI) are debt instruments which mainly include:

- fixed-rate loans,
- variable-rate loans that can include caps or floors,
- fixed or variable-rate debt securities (government or corporate bonds, other negotiable debt securities),
- securities purchased under resale agreements (reverse repos),
- guarantee deposits paid,
- trade receivables.

Contractual terms that would introduce exposure to risks or volatility in the contractual cash flows, unrelated to a basic lending arrangement (such as exposure to changes in equity prices or stock indexes for instance, or leverage features), could not be considered as being SPPI, except if their effect on the contractual cash flows remains minimum.



Non-basic financial assets (non-SPPI) mainly include:

- derivative instruments,
- shares and other equity instruments held by the entity,
- equity instruments issued by mutual funds,
- debt financial assets that can be converted or redeemed into a fixed number of shares (convertible bonds, equity-linked securities, etc.),
- Structured instruments whose cash flows are indexed, in part or in whole, to a benchmark index.



The Basic financial assets (SPPI) held by the Group include the financing of sustainable development projects (labelled Environment Social and Governance) in the form of Sustainability-linked bonds, social bonds and Green bonds with SPPI-compliant contractual cash flows.

Non-basic financial assets (non-SPPI) include the structured instruments whose cash flows are indexed, in whole or in part, to an index that is not specific to the issuer, such as an ESG market index.

Impact loans have been granted by the Group to support enterprises in their sustainability approach through an incentive mechanism that reviews the margin according to ESG criteria specific to the borrower or to the achievement by the latter of sustainable development goals (Sustainability-linked loans). As a result of their analysis, these loans have been classified as basic financial assets (SPPI) provided that their flows meet the SPPI criteria and the ESG component fulfills the *de minimis* criterion.

During the second half of 2022, the IASB decided to propose amendments to the IFRS 9 Implementation Guidance regarding classification as SPPI as well as new information to be disclosed for the financial instruments whose contractual conditions may change the timetable or the amount of contractual cash flows depending on a potential event. The objective of the project is to clarify how the SPPI qualification criteria apply to financial assets with ESG factors or similar characteristics. The IASB intends to issue an exposure draft during the first half of 2023.

When the time value component of interest can be modified according to the contractual term of the instrument, it may be necessary to compare the contractual cash flow with the cash flow that would arise from a benchmark instrument. For instance, that is the case when an interest rate is periodically reset, but the frequency of that reset does not match the tenor of the interest rate (such as an interest rate reset every month to a one-year rate), or when the interest rate is periodically reset to an average of short- and long-term interest rates.

If the difference between the undiscounted contractual cash flows and the undiscounted benchmark cash flows is or may become significant, then the instrument is not considered basic.

Depending on the contractual terms, the comparison with benchmark cash flow may be performed through a qualitative assessment; but in other cases, a quantitative test is required. The difference between contractual and benchmark cash flows has to be considered in each reporting period and cumulatively over the life of the instrument. When performing this benchmark test, the entity considers factors that could affect future undiscounted contractual cash flows: using the yield curve at the date of the initial assessment is not enough, and the entity also has to consider whether the curve could change over the life of the instrument according to reasonably possible scenarios.

Within the Group, the financial instruments concerned by a benchmark test include, for instance, variable-rate housing loans for which interest rates are reset every year based on the twelve-month Euribor average observed over the two months previous to the reset. Another example is loans granted to real estate professionals for which interest is revised quarterly based on the one-month Euribor average observed over the three months previous to the reset. Following the benchmark analysis performed by the Group, it has been concluded that these loans are basic.

Furthermore, a specific analysis of contractual cash flow is required when financial assets are instruments issued by a securitisation vehicle or a similar entity that prioritises payments to holders using multiple contractually-linked instruments that create concentrations of credit risk (tranches). When assessing whether contractual cash flows are SPPI or not, the entity must analyse the contractual terms, as well as the credit risk of each tranche and the exposure to credit risk in the underlying pool of financial instruments. To that end, the entity must apply a “look-through approach” to identify the underlying instruments that are creating the cash flows.

The data presented in Note 3 exclude the financial instruments of insurance subsidiaries; the data for insurance subsidiaries are presented in Note 4.3.
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NOTE 3.1 - FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

OVERVIEW

Table 3.1.A

<i>(In EUR m)</i>	31.12.2022		31.12.2021	
	Assets	Liabilities	Assets	Liabilities
Trading portfolio	310,087	234,851	319,789	243,112
Financial assets measured mandatorily at fair value through profit or loss	18,003		21,356	
Financial instruments measured at fair value through profit or loss using the fair value option	1,347	65,767	1,569	64,451
Total	329,437	300,618	342,714	307,563
<i>o/w securities purchased/sold under resale/repurchase agreements</i>	122,786	103,365	81,313	84,797

1. TRADING PORTFOLIO

ACCOUNTING PRINCIPLES

The trading book contains the financial assets and liabilities held or accrued for the purpose of capital markets activities.

This portfolio also includes, among other trading assets, the physical stocks of raw materials that the Group might hold a market-maker on commodity derivatives.

Derivative financial instruments are classified into the trading portfolio, unless they qualify as hedging instruments (see Note 3.2).

The financial instruments recorded in the trading portfolio are measured at fair value as at the closing date and recognised in the balance sheet under Financial assets or liabilities at fair value through profit or loss. The changes in fair value and revenues associated to those instruments are recorded in profit or loss under Net gains and losses on financial instruments at fair value through profit or loss.

TRADING ACTIVITIES

Financial assets held for trading are:

- acquired for the purpose of selling or repurchasing it in the near term; or
- held for market-making purposes; or
- acquired for the purposes of the specialised management of a trading portfolio, including derivative financial instruments, securities or other financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking.



Global market activities

The trading business model is applied by Global Banking and Investor Solutions to manage its global market activities.

It is also applied for managing syndicated loan commitments and loans that are not intended to be kept by the Group and that have been identified since their origination as to be sold in the short term (within 6 to 12 months) on the secondary market, as well as for loans originated by the Group through originate-to-distribute activities and that are expected to be sold shortly.

Financial assets held in run-off portfolios are also monitored based on their fair value. Although those portfolios are not related to market activities, those assets are presented amongst trading portfolio and are measured at fair value through profit or loss.

Trading portfolio includes all the financial assets held for trading purpose regardless of the characteristics of their contractual cash flows. Only non-SPPI financial assets that are not held for trading are classified amongst Financial assets measured mandatorily at fair value through profit or loss (see section 3.1.2).

ASSETS

Table 3.1.B

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Bonds and other debt securities	26,022	22,480
Shares and other equity securities	74,387	108,858
Securities purchased under resale agreements	122,752	81,282
Trading derivatives ⁽¹⁾	75,934	100,355
Loans, receivables and other trading assets	10,992	6,814
Total	310,087	319,789
<i>o/w securities lent</i>	12,455	14,370

(1) See Note 3.2 Financial derivatives.

LIABILITIES

Table 3.1.C

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Amounts payable on borrowed securities	51,101	45,821
Bonds and other debt instruments sold short	5,187	3,630
Shares and other equity instruments sold short	1,244	838
Securities sold under repurchase agreements	102,678	84,729
Trading derivatives ⁽¹⁾	72,068	106,607
Borrowings and other trading liabilities	2,573	1,487
Total	234,851	243,112

(1) See Note 3.2 Financial derivatives.

2. FINANCIAL INSTRUMENTS MANDATORILY AT FAIR VALUE THROUGH PROFIT OR LOSS

ACCOUNTING PRINCIPLES

Financial assets measured mandatorily at fair value through profit or loss include:

- loans, bonds and bond equivalents that are not held for trading purposes and do not pass the SPPI test (non-basic or non-SPPI instruments);
- shares and share equivalents that are not classified in any other sub-category: trading book at fair value through profit or loss, instruments designated by the Group at fair value through other comprehensive income without subsequent reclassification to profit or loss.

These assets are recorded at fair value in the balance sheet under Financial assets at fair value through profit or loss and changes in the fair value of these instruments (excluding interest income) are recorded in profit or loss under Net gains or losses on financial instruments at fair value through profit or loss.

Table 3.1.D

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Bonds and other debt securities	195	193
Shares and other equity securities	2,816	2,769
Loans, receivables and securities purchased under resale agreements	14,992	18,394
Total	18,003	21,356

BREAKDOWN OF LOANS AND RECEIVABLES AND SECURITIES PURCHASED UNDER RESALE AGREEMENTS

Table 3.1.E

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Short-term loans	1,500	1,257
Equipment loans	11,338	14,881
Other loans	2,154	2,256
Total	14,992	18,394

The loans and receivables and securities purchased under resale agreements recorded in the balance sheet under Financial assets mandatorily at fair value through profit or loss are mainly:

- loans that include prepayment features with compensation that do not reflect the effect of changes in the benchmark interest rate;
- loans that include indexation clauses that do not permit to recognise as basic loans (SPPI).

3. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS USING FAIR VALUE OPTION

ACCOUNTING PRINCIPLES

In addition to the financial assets and liabilities held for trading, and the financial assets measured mandatorily at fair value through profit or loss, the same items in the financial statements include the non-derivative financial assets and liabilities that the Group has designated at fair value through profit or loss. Changes in the fair value of these instruments (including interest) are recorded in profit or loss under Net gains or losses on financial instruments at fair value through profit or loss, except the share related to the Group's own credit risk on financial liabilities which is booked under Unrealised or deferred gains and losses.

Furthermore, in case of derecognition of a financial liability at fair value through profit or loss using the fair value option before its contractual maturity, any gains and losses, related to the Group's own credit risk are

booked under Unrealised or deferred gains and losses and then reclassified under Retained earnings at the beginning of the subsequent financial year.

For financial assets, this option may only be used to eliminate or significantly reduce accounting mismatches that would otherwise arise from applying different accounting treatments to certain related financial assets and liabilities.

For financial liabilities, this option may only be used in the following cases:

- to eliminate or reduce discrepancies in the accounting treatment of certain related financial assets and liabilities;
- when it applies to a hybrid financial instrument with one or more embedded derivatives, which should be recognised separately;
- when a group of financial assets and/or liabilities is managed together and its performance is measured at fair value.

The Group thus recognises structured bonds issued by Societe Generale Corporate and Investment Banking at fair value through profit or loss. These issuances are purely commercial and the associated risks are hedged on the market using financial instruments managed in trading portfolios. By using the fair value option, the Group can ensure consistency between the accounting treatment of these bonds and that of the derivatives hedging the associated market risks, which have to be carried at fair value.

ASSETS

Table 3.1.F

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Bonds and other debt securities	112	4
Loans, receivables and securities purchased under resale agreements	55	58
Separate assets for employee benefits plans	1,180	1,507
Total	1,347	1,569

(1) Including, as at 31 December 2022, EUR 1,002 million of separate assets for defined post-employment benefits compared to EUR 1,331 million as at 31 December 2021 (see Note 5.2).

LIABILITIES

Financial liabilities measured at fair value through profit or loss in accordance with the fair value option predominantly consist of structured bonds issued by the Societe Generale group.

Table 3.1.G

<i>(In EUR m)</i>	31.12.2022		31.12.2021	
	Fair value	Amount redeemable at maturity	Fair value	Amount redeemable at maturity
Financial instruments measured using fair value option through profit or loss	65,767	67,312	64,451	65,547

The revaluation differences attributable to the Group's issuer credit risk are determined using valuation models taking into account the Societe Generale group's most recent financing terms and conditions on the markets and the residual maturity of the related liabilities.

Changes in fair value attributable to own credit risk generated an equity gain of EUR 671 million before tax in 2022. As at December 31, 2022, the total amount of changes in fair value attributable to own credit risk represents a total gain of 326 million euros before tax.

4. NET GAINS AND LOSSES ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Table 3.1.H

<i>(In EUR m)</i>	2022	2021
Net gain/loss on trading portfolio (excluding derivatives)	(5,650)	20,580
Net gain/loss on financial instruments at fair value through profit or loss ⁽¹⁾	(2,006)	(1,401)
Net gain/loss on financial instruments measured using fair value option	2,806	(3,143)
Net gain/loss on derivative instruments	11,581	(10,993)
Net gains/loss on hedging instruments ⁽²⁾	107	(9)
<i>Net gain/loss on fair value hedging derivatives</i>	<i>(15,902)</i>	<i>(5,741)</i>
<i>Revaluation of hedged items attributable to hedged risks ⁽³⁾</i>	<i>16,019</i>	<i>5,732</i>
<i>Ineffective cut of the cash flow hedges</i>	<i>(10)</i>	<i>(0)</i>
Net gain/loss on foreign exchange transactions	(123)	670
Total	6,715	5,704
<i>o/w gains on financial instruments at fair value through other comprehensive income</i>	<i>99</i>	<i>113</i>

(1) This item includes realised and unrealised gains and losses on debt and equity instruments, with the exception of the income component of debt instruments representative of an interest rate, which is recorded under net interest margin (see Note 3.7).

(2) This item includes only the net gain/loss on hedging transactions related to financial instruments. For the hedging transactions related to non-financial assets and liabilities, the net gain/loss on hedging transactions is included under the income statement of the hedged item.

(3) This item includes the revaluation of fair value hedged items, including the change in revaluation differences in portfolios hedged against interest rate risk.

Insofar as income and expenses recorded in the income statement are classified by type of instrument rather than by purpose, the net income generated by activities in financial instruments at fair value through profit or loss must be assessed as a whole. It should be noted that the income shown here does not include the refinancing cost of these financial instruments, which is shown under interest expense and interest income.

NOTE 3.2 - FINANCIAL DERIVATIVES



Derivative instruments are financial instruments for which the value changes according to that of an underlying item and can be accompanied by a leverage effect. The items underlying these instruments are various (interest rates, exchange rates, equity, indexes, commodities, credit rating...), as are their forms (forward contracts, swaps, calls and puts...).

The Group may use these derivative instruments for their market activities to provide to its customers solutions to meet their risk management or revenue optimisation needs. In that case, they are accounted for as trading derivatives.

The Group may also use derivative instruments to manage and hedge its own risks. In which case, they are qualified as hedging derivatives. Hedging transactions can concern individual items or transactions (micro-hedging relationships) or portfolios of financial assets and liabilities that can generate a structural interest-rate risk (macro-hedging relationships).

Contrary to other financial instruments, derivative instruments are always measured at fair value in the balance sheet, regardless their purpose (market activities or hedging transactions). The fair value adjustments of trading derivatives are directly recognised in the income statement. However, the hedge accounting method allows for the linking of the fair value adjustment of hedging derivatives with the accounting treatment of the transactions and hedged instruments in order to eliminate or reduce volatility in the income statement.

ACCOUNTING PRINCIPLES

Derivatives are financial instruments meeting the following three criteria:

- their value changes in response to a change in a specified interest rate, foreign exchange rate, share price, index of prices, commodity price, credit rating, etc.;
- they require little to no initial investment;
- they are settled at a future date.

All financial derivatives are recognised at fair value in the balance sheet as financial assets or financial liabilities. They are considered to be trading derivatives, unless they are designated as hedging instruments for accounting purposes.

SPECIAL CASE - DERIVATIVES HAVING SOCIETE GENERALE SHARES AS THEIR UNDERLYING INSTRUMENT

Financial derivatives having Societe Generale shares as their underlying instrument or shares in Group subsidiaries and whose liquidation entails the payment of a fixed amount in cash (or another financial asset) against a fixed number of Societe Generale shares (other than derivatives) are equity instruments. These instruments, and any related premiums paid or received, are recognised directly in equity, and any changes in the fair value of these derivatives are not recorded. For sales of put options on Societe Generale shares and forward purchases of Societe Generale shares, a debt is recognised for the value of the notional amount with a contra entry in equity.

Other financial derivatives having Societe Generale shares as their underlying instrument are recorded in the balance sheet at fair value in the same manner as derivatives with other underlying instruments.

EMBEDDED DERIVATIVES

An embedded derivative is a component of a hybrid contract that also includes a non-derivative host instrument.

Where the host contract is a financial asset, the entire hybrid contract is measured at fair value through profit or loss because its contractual cash flows do not pass the SPPI test.

Where the host contract is a financial liability and is not measured at fair value through profit or loss, the embedded derivative is separated from the host contract if:

- at acquisition, the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host; and
- it would meet the definition of a derivative.

Once separated, the derivative is recognised at fair value in the balance sheet under Financial assets or Financial liabilities at fair value through profit or loss under the aforementioned conditions. The host contract is classified under one of the financial liability categories measured at amortised cost.

1. TRADING DERIVATIVES

ACCOUNTING PRINCIPLES

Trading derivatives are recorded in the balance sheet under Financial assets or liabilities at fair value through profit or loss. Changes in fair value are recorded in the income statement under Net gains and losses on financial instruments at fair value through profit or loss.

Changes in the fair value of financial derivatives involving counterparties that subsequently proved to be in default are recorded under Net gains and losses on financial instruments at fair value through profit or loss until the termination date of these instruments. On this termination date, the receivables and debts on these counterparties are recognised at fair value in the balance sheet. Any further impairment of these receivables is recognised under Cost of risk in the income statement.

FAIR VALUE

Table 3.2.A

<i>(In EUR m)</i>	31.12.2022		31.12.2021	
	Assets	Liabilities	Assets	Liabilities
Interest rate instruments	34,167	23,163	56,560	51,181
Foreign exchange instruments	24,272	25,341	18,404	19,320
Equities & index Instruments	15,513	21,191	24,186	33,779
Commodities Instruments	199	154	279	311
Credit derivatives	1,756	1,439	921	1,179
Other forward financial instruments	27	781	5	837
Total	75,934	72,069	100,355	106,607

The Group uses credit derivatives in the management of its Corporate credit portfolio, primarily to reduce individual, sector and geographic concentration and to implement a proactive risk and capital management approach. All credit derivatives, regardless of their purpose, are measured at fair value through profit or loss and cannot be qualified as hedging instruments for accounting purposes. Accordingly, they are recognised at fair value among trading derivatives.

COMMITMENTS (NOTIONAL AMOUNTS)

Table 3.2.B

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Interest rate instruments	9,757,261	9,807,443
Firm instruments	7,998,484	8,155,415
<i>Swaps</i>	6,412,207	7,013,837
<i>FRA</i> s	1,586,277	1,141,578
Options	1,758,777	1,652,028
Foreign exchange instruments	4,162,947	3,379,742
Firm instruments	3,046,929	2,617,178
Options	1,116,018	762,564
Equity and index instruments	791,814	838,749
Firm instruments	138,533	144,592
Options	653,281	694,157
Commodities instruments	20,714	24,539
Firm instruments	20,472	24,372
Options	242	167
Credit derivatives	170,225	177,923
Other forward financial instruments	28,066	31,022
Total	14,931,027	14,259,418

2. HEDGING DERIVATIVES

According to the transitional provisions of IFRS 9, the Group made the choice to maintain the IAS 39 provisions related to hedge accounting. Consequently, equity instruments do not qualify for hedge accounting regardless of their accounting category.

ACCOUNTING PRINCIPLES

In order to be hedged against certain market risks, the Group sets up hedging derivatives. From an accounting standpoint, the Group designates the hedging transaction as a fair value hedge, a cash flow hedge, or a hedge of a net investment in a foreign operation, depending on the risk and on the instruments to be hedged.

To designate an instrument as a hedging derivative, the Group documents the hedging relationship in detail, from inception. This documentation specifies the asset, liability, or future transaction hedged, the risk to be hedged and the associated risk management strategy, the type of financial derivative used and the valuation method that will be used to measure its effectiveness.

The derivative designated as a hedging instrument must be highly effective in offsetting the change in fair value or cash flows arising from the hedged risk. This effectiveness is verified when changes in the fair value or cash flows of the hedged instrument are almost entirely offset by changes in the fair value or cash flows of the hedging instrument, with the expected ratio between the two changes ranging from 80% to 125%. Effectiveness shall be assessed both when the hedge is first set up and throughout its life. Effectiveness is measured each quarter prospectively (expected effectiveness over the future periods) and retrospectively (effectiveness measured on past periods). Where the effectiveness falls outside the range specified above, hedge accounting is discontinued.

Hedging derivatives are recognised in the balance sheet under Hedging derivatives.

FAIR VALUE HEDGES

The purpose of these hedges is to protect the Group against an adverse fluctuation in the fair value of an instrument which could affect profit or loss if the instrument were derecognised from the balance sheet.

Changes in the fair value of the hedging derivative are recorded in the income statement under Net gains and losses on financial instruments at fair value through profit or loss; for interest rate derivatives, however, accrued interest income and expenses on the derivative are recorded in the income statement under Interest and similar income / Interest and similar expense – Hedging derivatives symmetrically to the accrued interest income and expenses related to the hedged item.

In the balance sheet, the carrying value of the hedged item is adjusted for the gains and losses attributable to the hedged risk, which are reported in the income statement under Net gains and losses on financial instruments at fair value through profit or loss. To the extent that the hedge is highly effective, changes in the fair value of the hedged item and changes in the fair value of the hedging derivative are accurately offset through profit or loss, the difference corresponding to an ineffectiveness gain or loss.

Prospective effectiveness is assessed via a sensitivity analysis based on probable market trends or via a regression analysis of the statistical relationship (correlation) between the hedged risk component and the hedging instrument. Retrospective effectiveness is assessed by comparing any changes in the fair value of the hedging instrument with any changes in the fair value of the hedged item.

If it becomes apparent that the derivative has ceased to meet the effectiveness criteria for hedge accounting or if it is terminated or sold, hedge accounting is discontinued prospectively. Thereafter, the carrying amount of the hedged asset or liability ceases to be adjusted for changes in fair value attributable to the hedged risk and the cumulative adjustments previously recognised under hedge accounting are amortised over its remaining life. Hedge accounting is also discontinued if the hedged item is sold prior to maturity or early-redeemed, the valuation adjustments are then immediately recognised in the income statement.

CASH FLOW HEDGES

The purpose of interest rate cash flow hedges is to protect against changes in future cash flows associated with a financial instrument on the balance sheet (loans, securities or floating-rate notes) or with a highly probable future transaction (future fixed interest rates, future exchange rates, future prices, etc.). The purpose of these hedges is to protect the Group against adverse fluctuations in the future cash-flows of an instrument or transaction that could affect profit or loss.

The prospective effectiveness of the hedge is assessed via a sensitivity analysis based on probable market input trends or via a regression analysis of the statistical relationship (correlation) between the hedged risk component and the hedging instrument. The effectiveness of the hedge is assessed using the hypothetical derivative method, which consists in i) creating a hypothetical derivative which bears exactly the same characteristics as the instrument being hedged (in terms of notional amounts, date on which the rates are reset, interest rate, exchange rate, etc.), but moves in the opposite direction and whose fair value is nil when the hedge is set up, then ii) comparing the expected changes in the fair value of the hypothetical derivative with those of the hedging instrument (sensitivity analysis) or performing a regression analysis on the prospective effectiveness of the hedge.

The changes in fair value of the hedging financial instruments are recorded directly as Unrealised or deferred gains and losses for their effective portion, while the ineffective portion is recognised under Net gains and losses on financial instruments at fair value through profit or loss. With regard to interest rate derivatives, the portion corresponding to the rediscount of the derivative financial instrument is recorded in the income statement under Interest and similar income / Interest and similar expense symmetrically to the interest income or expense related to the hedged item.

The gains or losses, realised or unrealised, accumulated directly in equity for the effective portion of these changes in value, are carried in equity to be recycled in the income statement when the expected hedged cash flows impact the income statement. With regard to the hedging flows related to a variable-rate financial instrument recorded on the balance sheet, recycling is done as and when the hedged interest income or expenses are recognised in the income statement. In the case of hedging of future transactions, if it is the future sale of a financial instrument, recycling takes place on the date when the sold instrument is derecognised; if the transaction is settled through the recognition on the balance sheet of a financial instrument, the gains or losses accumulated in equity are carried in it, before being recycled in the income statement at the same pace as the hedged cash flows generated by the instrument then recognised on the balance sheet.

Whenever the hedging derivative ceases to meet the effectiveness criteria for hedge accounting or is terminated or sold or if the future transaction hedged is no more probable, hedge accounting is discontinued prospectively. The amounts previously recognised directly in equity are reclassified in the income statement over the periods during which interest income is affected by the cash flows from the hedged item. If the hedged item is sold or redeemed earlier than expected or if the hedged forecast transaction ceases to be expected, the unrealised gains and losses recognised in equity are immediately reclassified in the income statement.

HEDGING OF A NET INVESTMENT IN A FOREIGN OPERATION

The purpose of a hedging of a net investment in a foreign company is to protect against exchange rate risk. The hedged item is an investment in a country whose currency differs from the Group's functional currency. The hedge therefore serves to protect the net position of a foreign subsidiary or branch against an exchange rate risk linked to the entity's functional currency.

The hedge of a net investment in a foreign operation follows the same accounting principles as the cashflow hedge relationships. Thus, the effective portion of the changes in fair value of a hedging derivative designated for accounting purposes as the hedge of a net investment is recognised in equity under Unrealised or deferred gains and losses, while the ineffective portion is recognised in the income statement under Gains and losses on financial instruments at fair value through profit or loss.

PORTFOLIO HEDGES (MACRO-HEDGE)

In this type of hedge, interest rate derivatives are used to globally hedge the structural interest rate risk resulting mainly from Retail Banking activities.

In accounting for these transactions, are either documented as fair value hedges or as cash flow hedges, depending on the Group entities.

Group entities documenting a macro fair value hedge of fixed rate assets and liabilities portfolios, apply the IAS 39 "carve-out" standard as adopted by the European Union, which facilitates:

- the application of fair value hedge accounting to the macro-hedges used for asset-liability management, including customer demand deposits in the fixed-rate positions being hedged;
- the performance of the effectiveness tests.

The accounting treatment of the financial derivatives designated as macro fair value hedges is similar to that of other fair value hedging instruments. Changes in the fair value of the portfolio of macro-hedged instruments measured based on the modelled synthetic instrument are reported on a separate line in the balance sheet under Revaluation differences on portfolios hedged against interest rate risk through profit or loss.

Group entities documenting a macro cash flow hedge apply the same accounting principles as those presented above for cash flow hedge. Thus, macro-hedged assets or liabilities portfolios are not measured at fair value for the hedged risk.

In the case of macro cash flow hedge, hedged portfolios include assets or liabilities at variable rate.

Finally, regardless of the documentation used for these macro-hedges, they require the implementation of three tests to measure the effectiveness of the relationship:

- a non-over-coverage test to ensure, prospectively and retrospectively, that the nominal amount of the portfolios covered is higher than the notional amount of the hedging instruments for each future maturity band and each rate generation;
- a test of non-disappearance of the hedged item, which consists in prospectively and retrospectively ensuring that the historically covered maximum position is less than the notional amount of the hedging instruments on the closing date considered for each maturity band and each generation of rates;
- a quantitative test to retrospectively ensure that the fair value changes in the modelled synthetic instrument offset the changes in fair value of the hedging instruments.

The sources of ineffectiveness of the macro-hedges implemented in the Group result from the latest fixing of the variable leg of the hedging swaps, the two-curve valuation of the collateralised hedging instruments, the possible mismatches of interests between the hedged item and the hedging instrument and the consideration of counterparty risk on the hedging instruments.

TREATMENT OF THE CHANGES IN THE BASIS USED FOR DETERMINING THE CONTRACTUAL CASH FLOWS OF THE COMPONENTS OF A HEDGING RELATIONSHIP – IBOR REFORM

Non-discontinuation of hedging relationships

The documentation of the existing hedging relationships shall be updated to reflect the changes brought about by the reform of the reference interest rate (IBOR reform) on the basis for determining the contractual cash flows of the hedged items and/or of the hedging instruments.

These updates resulting from the IBOR reform do not cause the discontinuation of the hedging relationship nor the designation of a new accounting hedge as long as they meet the following conditions:

- the change in the basis for determining the contractual cash flows is required and results directly from the IBOR reform; and
- the new basis for determining the contractual cash flows is economically equivalent to the former basis used before the change.

When those conditions are met, the update of the hedging documentation only consist in:

- designate the alternative reference interest rate (contractually or non-contractually specified) as a hedged risk;
- update the description of the hedged item, including a description of the hedged portion of cash flows or of the fair value;
- update the description of the hedging instrument;
- update the description of the method used to assess the effectiveness of the hedge.

These updates are performed as and when changes are made to the hedged items or the hedging instruments but before the end of the reporting period during which the change was made; an accounting hedge may be updated several successive times.

Changes not directly resulting from the application of the IBOR reform and impacting the basis used for determining the contractual cash flows of the hedging relationship components or the hedging documentation are analysed beforehand in order to confirm compliance with the qualifying criteria for hedge accounting.

Specific accounting treatments

Regarding fair value hedges and cash flow hedges, the applicable accounting requirements remain unchanged for the recognition of gains and losses resulting from the reassessment of the hedged component and the hedging instrument taking account of the changes described above.

For the purpose of the retrospective effectiveness assessment, the cumulative fair value changes may be reset to zero on a case by case basis for each hedging relationship modified.

With regard to hedged cash flows, when the benchmark rate on which the future hedged cash flows were based changes, the amounts of gains or losses recorded for the hedging instrument are carried in equity until the recording in the income statement of the adjusted hedged cash flows as long as the transaction remains highly probable.

An alternative reference interest rate used as a risk component not specified by an agreement (example, a 3-month alternative reference interest rate used to determine the fixed rate of a loan and for which the Group intends to hedge the changes in value) may be used, provided it is, as reasonably expected, separately identifiable (*i.e.*, quoted on a sufficiently liquid market) in the 24 months after its first use.

FAIR VALUE

Table 3.2.C

<i>(In EUR m)</i>	31.12.2022		31.12.2021	
	Assets	Liabilities	Assets	Liabilities
Fair value hedge	32,272	45,539	12,823	10,171
Interest rate instruments	32,252	45,538	12,786	10,141
Foreign exchange instruments	20	1	36	30
Equity and index Instruments	-	-	1	-
Cash flow hedge	349	511	311	61
Interest rate instruments	300	443	253	26
Foreign exchange instruments	43	51	24	33
Equity and index Instruments	6	17	34	2
Net investment hedge	229	114	105	193
Foreign exchange instruments	229	114	105	193
Total	32,850	46,164	13,239	10,425

The Group sets up hedging relationships recognised for accounting purposes as fair value hedges in order to protect its fixed-rate financial assets and liabilities (primarily loans / borrowings, securities issued and fixed-rate securities) against changes in long-term interest rates. The hedging instruments used mainly consist of interest rate swaps.

Furthermore, through some of its Corporate and Investment Banking operations, the Group is exposed to future cash flow changes in its short and medium-term funding requirements and sets up hedging relationships recognised for accounting purposes as cash flow hedges. Highly probable funding requirements are determined using historic data established for each activity and representative of balance sheet outstanding. These data may be increased or decreased by changes in management methods.

Finally, as part of their management of structural interest rate and exchange rate risks, the Group's entities set up fair value hedge for portfolios of assets or liabilities for interest rate risk as well as cash flow hedge and net investment hedge for foreign exchange risk.

As at 31 December 2022, the revaluation differences on macro-hedged fixed-rate assets portfolios and fixed-rate liabilities portfolios have become negative as a result of the interest rate raise observed during the period. On the asset side of the balance sheet, the revaluation difference on portfolios hedged against interest rate risk amounts to EUR -2,262 million as at 31 December 2022 (compared to EUR +131 million as at 31 December 2021); and on the liabilities side, the revaluation differences on portfolios hedged against interest rate risk amounts to EUR -9,659 million as at 31 December 2022 (against EUR +2,832 million as at 31 December 2021).

COMMITMENTS (NOTIONAL AMOUNTS)

Table 3.2.D

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Interest rate instruments	861,523	981,765
Firm instruments	861,181	978,728
<i>Swaps</i>	728,373	696,716
<i>FRAs</i>	132,808	282,012
Options	342	3,037
Foreign exchange instruments	8,333	9,245
Firm instruments	8,333	9,245
Equity and index instruments	179	160
Firm instruments	179	160
Total	870,035	991,170

MATURITIES OF HEDGING FINANCIAL DERIVATIVES (NOTIONAL AMOUNTS)

These items are presented according to the contractual maturity of the financial instruments.

Table 3.2.E

<i>(In EUR m)</i>	Up to 3 months	From 3 months to 1 year	From 1 year to 5 years	Over 5 years	31.12.2022
Interest rate instruments	108,878	193,268	290,166	269,211	861,523
Foreign exchange instruments	2,054	5,683	579	17	8,333
Equity and index instruments	85	35	58	1	179
Total	111,017	198,986	290,803	269,229	870,035

NOTE 3.3 - FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

OVERVIEW

Table 3.3.A

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Debt instruments	37,199	43,180
<i>Bonds and other debt securities</i>	37,199	43,081
<i>Loans and receivables and securities purchased under resale agreements</i>	-	99
Shares and other equity securities	264	270
Total	37,463	43,450
<i>o/w securities lent</i>	249	241

1. DEBT INSTRUMENTS

ACCOUNTING PRINCIPLES

Debt instruments (loans and receivables, bonds and bond equivalents) are classified as Financial assets at fair value through other comprehensive income when their contractual cash flows are consistent with basic lending arrangements (SPPI) and they are managed under a Collect and Sell business model. At the time of original recognition, these financial assets are measured at fair value including the costs directly attributable to their acquisition or subscription.

Accrued or earned income on debt instruments is recorded in profit or loss based on the effective interest rate, under Interest and similar income.

At the reporting date, these instruments are measured at fair value and changes in fair value excluding income, are recorded in equity under Unrealised or deferred gains and losses, except for foreign exchange differences on money market instruments denominated in local currencies, which are recorded in profit or loss. Furthermore, as these financial assets are subject to impairment for credit risk, the changes in expected credit losses are recorded in profit or loss under Cost of risk with a corresponding entry under Unrealised or deferred gains and losses. The applicable impairment rules are described in Note 3.8.

BUSINESS MODEL “HOLD TO COLLECT AND SELL”

The objective of this business model is to realise cash flows by both collecting contractual payments and selling financial assets. In this type of business model, the sales of financial assets are not incidental or exceptional, but they are integral to achieving the business’ objectives.

	<p>Cash management</p> <p>Within the Group, except for the insurance activities, the “hold to collect and sell” business model is mainly applied by cash management activities for managing HQLA securities (High Quality Liquid Assets) included in the liquidity reserve. Only a few subsidiaries apply a “hold to collect” business model for managing their HQLA securities.</p>
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CHANGES OF THE PERIOD

Table 3.3.B

<i>(In EUR m)</i>	2022
Balance as at 1 January	43,180
Acquisitions / disbursements	28,108
Disposals / redemptions	(32,139)
Change in scope and others	(357)
Changes in fair value during the period	(2,725)
Change in related receivables	13
Translation differences	1,119
Balance as at 31 December	37,199

CUMULATIVE UNREALISED GAINS AND LOSSES RECOGNISED DIRECTLY IN EQUITY

Table 3.3.C

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Unrealised gains	212	334
Unrealised losses	(809)	(200)
Total	(597)	134

2. EQUITY INSTRUMENTS

ACCOUNTING PRINCIPLES

Equity instruments (shares and share equivalents), that are not held for trading purposes, can be initially designated by the Group to be measured at fair value through other comprehensive income. This choice made instrument by instrument, is irrevocable.

These equity instruments are then measured at fair value and the changes in fair value are recognised under Unrealised or deferred gains and losses with no subsequent reclassification to profit or loss. If the instruments are sold, the realised gains and losses are reclassified to Retained earnings at the opening of the next financial year. Only dividend income, if it is considered as a return on investment, is recorded in profit or loss under Net gains or losses on financial instruments at fair value through other comprehensive income.

The Group chose only in few rare cases to designate equity instruments to be measured at fair value through other comprehensive income.

NOTE 3.4 - FAIR VALUE OF FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE



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The financial assets and liabilities recognised in the Group balance sheet are measured either at fair value or at amortised cost. In the latter case, the fair value of the instruments is disclosed in the notes.

If an instrument is quoted on an active market, its fair value is equal to its market price.

But many financial instruments are not listed (for example, most customer loans and deposits, interbank debts and claims, etc.), or are only negotiable on illiquid markets or over-the-counter markets (which is the case for many derivative instruments).

In such situations, the fair value of the instruments is calculated using measurement techniques or valuation models. Market parameters are included in these models and must be observable; otherwise they are determined based on internal estimates. The models and parameters used are subject to independent validations and internal controls.

ACCOUNTING PRINCIPLES

DEFINITION OF FAIR VALUE

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date.

In the absence of observable prices for identical assets or liabilities, the fair value of financial instruments is determined using another measurement technique which maximises the use of observable market input based on assumptions that market operators would use to set the price of the instrument in question.

FAIR VALUE HIERARCHY

For information purposes, in the notes to the consolidated financial statements, the fair value of the financial instruments is classified using a fair value hierarchy that reflects the observability level of the inputs used. The fair value hierarchy is composed of the following levels:

Level 1 (L1): instruments valued on the basis of quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 1 instruments carried at fair value on the balance sheet include in particular shares listed in an active market, government or corporate bonds priced directly by external brokers/dealers, derivatives traded on organised markets (futures, options), and units of funds (including UCITS) whose net asset value is available on the balance sheet date.

A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and if they reflect actual and regular market transactions on an arm's length basis.

Determining whether a market is inactive requires the use of indicators such as a sharp decline in the trading volume and the level of activity in the market, a sharp disparity in prices over time and among the various above-mentioned market participants, or the fact that the latest transactions conducted on an arm's length basis did not take place recently enough.

Where a financial instrument is traded in several markets to which the Group has immediate access, its fair value is represented by the market price at which volumes and activity levels are highest for the instrument in question.

Transactions resulting from involuntary liquidations or distressed sales are usually not taken into account to determine the market price.

Level 2 (L2): instruments valued using inputs other than the quoted prices included in Level 1 and that are observable for the asset or liability concerned, either directly (*i.e.* as prices) or indirectly (*i.e.* derived from prices).

These are the instruments measured using a financial model based on market inputs. The inputs used shall be observable in active markets; using some unobservable inputs is possible only if the latter have only a minor impact on the fair value of the instrument. The prices published by an external source, derived from the valuation of similar instruments are considered as data derived from prices.

Level 2 instruments include in particular the non-derivative financial instruments carried at fair value on the balance sheet that are not directly quoted or do not have a quoted price on a sufficiently active market (*e.g.* corporate bonds, repos transactions, mortgage-backed securities, units of funds), and the firm derivatives and options traded over-the-counter: interest rate swaps, caps, floors, swaptions, equity options, index options, foreign exchange options, commodity options and credit derivatives. The maturities of these instruments are linked to ranges of terms commonly traded in the market, and the instruments themselves can be simple or offer a more complex remuneration profile (*e.g.* barrier options, products with multiple underlying instruments), with said complexity remaining however limited. The valuation techniques used in this category are based on common methods shared by the main market participants.

This category also includes the fair value of loans and receivables at amortised cost granted to counterparties whose credit risk is quoted via Credit Default Swap.

Level 3 (L3): instruments valued using inputs a significant part of which are not based on observable market data (referred to as unobservable inputs).

Level 3 instruments carried at fair value on the balance sheet are valued using financial models based on market inputs among which those which are unobservable or observable on insufficiently active markets, have a significant impact on the fair value of the financial instrument as a whole.

Accordingly, Level 3 financial instruments include derivatives and repo transactions with longer maturities than those usually traded and/or with specifically-tailored return profiles, structured debts including embedded derivatives valued based on a method using unobservable inputs or long-term equity investments valued based on a corporate valuation method, which is the case for unlisted companies or companies listed on an insufficiently liquid market.

The main L3 complex derivatives are:

- Equity derivatives: options with long maturities and/or incorporating bespoke remuneration mechanisms. These instruments are sensitive to market inputs (volatility, dividend rates, correlations, etc.). In the absence of market depth and an objective approach made possible by regularly observed prices, their valuation is based on proprietary methods (*e.g.* extrapolation from observable data, historical analysis). Hybrid equity instruments (*i.e.* having at least one non-equity underlying instrument) are also classified as L3 insofar as the correlations between the different underlying assets are generally unobservable;
- Interest rate derivatives: long-term and/or exotic options, products sensitive to correlation between different interest rates, different exchange rates, or between interest rates and exchange rates, for example for *quanto* products (in which the instrument is settled in a currency different from the currency of the underlying asset); they are liable to be classified as L3 because the valuation inputs are unobservable due to the liquidity of the correlated pair and the residual maturity of the transactions (*e.g.* exchange rate correlations are deemed unobservable for the USD/JPY);
- Credit derivatives: L3 credit derivatives mainly include baskets of instruments exposed to time to default correlation (“N to default” products in which the buyer of the hedge is compensated as of the Nth default, which are exposed to the credit quality of the issuers comprising the basket and to their correlation, or CDO Bespoke products, which are Collateralised Debt Obligations created specifically for a group of investors and structured according to their needs), as well as products subject to credit spread volatility;
- Commodity derivatives: this category includes products involving unobservable volatility or correlation inputs (*i.e.* options on commodity swaps or instruments based on baskets of underlyings).

1. FINANCIAL ASSETS MEASURED AT FAIR VALUE

Table 3.4.A

<i>(In EUR m)</i>	31.12.2022				31.12.2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Trading portfolio (excluding derivatives)	93,492	134,259	6,402	234,153	119,240	95,485	4,709	219,434
Bonds and other debt securities	23,925	1,939	158	26,022	19,516	2,584	380	22,480
Shares and other equity securities	69,565	4,822	-	74,387	99,721	9,137	-	108,858
Securities purchased under resale agreements	-	116,586	6,166	122,752	-	77,080	4,202	81,282
Loans, receivables and other trading assets	2	10,912	78	10,992	3	6,684	127	6,814
Trading derivatives	82	72,474	3,378	75,934	371	96,018	3,966	100,355
Interest rate instruments	7	31,689	2,473	34,169	17	53,860	2,683	56,560
Foreign exchange instruments	75	23,751	446	24,272	354	17,817	233	18,404
Equity and index instruments	-	15,406	106	15,512	-	23,613	573	24,186
Commodity instruments	-	199	-	199	-	276	3	279
Credit derivatives	-	1,402	353	1,755	-	447	474	921
Other forward financial instruments	-	27	-	27	-	5	-	5
Financial assets measured mandatorily at fair value through profit or loss	312	13,048	4,643	18,003	169	16,727	4,460	21,356
Bonds and other debt securities	-	37	157	194	16	45	132	193
Shares and other equity securities	312	245	2,259	2,816	153	368	2,248	2,769
Loans, receivables and securities purchased under resale agreements	-	12,766	2,227	14,993	-	16,314	2,080	18,394
Financial assets measured using fair value option through profit or loss	107	1,240	-	1,347	-	1,565	4	1,569
Bonds and other debt securities	107	4	-	111	-	-	4	4
Loans, receivables and securities purchased under resale agreements	-	55	-	55	-	58	-	58
Separate assets for employee benefit plans	-	1,181	-	1,181	-	1,507	-	1,507
Hedging derivatives	-	32,850	-	32,850	-	13,239	-	13,239
Interest rate instruments	-	32,551	-	32,551	-	13,039	-	13,039
Foreign exchange instruments	-	293	-	293	-	165	-	165
Equity and index instruments	-	6	-	6	-	35	-	35
Financial assets measured at fair value through other comprehensive income	37,066	132	265	37,463	42,798	380	272	43,450
Bonds and other debt securities	37,066	132	1	37,199	42,798	281	2	43,081
Shares and other equity securities	-	-	264	264	-	-	270	270
Loans and receivables	-	-	-	-	-	99	-	99
Total	131,059	254,003	14,688	399,750	162,578	223,414	13,411	399,403

2. FINANCIAL LIABILITIES MEASURED AT FAIR VALUE

Table 3.4.B

	31.12.2022				31.12.2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<i>(In EUR m)</i>								
Trading portfolio (excluding derivatives)	6,424	152,974	3,385	162,783	4,494	129,989	2,022	136,505
Amounts payable on borrowed securities	8	51,038	55	51,101	30	45,630	161	45,821
Bonds and other debt instruments sold short	5,172	-	14	5,186	3,626	1	3	3,630
Shares and other equity instruments sold short	1,244	-	-	1,244	838	-	-	838
Securities sold under repurchase agreements	-	99,372	3,307	102,679	-	82,874	1,855	84,729
Borrowings and other trading liabilities	-	2,564	9	2,573	-	1,484	3	1,487
Trading derivatives	349	68,404	3,315	72,068	400	101,390	4,817	106,607
Interest rate instruments	7	21,106	2,049	23,162	9	48,750	2,422	51,181
Foreign exchange instruments	342	24,728	272	25,342	390	18,719	211	19,320
Equity and index instruments	-	20,465	725	21,190	1	32,124	1,654	33,779
Commodity instruments	-	154	-	154	-	309	2	311
Credit derivatives	-	1,170	269	1,439	-	651	528	1,179
Other forward financial instruments	-	781	-	781	-	837	-	837
Financial liabilities measured using fair value option through profit or loss	-	29,096	36,671	65,767	-	27,633	36,818	64,451
Hedging derivatives	-	46,164	-	46,164	-	10,425	-	10,425
Interest rate instruments	-	45,981	-	45,981	-	10,168	-	10,168
Foreign exchange instruments	-	166	-	166	-	255	-	255
Equity and index instruments	-	17	-	17	-	2	-	2
Total	6,773	296,638	43,371	346,782	4,894	269,437	43,657	317,988

3. VARIATION IN LEVEL 3 FINANCIAL INSTRUMENTS

FINANCIAL ASSETS

Table 3.4.C

<i>(In EUR m)</i>	Balance as at 31.12.2021	Acquisitions	Disposals / redemptions	Transfer to Level 2	Transfer from Level 2	Gains and losses	Translation differences	Change in scope and others	Balance as at 31.12.2022
Trading portfolio (excluding derivatives)	4,709	4,978	(2,190)	(802)	9	(351)	99	(50)	6,402
Bonds and other debt securities	380	599	(787)	(85)	9	29	13	-	158
Securities purchased under resale agreements	4,202	4,379	(1,395)	(717)	-	(381)	78	-	6,166
Loans, receivables and other trading assets	127	-	(8)	-	-	1	8	(50)	78
Trading derivatives	3,966	51	(13)	(2,094)	136	1,091	241	-	3,378
Interest rate instruments	2,683	-	-	(1,960)	105	1,436	209	-	2,473
Foreign exchange instruments	233	1	(2)	(4)	2	212	4	-	446
Equity and index instruments	573	50	(11)	(36)	2	(489)	17	-	106
Commodity instruments	3	-	-	(1)	-	(2)	-	-	-
Credit derivatives	474	-	-	(93)	27	(66)	11	-	353
Financial assets measured mandatorily at fair value through profit or loss	4,460	593	(342)	(65)	-	128	73	(204)	4,643
Bonds and other debt securities	132	52	(29)	-	-	2	-	-	157
Shares and other equity securities	2,248	321	(258)	-	-	158	(6)	(204)	2,259
Loans, receivables and securities purchased under resale agreements	2,080	220	(55)	(65)	-	(32)	79	-	2,227
Financial assets measured using fair value option through profit or loss	4	-	(4)	-	-	-	-	-	-
Bonds and other debt securities	4	-	(4)	-	-	-	-	-	-
Loans, receivables and securities purchased under resale agreements	-	-	-	-	-	-	-	-	-
Financial assets measured at fair value option through other comprehensive income	272	19	(1)	-	-	(27)	-	2	265
Debt instruments	2	-	(1)	-	-	-	-	-	1
Equity instruments	270	19	-	-	-	(27)	-	2	264
Total	13,411	5,641	(2,550)	(2,961)	145	841	413	(252)	14,688

FINANCIAL LIABILITIES

Table 3.4.D

<i>(In EUR m)</i>	Balance as at 31.12.2021	Issues	Redemptions	Transfer to Level 2	Transfer from Level 2	Gains and losses	Translation differences	Change in scope and others	Balance as at 31.12.2022
Trading portfolio (excluding derivatives)	2,022	2,920	(1,148)	-	-	(320)	(89)	-	3,385
Amounts payable on borrowed securities	161	-	-	-	-	(105)	-	-	56
Bonds and other debt instruments sold short	3	-	-	-	-	11	-	-	14
Securities sold under repurchase agreements	1,855	2,920	(1,148)	-	-	(232)	(89)	-	3,306
Borrowings and other trading liabilities	3	-	-	-	-	6	-	-	9
Trading derivatives	4,817	493	(56)	(1,349)	110	(726)	26	-	3,315
Interest rate instruments	2,422	1	(1)	(1,116)	67	698	(23)	-	2,048
Foreign exchange instruments	211	1	-	-	-	64	(3)	-	273
Equity and index instruments	1,654	491	(53)	(39)	14	(1,386)	44	-	725
Commodity instruments	2	-	(2)	-	-	-	-	-	-
Credit derivatives	528	-	-	(194)	29	(102)	8	-	269
Financial liabilities measured using fair value option through profit or loss	36,818	20,947	(16,442)	(1,324)	1,621	(5,401)	452	-	36,671
Total financial liabilities at fair value	43,657	24,360	(17,646)	(2,673)	1,731	(6,447)	389	-	43,371

4. VALUATION METHODS OF FINANCIAL INSTRUMENTS CARRIED AT FAIR VALUE ON THE BALANCE SHEET

For financial instruments recognised at fair value on the balance sheet, fair value is determined primarily on the basis of the prices quoted in an active market. These prices may be adjusted, if they are not available at the balance sheet date in order to incorporate the events that have an impact on prices and occurred after the closing of the stock markets but before the measurement date or in the event of an inactive market. However, due notably to the varied characteristics of financial instruments traded over-the-counter on the financial markets, a large number of financial products traded by the Group does not have quoted prices in the markets.

For these products, fair value is determined using models based on valuation techniques commonly used by market participants to measure financial instruments, such as discounted future cash flows for swaps or the Black & Scholes formula for certain options and using valuation parameters that reflect current market conditions at the balance sheet date. These valuation models are validated independently by the experts from the Market Risk Department of the Group's Risk Division.

Furthermore, the inputs used in the valuation models, whether derived from observable market data or not, are checked by the Finance Division of Market Activities, in accordance with the methodologies defined by the Market Risk Department.

If necessary, these valuations are supplemented by additional reserves (such as bid-ask spreads and liquidity) determined reasonably and appropriately after an analysis of available information.

Derivatives and security financing transactions are subject to a Credit Valuation Adjustment (CVA) or Debt Valuation Adjustment (DVA). The Group includes all clients and clearing houses in this adjustment, which also reflects the netting agreements existing for each counterparty.

The CVA is determined based on the Group entity's expected positive exposure to the counterparty, the counterparty's probability of default and the amount of the loss given default. The DVA is determined

symmetrically based on the negative expected exposure. These calculations are carried out over the life of the potential exposure, with a focus on the use of relevant and observable market data. Since 2021, a system has been in place to identify the new transactions for which CVA/DVA adjustments are significant. These transactions are then classified in Level 3.

Similarly, an adjustment to take into account the costs or profits linked to the financing of these transactions (FVA, Funding Value Adjustment) is also performed.

Observable data must be: independent, available, publicly distributed, based on a narrow consensus and/or backed up by transaction prices.

For example, consensus data provided by external counterparties are considered observable if the underlying market is liquid and if the prices provided are confirmed by actual transactions. For long maturities, these consensus data are not observable. This is the case for the implied volatility used for the valuation of equity options with maturities of more than five years. However, when the residual maturity of the instrument falls below five years, its fair value becomes sensitive to observable inputs.

In the event of unusual tensions on the markets, leading to a lack of the usual reference data used to measure a financial instrument, the Risk Division may implement a new model in accordance with pertinent available data, similar to methods used by other market players.

SHARES AND OTHER EQUITY SECURITIES

For listed shares, fair value is taken to be the quoted price on the balance sheet date.

The significant unlisted securities and the significant securities listed on an illiquid market will be valued primarily by using a developed valuation method: Discounted Cash Flows (DCF) or Discounted Dividend Model (DDM) and/or Market multiples.

For non-significant unlisted shares, fair value is determined depending on the type of financial instrument and according to one of the following methods:

- proportion of net asset value held;
- valuation based on a recent transaction involving the issuing company (third party buying into the issuing company's capital, appraisal by a professional valuation agent, etc.);
- valuation based on a recent transaction in the same sector as the issuing company (income multiple, asset multiple, etc.).

DEBT INSTRUMENTS HELD IN PORTFOLIO, ISSUES OF STRUCTURED SECURITIES MEASURED AT FAIR VALUE AND FINANCIAL DERIVATIVES INSTRUMENTS

The fair value of these financial instruments is determined based on the quoted price on the balance sheet date or prices provided by brokers on the same date, when available. For unlisted financial instruments, fair value is determined using valuation techniques. Concerning liabilities measured at fair value, the on-balance sheet amounts include changes in the Group's issuer credit risk.

OTHER DEBTS

For listed financial instruments, fair value is taken as their closing quoted price on the balance sheet date. For unlisted financial instruments, fair value is determined by discounting future cash flows to present value at market rates (including counterparty risks, non-performance and liquidity risks).

CUSTOMER LOANS

The fair value of loans and receivables is calculated, in the absence of an actively traded market for these loans, by discounting the expected cash flows to present value at a discount rate based on interest rates prevailing on the market at the reporting date for loans with broadly similar terms and maturities. These discount rates are adjusted for borrower credit risk.

5. ESTIMATES OF MAIN UNOBSERVABLE INPUTS

The following table provides, for Level 3 instruments, the ranges of values of the most significant unobservable inputs by main product type.

Table 3.4.E

(In EUR m)

Cash instruments and derivatives	Main products	Valuation techniques used	Significant unobservable inputs	Range of inputs	
				min.	max.
Equities/funds	Simple and complex instruments or derivatives on funds, equities or baskets of stocks	Various option models on funds, equities or baskets of stocks	Equity volatilities	2.4%	89.9%
			Equity dividends	0.0%	0.114
			Correlations	-81.0%	100.0%
			Hedge fund volatilities	7.6%	20.0%
			Mutual fund volatilities	3.2%	31.5%
Interest rates and Forex	Forex derivatives	Forex option pricing models	Forex volatilities	5.0%	32.0%
Credit	Collateralised Debt Obligations and index tranches	Recovery and base correlation projection models	Time to default correlations	0.0%	100.0%
			Recovery rate variance for single name underlyings	0.0%	100.0%
			Time to default correlations	0.0%	100.0%
	Other credit derivatives	Credit default models	Quanto correlations	-50.0%	40.0%
			Credit spreads	0 bps	1 000 bps
Commodities	Derivatives on commodities baskets	Option models on commodities	Correlations	NA	NA
Long term equity investments	Securities held for strategic purposes	Net Book Value / Recent transactions	Not applicable	-	-

The table below shows the valuation of cash and derivative instruments on the balance sheet. When it comes to hybrid instruments, they are broken down according to the main unobservable inputs.

Table 3.4.F

	31.12.2022	
	Assets	Liabilities
(In EUR m)		
Equities/funds	730	24,037
Rates and Forex	11,628	19,065
Credit	353	269
Long term equity investments	1,977	-
Total	14,688	43,371

6. SENSITIVITY OF FAIR VALUE FOR LEVEL 3 INSTRUMENTS

Unobservable inputs are assessed carefully, particularly in this persistently uncertain economic environment and market. However, by their very nature, unobservable inputs inject a degree of uncertainty into the valuation of Level 3 instruments.

To quantify this, fair value sensitivity was estimated at 31 December 2022 on instruments whose valuation requires certain unobservable inputs. This estimate was based either on a “standardised” variation in

unobservable inputs, calculated for each input on a net position, or on assumptions in line with the additional valuation adjustment policies for the financial instruments in question.

The “standardised” variation corresponds to the standard deviation of consensus prices (TOTEM, etc.) used to measure an input nevertheless considered as unobservable. In cases of unavailability of these data, the standard deviation of historical data is then used to assess the input.

SENSITIVITY OF LEVEL 3 FAIR VALUE TO A “STANDARDISED” VARIATION IN UNOBSERVABLE INPUTS

Table 3.4.G

	31.12.2022		31.12.2021	
	Negative impact	Positive impact	Negative impact	Positive impact
<i>(In EUR m)</i>				
Shares and other equity instruments and derivatives	(30)	82	(21)	78
Equity volatilities	-	5	-	12
Dividends	-	20	-	19
Correlations	(30)	56	(20)	44
Hedge Fund volatilities	-	-	-	0
Mutual Fund volatilities	(0)	1	(1)	3
Rates or Forex instruments and derivatives	(15)	28	(6)	30
Correlations between exchange rates and/or interest rates	(14)	27	(3)	27
Forex volatilities	(1)	1	(2)	3
Constant prepayment rates	-	-	-	(0)
Inflation/inflation correlations	(0)	0	(1)	0
Credit instruments and derivatives	-	5	-	8
Time to default correlations	-	0	-	1
Quanto correlations	-	3	-	4
Credit spreads	-	2	-	3
Commodity derivatives	NA	NA	NA	NA
Commodities correlations	NA	NA	NA	NA
Long term securities	NA	NA	NA	NA

It should be noted that, given the already conservative valuation levels, this sensitivity is higher for a favourable impact on results than for an unfavourable impact. Moreover, the amounts shown above illustrate the uncertainty of the valuation as at the computation date based on a “standardised” variation in inputs. Future variations in fair value cannot be deduced or forecast from these estimates.

7. DEFERRED MARGIN RELATED TO MAIN UNOBSERVABLE INPUTS

At initial recognition, financial assets and liabilities are measured at fair value, that is to say the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

When this fair value differs from transaction price and the instrument’s valuation technique uses one or more unobservable inputs, this difference representative of a commercial margin is deferred in time to be recorded in the income statement, from case to case, at maturity of the instrument, at the time of sell or transfer, over time, or when the inputs become observable.

The table below shows the amount remaining to be recognised in the income statement due to this difference, less any amounts recorded in the income statement after initial recognition of the instrument.

Table 3.4.H

<i>(In EUR m)</i>	2022	2021
Deferred margin at 1 January	1,191	1,157
Deferred margin on new transactions during the period	794	1,053
Margin recorded in the income statement during the period	(737)	(1,019)
<i>o/w amortisation</i>	(497)	(558)
<i>o/w switch to observable inputs</i>	(12)	(15)
<i>o/w disposed, expired or terminated</i>	(228)	(446)
Deferred margin at 31 December	1,248	1,191

NOTE 3.5 - LOANS, RECEIVABLES AND SECURITIES AT AMORTISED COST

OVERVIEW

Table 3.5.A

<i>(In EUR m)</i>	31.12.2022		31.12.2021	
	Carrying amount	<i>o/w</i> impairment	Carrying amount	<i>o/w</i> impairment
Due from banks	66,903	(39)	55,972	(36)
Customer loans	506,529	(10,634)	497,164	(10,980)
Securities	21,430	(63)	19,371	(57)
Total	594,862	(10,736)	572,507	(11,073)

ACCOUNTING PRINCIPLES

Loans, receivables and debt securities are measured at amortised cost where their contractual cash flows are consistent with basic lending arrangements (SPPI) and they are managed under a “Hold to Collect” business model.

Subsequent to initial recognition, they are measured at amortised cost using the effective interest method, and their accrued or earned income are recorded in profit or loss under Interest and similar income. Furthermore, as these financial assets are subject to impairment for credit risk, changes in the expected credit losses are recorded in profit or loss under Cost of risk with a corresponding impairment of the amortised cost on the asset side of the balance sheet. The applicable impairment rules are described in Note 3.8. When a loan or a receivable is classified in Stage 3 for impairment (doubtful outstanding), the subsequent accrued interest incremented to the carrying amount of the financial asset before impairment is limited to the interest recognised in profit or loss. The amount of such interest is then calculated by applying the effective interest rate to the net carrying amount of the financial asset (see Note 3.7).

Loans granted by the Group may be subject to renegotiations for commercial reasons, while the borrowing customer is not experiencing any financial difficulties or insolvency. Such efforts are undertaken for customers for which the Group agrees to renegotiate their debt at the new market conditions in the interest of preserving or developing a business relationship, in accordance with the credit approval procedures in force and without relinquishing any principal or accrued interest. Except in specific cases where the modification due to the renegotiation would not be considered significant, renegotiated loans are derecognised as at the renegotiation date, and the new loans contracted under the renegotiated terms and conditions replace the previous loans in the balance sheet as at this same date. The new loans are subject to the SPPI test to determine how they are classified in the balance sheet. If a loan qualifies as a basic instrument (SPPI), the handling and implementation fees associated with the new transaction received are included in the effective interest rate of the new instrument.

Customer loans at amortised cost include lease receivables where they are classified as finance leases. Leases granted by the Group are classified as finance leases if they transfer substantially all the risks and rewards incidental to ownership of the leased asset to the lessee. Otherwise, they are classified as operating leases (see Note 4.2).

These finance lease receivables represent the Group's net investment in the lease, calculated as the present value of the minimum payments to be received from the lessee, plus any unguaranteed residual value, discounted at the interest rate implicit in the lease. In the event of a subsequent reduction in the estimated unguaranteed residual value used to calculate the lessor's investment in the finance lease, the present value of this reduction is recognised as a loss under Expenses from other activities in the income statement and as a reduction of the finance lease receivables on the asset side of the balance sheet.

BUSINESS MODEL “HOLD TO COLLECT”

Under this model, financial assets are managed to obtain cash flows by collecting contractual payments over the life of the instrument.

To achieve the objective of this business model, it is not necessary for the entity to hold all the instruments until maturity. Selling assets remains consistent with a business model whose objective is to collect contractual cash flows in the following cases:

- the financial asset is sold following an increase in the asset’s credit risk; or
- the sale of the financial asset occurs close to its maturity and the proceeds from the sale are similar to the amount to be collected from the remaining contractual cash flows.

Other sales can be consistent with the objective of collecting contractual cash flows, as well, provided they are infrequent (even if significant in value) or insignificant in value, both individually and in aggregate terms (even if frequent). Such other sales include sales made to manage credit concentration risk (without an increase in the asset’s credit risk). The Group has set up procedures for reporting and analysing all significant projected sales of financial assets held for collecting contractual cash flows, as well as a periodic review of sales that have occurred.

	Financing activities Within the Group, the “hold to collect” business model is mainly applied by financing activities managed by French Retail Banking, International Retail Banking and Financial Services and by Global Banking and Investor Solutions, except for the part of syndicated loans that is expected to be sold.
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1. DUE FROM BANKS

Table 3.5.B

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Current accounts	33,402	26,997
Deposits and loans	15,053	18,123
Securities purchased under resale agreements	17,670	10,184
Subordinated and participating loans	238	99
Related receivables	655	585
Due from banks before impairments ⁽¹⁾	67,018	55,988
Credit loss impairments	(39)	(36)
Revaluation of hedged items	(76)	20
Total	66,903	55,972

(1) As at 31 December 2022, the amount due from banks classified as Stage 3 impairment (credit impaired) is EUR 68 million compared to EUR 46 million at 31 December 2021. The accrued interests included in this amount are limited to interests recognised in net income by applying the effective interest rate to the net carrying amount of the financial asset (see Note 3.7).

2. CUSTOMER LOANS

Table 3.5.C

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Overdrafts	29,244	27,013
Other customer loans	444,532	438,165
Lease financing agreements	29,499	30,509
Securities purchased under resale agreements	10,159	8,831
Related receivables	4,045	3,399
Customer loans before impairments ⁽¹⁾	517,479	507,917
Credit loss impairment	(10,634)	(10,980)
Revaluation of hedged items	(316)	227
Total	506,529	497,164

(1) As at 31 December 2022, the amount due from banks classified as Stage 3 impairment (credit impaired) is EUR 15,687 million compared to EUR 16,261 million as at 31 December 2021. The accrued interests included in this amount are limited to interests recognised in net income by applying the effective interest rate to the net carrying amount of the financial asset (see Note 3.7).

BREAKDOWN OF OTHER CUSTOMER LOANS

Table 3.5.D

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Trade notes	7,547	9,945
Short-term loans	146,274	144,481
Export loans	13,801	13,220
Equipment loans	70,293	66,183
Housing loans	152,282	151,869
Loans secured by notes and securities	246	204
Other loans	54,089	52,263
Total	444,532	438,165

ADDITIONAL INFORMATION ON LEASE FINANCING AND SIMILAR AGREEMENTS

Table 3.5.E

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Gross investments	31,339	32,201
Amount for the next five years	26,129	26,714
<i>Less than one year</i>	9,657	9,227
<i>From one to two years</i>	6,418	7,124
<i>From two to three years</i>	4,855	5,047
<i>From three to four years</i>	3,190	3,315
<i>From four to five years</i>	2,009	2,001
More than five years	5,210	5,487
Present value of minimum payments receivable	27,846	28,888
Rental receivables due for the next five years	23,799	24,685
<i>Less than one year</i>	8,982	8,759
<i>From one to two years</i>	5,926	6,666
<i>From two to three years</i>	4,403	4,598
<i>From three to four years</i>	2,831	2,966
<i>From four to five years</i>	1,657	1,696
Rental receivables due for more than five years	4,047	4,203
Unearned financial income	1,840	1,692
Unguaranteed residual values receivable by the lessor	1,653	1,621

3. SECURITIES

Table 3.5.F

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Government securities	9,734	8,896
Negotiable certificates, bonds and other debt securities	11,808	10,525
Related receivables	208	160
Securities before impairments	21,750	19,581
Impairment	(63)	(57)
Revaluation of hedged items	(257)	(153)
Total	21,430	19,371

NOTE 3.6 - DEBTS

ACCOUNTING PRINCIPLES

Debts include the non-derivative financial liabilities that are not measured at fair value through profit or loss (these instruments are described in Note 3.1.3).

They are recognised in the balance sheet, depending on the type of instrument and counterparty, under Due to banks, Customer deposits, Debt securities issued or Subordinated debt.

Subordinated debts are all dated or undated borrowings, whether or not in the form of debt securities, which in the event of the liquidation of the borrowing company may only be redeemed after all other creditors have been paid.

Debts are initially recognised at cost, *i.e.* at the fair value of the amount borrowed net of transaction fees. These liabilities are measured as at the reporting date at amortised cost using the effective interest rate method. As a result, issue or redemption premiums on bonds are amortised over the lifetime of the instruments concerned. Accrued or paid expenses are recorded in profit or loss under Interest and similar expense.

The Group's obligations arising from mortgage savings accounts and plans are recorded under Customer deposits – Regulated savings accounts. A provision may be recorded in respect of such mortgage savings instruments (see Note 8.3).

1. DUE TO BANKS

Table 3.6.A

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Demand deposits and current accounts	10,455	12,373
Overnight deposits and borrowings	392	1,564
Term deposits ⁽¹⁾	120,141	121,708
Related payables	301	47
Revaluation of hedged items	(1,933)	104
Securities sold under repurchase agreements	3,632	3,381
Total	132,988	139,177

(1) Including term-deposits linked to central banks, and in particular long-term refinancing operations set up by the ECB (Targeted Longer-Term Refinancing Operations – TLTRO).

TLTRO

The European Central Bank (ECB) launched in 2019 a third series of Targeted Longer-Term Refinancing Operations (TLTRO) with the aim of maintaining favourable credit conditions in the euro area. As in the two previous systems, the level of remuneration of the borrowings depends on the performance of the borrowing banking institutions in terms of loans granted to their household customers (excluding real estate loans) and business customers (excluding financial institutions); depending on these performances, the borrowing institutions may benefit from a reduced interest rate and an additional temporary bonus applicable from 24 June 2020 to 23 June 2021 (reduction by 50 basis points of the average rate of the deposit facility with a floor rate set at -1%). These TLTRO III operations are conducted on a quarterly basis between September 2019 and December 2021, for a possible total of 10 drawdowns. Each such operation has a three-year maturity and includes an early repayment option. Some terms and conditions were modified in March 2020, in particular the loan production objectives, rate conditions and drawdown limit, in order to further support the granting of loans at the outset of the Covid-19 crisis. In January 2021, the ECB decided to extend the temporary additional bonus over the period from 24 June 2021 to 23 June 2022 subject to performance in terms of number of granted loans observed over a new reference period from 1 October 2020 to 31 December 2021.

The Group, via Societe Generale and Crédit du Nord, subscribed to TLTRO III loans through quarterly drawdowns staggered between December 2019 and December 2021. The residual amount of TLTRO borrowings on the liabilities side of the balance sheet is EUR 52.7 billion as at 31 December 2022, following the early repayments made in the fourth quarter of 2022 for an amount of EUR 19.2 billion.

As at 31 December 2021, the Group had already reached its objective of stability of the loans outstanding required to benefit from the reduced interest rate as well as from two additional temporary bonuses applied from 24 June 2020 to 23 June 2021 and from 24 June 2021 to 23 June 2022. The additional bonuses have been qualified for accounting purposes as grants under IAS 20 and the loans as adjustable rate liabilities under IFRS 9.

On 27 October 2022, the ECB changed the methods for calculating the interest rate relating to the last period of TLTRO III. The effect of these changes resulted in an adjustment of the effective interest rate applied between 23 June 2022 to 22 November 2022 and the implementation of new calculation method from 23 November 2022 on.

As at 31 December 2022, the total cost of TLTRO borrowings including interest and bonuses is therefore between -0.21% and -0.89% depending on the drawdown dates. For the financial year 2022, the total amount for interests and bonuses on the TLTRO borrowings recorded under Interest and similar income amount to EUR 0.4 billion; this amount includes the immediate registration of bonuses not yet recognised on the early repaid loans.

In January 2021, the IFRS IC received a question about the accounting treatment of the TLTRO and has ruled neither on the recognition of transactions under IFRS 9, nor on the possible identification of a grant. The topic has been referred to the IFRS 9 Post Implementation Review. The Group has not changed the accounting treatment that it applies for the TLTRO and remains vigilant regarding any elements of clarification that this review will provide.

2. CUSTOMER DEPOSITS

Table 3.6.B

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Regulated savings accounts	111,496	109,079
<i>Demand</i>	86,368	83,025
<i>Term</i>	25,128	26,054
Other demand deposits ⁽¹⁾	295,933	308,091
Other term deposits ⁽¹⁾	115,651	84,861
Related payables	876	261
Revaluation of hedged items	(89)	103
Total customer deposits	523,867	502,395
Securities sold to customers under repurchase agreements	6,897	6,738
Total	530,764	509,133

(1) Including term-deposits linked to governments and central administrations.

PARTNERSHIP AGREEMENT WITH ING

On 4 April 2022, Boursorama signed a partnership agreement with ING following its decision to withdraw from the retail banking market in France. Under the terms of this agreement, Boursorama offers ING's online banking clients in France an alternative banking solution with a simplified subscription process and exclusive offers on the products and services subscribed. The proposed offers relate to current accounts, savings plans and means of payment as well as securities accounts; credits, however, are not included within the scope of the agreement.

As at 31 December 2022, Debts to customers, on the liabilities side of the balance sheet, include the outstanding deposits and savings accounts transferred to Boursorama for an amount of EUR 3,635 million.

In early July 2022, the life insurance brokerage activities of ING Direct Vie have been transferred to Boursorama.

BREAKDOWN OF OTHER DEMAND DEPOSITS BY CUSTOMER TYPE

Table 3.6.C

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Professionals and corporates	151,687	149,089
Individual customers	88,450	90,590
Financial customers	42,982	51,306
Others ⁽¹⁾	12,814	17,106
Total	295,933	308,091

(1) Including term-deposits linked to governments and central administrations.

3. DEBT SECURITIES ISSUED

Table 3.6.D

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Term savings certificates	230	276
Bond borrowings	25,974	21,525
Interbank certificates and negotiable debt instruments	110,543	112,819
Related payables	635	574
Revaluation of hedged items	(4,206)	130
Total	133,176	135,324
<i>o/w floating-rate securities</i>	<i>77,220</i>	<i>62,215</i>

NOTE 3.7 - INTEREST INCOME AND EXPENSE



Interest is compensation for a financial service, consisting in a lender making a certain amount of cash available to a borrower for an agreed period of time. Such compensated financing arrangements can be loans, deposits or securities (bonds, negotiable debt securities...).

This compensation is a consideration for the time value of money, and additionally for credit risk, liquidity risk and administrative costs, all borne by the lender for the duration of the financing agreement. The interest can also include a margin used by the lending bank to remunerate equity instruments (such as ordinary shares) that are required by prudential regulation to be issued in relation to the amount of financing granted, so as to guarantee its own solvency.

Interest is recognised as expense or income over the life of the financing service granted or received, proportionally to the principal amount outstanding.

ACCOUNTING PRINCIPLES

Interest income and expense are recorded in the income statement under Interest and similar income and Interest and similar expense for all financial instruments measured using the effective interest method (instruments at amortised cost and debt instruments at fair value through other comprehensive income) and for all financial instruments mandatorily measured at fair value through profit and loss and interest rate risk hedging derivatives for the portion of income or expenses representative of the effective interest rate. Negative interest incomes on financial assets are recorded under Interest and similar expense; negative interest expenses on financial liabilities are recorded under Interest and similar income.

The effective interest rate is taken to be the rate used to net discount future cash inflows and outflows over the expected life of the instrument in order to establish the net book value of the financial asset or liability. The calculation of this rate considers the future cash flows estimated on the basis of the contractual provisions of the financial instrument without taking account of possible future credit losses and also includes commissions paid or received between the parties where these may be assimilated to interest, directly linked transaction costs, and all types of premiums and discounts.

Where a financial asset is classified in Stage 3 for impairment, subsequent interest income is recognised in profit or loss by applying the effective interest rate to the net carrying amount of the financial asset with an offsetting entry equal to the outstanding financial asset before impairment.

Moreover, except for those related to employee benefits, provisions recognised as balance sheet liabilities generate interest expenses which are calculated using the same risk-free interest rate as that used to discount the expected outflow of resources as soon as the effects of this update are significant.

SPECIFIC TREATMENT RELATED TO THE REPLACEMENT OF A REFERENCE INTEREST RATE BY AN ALTERNATIVE REFERENCE INTEREST RATE (POSSIBLY INCLUDING A FINANCIAL COMPENSATION) – IBOR REFORM

The replacement of a reference interest rate by an alternative reference interest rate (possibly including a financial compensation in the form of a margin adjustment expressed in basis points and/or a cash amount) is liable to change the basis for determining the contractual cash flows of a financial asset or liability (*i.e.*, the method for calculating the return on it).

The effective interest rate is then modified prospectively to reflect the change from the current reference interest rate to an alternative reference interest rate. This last is adjusted for the new margin expressed in basis points and, if needed, for the amortisation over the remaining term of the contract, of the cash amount paid at the time of the modification.

Table 3.7.A

<i>(In EUR m)</i>	2022			2021		
	Income	Expense	Net	Income	Expense	Net
Financial instruments at amortised cost	17,379	(8,787)	8,592	11,574	(4,344)	7,230
<i>Central banks</i>	1,255	(306)	949	78	(308)	(230)
<i>Bonds and other debt securities</i>	524	(1,646)	(1,122)	428	(1,293)	(865)
<i>Due from/to banks ⁽¹⁾</i>	1,896	(1,724)	172	1,107	(410)	697
<i>Customer loans and deposits</i>	12,152	(3,916)	8,236	9,680	(1,695)	7,985
<i>Subordinated debt</i>	-	(641)	(641)	-	(526)	(526)
<i>Securities lending/borrowing</i>	42	(14)	28	10	(11)	(1)
<i>Repo transactions</i>	1,510	(540)	970	271	(101)	170
Hedging derivatives	9,690	(8,727)	963	7,015	(5,489)	1,526
Financial instruments at fair value through other comprehensive income	520	-	520	415	-	415
Lease agreements	852	(37)	815	843	(39)	804
<i>Real estate lease agreements</i>	181	(37)	144	166	(39)	127
<i>Non-real estate lease agreements</i>	671	(0)	671	677	-	677
Subtotal interest income/expense on financial instruments using the effective interest method	28,441	(17,551)	10,890	19,847	(9,872)	9,975
Financial instruments mandatorily at fair value through profit or loss	397	(1)	396	743	-	743
Total Interest income and expense	28,838	(17,552)	11,286	20,590	(9,872)	10,718
<i>o/w interest income from impaired financial assets</i>	250	-	250	259	-	259

(1) Negative interest on TLTRO borrowings is recorded as income from Loans / borrowings from credit institutions (see. Note 3.6).

These interest expenses include the refinancing cost of financial instruments at fair value through profit or loss, the results of which are classified in net gains or losses on these instruments (see Note 3.1). Given that income and expenses booked in the income statement are classified by type of instrument rather than by purpose, the net income generated by activities in financial instruments at fair value through profit or loss must be assessed as a whole.

BREAKDOWN OF INCOME OF CUSTOMER LOANS AT AMORTISED COST

Table 3.7.B

<i>(In EUR m)</i>	2022	2021
Trade notes	487	332
Other customer loans	10,433	8,485
<i>Short-term loans</i>	4,490	3,486
<i>Export loans</i>	366	223
<i>Equipment loans</i>	1,751	1,396
<i>Housing loans</i>	2,694	2,781
<i>Other customer loans</i>	1,132	599
Overdrafts	989	613
Doubtful outstanding (stage 3)	243	250
Total	12,152	9,680

NOTE 3.8 - IMPAIRMENT AND PROVISIONS



MAKING
IT
SIMPLE

Some financial assets (loans, debt securities) involve credit risk which exposes the Group to a potential loss if the counterparty or the securities issuer were to be unable to respect their financial commitments. To compensate for this risk, the bank receives a portion of the contractual interest on those assets, called credit margin.

For loans, receivables and debt securities measured at amortised cost or fair value through other comprehensive income, this potential loss, or expected credit loss, as estimated by the Group, is recognised in profit or loss without waiting for a payment default individually impacting the counterparty; these expenses partly offset the interest income and thus avoid overestimating the income during the periods prior to the counterparty default. On balance sheet, this potential loss is recognised as an impairment that reduces the carrying amount of assets measured at amortised cost. Impairment is written-back in case of a subsequent decrease of credit risk.

Potential losses recognised in the income statement represent initially the credit losses expected by the Group over the year to come. Subsequently, the amount is increased by the expected loss at maturity of the instrument in case of significant increase of risk.

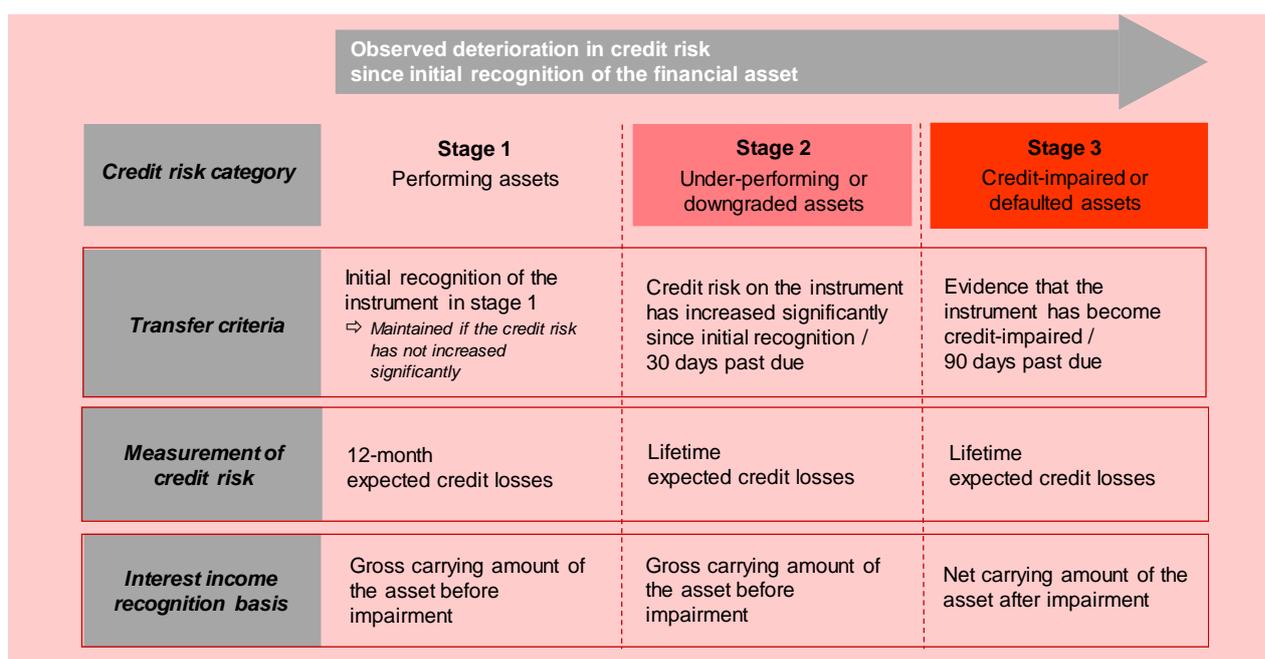
For financial assets measured at fair value through profit or loss (including instruments held by global markets activities), their fair value includes already the expected credit loss, as assessed by the market participants, on the residual lifetime of the instrument.

ACCOUNTING PRINCIPLES

RECOGNITION OF EXPECTED CREDIT LOSSES

Debt instruments (loans, debt securities and bonds and similar) classified as financial assets at amortised cost or as financial assets at fair value through other comprehensive income, operating lease receivables, customer receivables and income to be received included amongst Other assets, as well as loan commitments granted and guarantee commitments issued, are systematically subject to impairment or provisions for expected credit losses. These impairments and provisions are recognised as the loans are granted, the commitments undertaken, or the debt securities purchased, without waiting for the occurrence of an objective evidence of impairment.

To determine the amount of impairment or provision to be recorded at each reporting date, these exposures are split among three categories based on the increase in credit risk observed since initial recognition. An impairment or provision shall be recognised for the exposures in each category as follows:



EXPOSURES CLASSIFIED IN STAGE 1

At the initial recognition date, the exposures are systematically classified in Stage 1, unless they are purchased or originated credit-impaired instruments.

EXPOSURES CLASSIFIED IN STAGE 2

To identify Stage 2 exposures, the significant increase in credit risk compared to the date of initial recognition is assessed by the Group using all available past and forward-looking data (behavioural scores, loan to value indicators, macroeconomic forecast scenarios, sector analyses, cash flow projections for some counterparties, etc.).

The three criteria used to assess the significant changes in credit risk are detailed below. Once only one of these three criteria is met, the relevant outstanding is transferred from Stage 1 to Stage 2 and related impairment or provisions are adjusted accordingly. Furthermore, the Group does not apply the exemption for low credit risk; it thus carries out an assessment of a significant increase in credit risk for all loans and debt securities.

Criteria 1: the classification of the counterparty in “sensitive”

To determine the classification of the counterparty as “sensitive” (notion of watch list), the Group analyses:

- the counterparty’s credit rating (where it is the subject of an internal analysis); and
- the changes in its operating sector, in macroeconomic conditions and in the behaviours of the counterparty which may also be indicative of a deterioration in credit risk.

If, after a review, a counterparty is deemed “sensitive” (notion of watch list), all existing contracts between the Group and this counterparty are transferred into Stage 2 (to the extent that this approach does not lead to a distortion compared with an analysis of the credit quality at the time of granting of each financial instrument) and the related impairment and provisions are increased up to the lifetime expected credit losses.

Once a counterparty has been placed on a watch list, all new transactions originated with that counterparty are recorded in Stage 1.

Criteria 2: the magnitude of the change in a counterparty’s credit rating since the initial recognition

This magnitude is assessed from contract to contract, from the date of their initial recognition to the balance sheet date.

To determine whether a deterioration or improvement in the credit rating between the date of initial recognition and the balance sheet date is significant enough to prompt a change in the impairment Stage, thresholds are set once a year by the Risk Division. These transfer thresholds between Stage 1 and Stage 2 are determined for each homogeneous portfolio of contracts (notion of risk segment based on the customer typology and the credit quality) and are calculated based on their specific probability-of-default curves (thus, the threshold is different depending on whether it is a Sovereign portfolio or a Large Corporates portfolio, for instance). These thresholds may be expressed as an absolute or relative increase in the probability of default. For example, the threshold is set at +50 bp for sovereign debt, +100 bp for the Very Large Enterprises (turnover exceeding EUR 500 million), +200 bp for SME and +10 bp for the French mortgages of the Societe Generale retail network.

In addition and in line with the recommendations issued by the EBA and the ECB, loans for which the probability of default has been multiplied by 3 between the date of first recognition and the balance sheet date are transferred to Stage 2

Criteria 3: the existence of payments more than 30 days past due

There is a (rebuttable) presumption of a significant deterioration in credit risk when a payment on an asset is more than 30 days past due.

The three criteria are symmetrical: thus, a removal from the watch list of sensitive counterparties, a sufficient improvement in the debtor's credit rating or a settlement of payments more than 30 days overdue results in a return to Stage 1, without any probation period in Stage 2.

Particular case of exposures without credit rating

For exposures to counterparties for which no credit rating is available (retail customers and a limited portion of the "small- and medium- sized companies" segment), the transfer into Stage 2 is based on:

- the Basel behavioural score or the existence of payments more than 30 days past due for retail customers;
- the placement on the watch list or the existence of payments more than 30 days past due for Corporate.

EXPOSURES CLASSIFIED IN STAGE 3

To identify Stage 3 exposures (doubtful exposures), the Group has been applying to most of its entities, since July 2020, the new definition of default as detailed in the guidelines published by the European Banking Authority (EBA). This definition leads to applying the following criteria to classify exposures as Stage 3:

- one or more unpaid payments of over 100 euros for Retail (500 euros for Non-retail) during 90 consecutive days, representing at least 1% of the total exposure of the customer. This unpaid amount may or may not be accompanied by a recovery procedure (except for restructured loans classified into Stage 1 or 2 which are retransferred into Stage 3 from the first amount unpaid after 30 days during the two-year probation period). In addition, only missed payments related to business litigations, specific contractual features or IT failures may avoid automatic transfer into Stage 3 after 90 days.
- identification of other criteria that evidence, even in the absence of missed payments, that this is unlikely that the counterparty could meet all its financial obligations:
- a significant deterioration in the counterparty's financial situation creates a strong probability that it will not be able to meet all of its commitments and thus represents a risk of loss for the Group;
- the granting of concessions to the clauses of the loan agreement, which would not have been granted if the counterparty wasn't experiencing financial difficulties (restructured loans) and which result in a decrease in the present value of the loan cash flows of more than 1% of its initial value;
- the existence of litigious proceedings (ad hoc mandate, bankruptcy protection, court-ordered settlement or compulsory liquidation or other similar proceedings in local jurisdictions).

The Group applies the impairment contagion principle to all of the defaulting counterparty's exposures. When a debtor belongs to a group, the impairment contagion principle may also be applied to all of the group's exposures.

The classification in Stage 3 is kept during the 3-month probation period after the disappearance of all default indicators described above. The probation period in Stage 3 is extended to one year for the restructured loans that have been transferred in Stage 3.

In the case of a return to Stage 2, the exposures are kept in Stage 2 during a probation period before assessing whether they could be transferred to Stage 1. This probation period in Stage 2 is from 6 months to two years according to the nature of the risk portfolio to which the exposures belong.

MEASUREMENT OF DEPRECIATION AND PROVISION

Stage 1 exposures are impaired for the amount of credit losses that the Group expects to incur within 12 months (12-month expected credit losses), based on past data and the current situation. Accordingly, the amount of impairment is the difference between the gross carrying amount of the asset and the present value of future cash flows deemed to be recoverable, taking into account the impact of collateral called up or liable to be called up and the probability of a default event occurring within the next 12 months.

Stage 2 and 3 exposures are impaired for the amount of credit losses that the Group expects to incur over the life of the exposures (lifetime expected credit losses), taking into consideration past data, the present situation and reasonable forecast changes in economic conditions, and relevant macroeconomic factors through to maturity. Accordingly, the amount of impairment is the difference between the gross carrying amount of the asset and the present value of future cash flows deemed to be recoverable, taking into account the impact of collateral called up or liable to be called up and the probability of a default event occurring through to the instrument's maturity.

Financial guarantees are taken into account in the estimation of the recoverable cash flows when they are integral part of the contractual characteristics of the related loans and they are not recognised separately.

If the financial guarantees don't meet these criteria and as a consequence their effects cannot be taken into account in the calculation of impairment, a separate asset is recorded in the balance sheet under Other Assets. The book value of this asset is representative of the expected credit losses, recorded in the balance sheet within the impairment of assets, for which the Group is almost certain to receive a compensation. Changes in the carrying amount of this asset are recorded in the income statement under Cost of risk.

Irrespective of the Stage in which the exposures are classified, cash flows are discounted using the initial effective interest rate of the financial asset. The amount of impairment is included in the net carrying amount of the credit impaired financial asset. Impairment allocations/reversals are recorded in the income statement under Cost of risk.

The expected credit losses on the financing commitments and financial collateral given are determined using a similar approach applied to the estimated amount of Group exposure in case of default (amount drawn from the financing commitment as at the default date, amount of collateral called up as at the default date). The credit loss amounts thus calculated at one year (Stage 1) or over the life of the commitments (Stages 2 and 3) are recognised as liabilities on the balance sheet under Provisions.

For operating leases and trade receivables, the Group uses the "simplified" approach, under which impairments are calculated as lifetime expected credit losses since their initial recognition, regardless of any subsequent changes in the counterparty's credit risk. The assessment of depreciation is mainly based on historical data on default rates and incurred losses in the event of default. Adjustments to take into account forward-looking information on economic conditions and macro-economic factors are determined by an expert.

RESTRUCTURED LOANS

Loans issued or acquired by the Group may be restructured due to financial difficulties. This takes the shape of a contractual modification of the initial terms of the loan (e.g. lower interest rates, rescheduled loan payments, partial debt forgiveness, or additional collateral). This adjustment of the contractual terms is strictly linked to the borrower's financial difficulties and/or insolvency (whether they have already become insolvent or are certain to do so if the loan is not restructured).

Where they still pass the SPPI test, restructured loans are still recognised in the balance sheet and their amortised cost before credit risk allowance is adjusted for a discount representing the restructuring loss. This discount is equal to the difference between the present value of the new contractual cash flows resulting from the restructuring of the loan and the amortised cost before credit risk allowance less any partial debt forgiveness; it is booked to Cost of risk in the income statement. As a result, the amount of interest income subsequently recognised into income is still computed using the initial effective interest rate of the loan and

based on the net carrying amount of the asset after impairment during at least the first year following the restructuring.

Post-restructuring, these financial assets are classified in Stage 3 (credit-impaired exposures) whether the present value of modified cash flows decreases by more than 1% compared with the carrying amount of financial instruments before the restructuring or there is a high probability that the counterparty cannot meet all its commitments involving a risk of loss for the Group. In these two cases, the restructuring of financial assets leads to default. Stage 3 classification is maintained for at least one year, or longer if the Group is uncertain that the borrowers will be able to meet their commitments. Once the loan is no longer classified in Stage 3 or the loans which the present value does not decrease more than 1%, the assessment of the significant increase of credit risk will be performed by comparing the characteristics of the instrument at the closing date and the characteristics at the initial recognition date of the loan before restructuring, applying the transfer rules to Stage 1 and 2 previously mentioned in this note with specific conditions during the probation period (during the first two-years following the restructuring, loans are retransferred into Stage 3 as of payments more than 30 days past due).

The criteria to return to Stage 1 for the restructured loans are similar to those of all the other exposures, after a probation period in Stage 3 of a minimum of one year.

Given the new contractual terms arising from the restructuring where they no longer pass the SPPI test, restructured loans are derecognised and replaced by new loans recognised according to the restructured terms and conditions. These new assets are recorded under Financial assets measured at fair value through profit or loss. The difference between the net present value of these restructured loans and the initial fair value of the new assets is recorded under Cost of Risk in the income statement.

Restructured loans do not include loans and receivables subject to commercial renegotiations that are loans to customers for which the Group has agreed to renegotiate the debt with the aim of maintaining or developing a commercial relationship, in accordance with the credit approval procedures in force and without relinquishing any principal or accrued interest. The accounting treatment of renegotiations is detailed in Note 3.5.

ASSESSMENT METHOD OF EXPECTED CREDIT LOSSES

The methodology for calculating impairments and provisions for expected credit losses in Stage 1 and Stage 2 was developed in the Basel framework used which was used as a basis for choosing the methods for assessing the calculation parameters (probability of default and loss rate for outstanding loans under the Basel advanced approaches – IRBA and IRBF – and provisioning rate for outstanding loans under the standardised approach).

The Group portfolios have been segmented to ensure homogeneous risk characteristics and better correlation with macroeconomic variables, both local and global. This segmentation makes it possible to address all the Group's specificities. It is consistent with or similar to the one defined in the Basel framework to ensure the uniqueness of the historical records of losses and defaults.

The variables used in the expected credit loss assessment models are presented in the Note 10.3, paragraph 3.1 – General framework of the internal approach.

Expected losses are assessed based on the above-mentioned parameters, supplemented with in-house analyses of each counterparty's credit quality, performed either individually or statistically.

CRISES: WAR IN UKRAINE, COVID-19 CRISIS AND ECONOMIC CONSEQUENCES

To take account of the uncertainties relating to the Covid-19 crisis, the Group updated as at 31 December 2022 the model and post-model adjustments set out since the beginning of the health crisis in line with 2021.

In 2022, the Group reviewed the parameters used in the models on the basis of the new macroeconomic scenarios (see Note 1) taking into account the specific conditions created by the war in Ukraine.

The impacts of the adjustments to models and post-models on the determination of expected credit losses are described hereinafter.

UPDATE OF THE MODELS AND PARAMETERS USED TO ESTIMATE THE EXPECTED CREDIT LOSSES

GDP adjustment

The containment measures taken by governments in the context of the Covid-19 crisis resulted in a sudden decline in economic activity reflected in high volatility in quarterly GDP growth rates (year-on-year) in the 2021 and 2022 forecasts in the countries where the Group operates.

Furthermore, the authorities adopted financial support measures for households and businesses to help them cope with the sudden deterioration in activity. Therefore, there will likely be a time-lag between the deterioration in the portfolios' credit quality and that of activity, the first being delayed with respect to the second.

In order to account for this time-lag, the Group revised its models in 2020, using for each quarter between 2020 and 2022 an average of the changes in GDP over the last eight quarters compared to a base of 100 in 2019. This adjustment has not been used to determine the GDP rates for 2023 to 2026.

As at 31 December 2022, the GDP rates used in the models have been determined as follows:

- for each quarter of 2022, the Group used in its models an average of the changes in GDP over the last eight quarters compared to a base of 100 in 2019. This adjustment has been applied to each of the three scenarios (SG Favourable, SG Central and SG Stress) for the GDP series used in the modelling of expected credit losses (see paragraph 6 in Note 1).
- The data displayed for 2022 in the table below correspond to the weighted average of the GDP growth rates of the three scenarios, adjusted as described above;
- the data displayed for the years 2023 to 2026 in the table below correspond to the weighted average of the GDP growth rates of the three scenarios.

	2022	2023	2024	2025	2026
Euro area	(1.4)	(1.2)	0	0.6	1.0
France	(1.8)	(0.9)	0.1	0.6	1.0
United States of America	0.9	(1.4)	(0.1)	1.4	1.8
China	3.0	3.1	3.6	3.7	4.2

Impacts on the estimation of expected credit losses

Thus, as at 31 December 2022, the adjustments made to the macroeconomic variables and to the probabilities of default have resulted in a decrease of EUR 10 million in the amount of impairments and provisions for credit risk (EUR 445 million for the 2021 financial year). The impact of these adjustments is due to:

- an EUR 1 million residual increase for the above-mentioned GDP adjustments that ended on 31 December 2022;
- a decrease of EUR 11 million reflecting the updated weightings of the macro-economic scenarios presented in Note 1 (removal of the "Extended" scenario).

In addition, owing to the degraded macroeconomic conditions and geopolitical backdrop linked to the war in Ukraine, all our Russian counterparts (EUR 2 billion) have been ranked "Sensitive" (notion of watch list) and the related exposures transferred to Stage 2. Other exposures were identified after supplementary analysis as requiring transfer to Stage 3 (EUR 0.6 billion). The impact of these transfers on the calculation of expected credit losses amounts to EUR 427 million as at 31 December 2022 (including the supplementary adjustment detailed in the "Other adjustments" paragraph).

Adjustments implemented to supplement the application of the models

Sectoral adjustments

The Group can supplement the models with two types of sectoral adjustments: the first relates to the possible revision of the expected credit loss estimates of some sectors (with no impact on the classification of loans); the second, implemented since 2020 in relation with Covid-19 crisis, supplements the analysis of the increase in credit risk and may lead to additional transfers to Stage 2.

Estimate of the expected credit losses

The different models used to estimate the expected credit losses may be supplemented with sectoral adjustments that increase or decrease the amount of expected credit losses. These adjustments improve the anticipation the cycle of defaults or recoveries in some cyclical sectors that have known peaks of default in the past or that are particularly vulnerable to the current crisis and whose Group exposure exceeds a threshold reviewed and fixed yearly by the Risk Division.

These sectoral adjustments are reviewed and updated on a quarterly basis by the Risk Division and approved by General Management according to the materiality threshold.

The main sectors concerned are the commercial real-estate sector, as well as leisure, oil and gas, cruise operators and airline sectors.



At the time when these adjustments are reviewed and where consistent with the provisioning horizon, a quantitative analysis of the possible impact of climate risks on the determination of the expected credit losses has been integrated.

The total sectoral adjustments thus amount to EUR 741 million as at 31 December 2022 (EUR 536 million as at 31 December 2021). These changes stem from the implementation of specific adjustments to take account of the impact of the commodities supply issues resulting from the war in Ukraine and the impact of a lasting stagflation on the most exposed sectors.

Additional criterion of transfer to Stage 2

Since 2020 and the onset of the Covid-19 crisis, to supplement the criteria for the transfer to underperforming loans classified as Stage 2, applied at an individual level, an additional expert analysis had been conducted on the outstanding portfolios existing at the end of this year and for which the increase in credit risk has been deemed significant since their granting. The subsequent productions are not affected by these provisions. As a result of this analysis, conducted half-yearly and in line with the governance set up during the Covid-19 crisis, additional transfers have been made to Stage 2 underperforming loans for all the outstanding loans of the sectors regarded by the Group as most affected by the Covid-19 crisis and granted prior to the crisis. As at 31 December 2022, the remaining affected sectors are Naval, aeronautical & railway construction, air and space transport, hotels, catering and leisure. For the loans outstanding concerned, in addition to these transfers to Stage 2, the provision has been estimated taking account of the sectoral adjustments (described above) that might have been applied.

These adjustments amount to EUR 17 million as at 31 December 2022 (EUR 19 million as at 31 December 2021). These movements have decreased over 2022 due to the expiry of some contracts concerned on these sectors classified as Stage 2.

Other adjustments

Adjustments based on expert opinion have also been made to reflect the heightened credit risk on some portfolios, when this heightened risk has not been detectable through a line-by-line analysis of the loans outstanding:

- for the scope of entities lacking developed models for estimating the correlations between the macroeconomic variables and the probability of default; and
- for the scopes on which models are developed and when these models cannot reflect future risk not observed in historical records.

These adjustments amount to EUR 796 million as at 31 December 2022 (EUR 399 million as at 31 December 2021).

This is mainly due to the account taken of:

- the specific risk on the portfolio of offshore loans to Russian corporate customers owing to the geopolitical situation
- risks resulting from the specific economic context, such as rising inflation and interest rates, on vulnerable customers and the more particularly exposed portfolios, and that are not taken into account by the models.

CONSIDERATION OF THE SUPPORT MEASURES IN THE ASSESSMENT OF THE SIGNIFICANT INCREASE IN CREDIT RISK

Despite the absence of material defaults, while most Covid-19 support measures have now come to an end, the Group maintains a conservative provisioning policy in an uncertain environment, in particular in France with the start of *PGE* repayments for customers having benefited from a two-year repayment exemption, and in all areas with the gradual spread of the economic shock triggered by the war in Ukraine and the context of rising interest rates and inflation.

1. OVERVIEW

The tables of this note do not lay out the IAS 39 impairment related to financial instruments of insurance subsidiaries. This impairment is presented in the Note 4.3.
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Since 2022, the measurement adopted is the accounting outstanding amounts (Balance Sheet and Off-Balance Sheet). For the sake of rationalisation, all the quantitative information related to credit risk is presented in this Note.

PRESENTATION OF BALANCE SHEET AND OFF-BALANCE SHEET OUTSTANDING AMOUNTS

In 2022, the Group has refined the identification of the credit-risk bearing financial assets presented in Note 4.4 and has consequently adopted a more granular presentation (Guarantee deposits paid, Other miscellaneous receivables bearing credit risk, Clearing houses bearing credit risk). This revision also made it possible to reduce the "Restatements: excluded items" line.

The opening limit as at 31 December 2021 has been restated with no impact on the amount of provisions and impairments for credit risk.

Table 3.8.A

<i>(In EUR m)</i>		31.12.2022	31.12.2021
Debt instruments at fair value through other comprehensive income	Note 3.3	37,199	43,180
Securities at amortised cost	Note 3.5	21,430	19,371
Due from banks at amortised cost	Note 3.5	66,903	55,972
Due from central banks ⁽¹⁾		204,553	177,510
Customer loans at amortised cost	Note 3.5	506,529	497,164
Guarantee deposits paid	Note 4.4	68,884	77,584
Others		3,895	3,756
<i>o/w other miscellaneous receivables bearing credit risk ⁽²⁾</i>	<i>Note 4.4</i>	<i>3,633</i>	<i>3,494</i>
<i>o/w due from clearing houses bearing credit risk</i>	<i>Note 4.4</i>	<i>262</i>	<i>262</i>
Net value of accounting outstanding amounts (balance sheet)		909,393	874,537
Impairment of loans at amortised cost	Note 3.8	11,031	11,357
Gross value of accounting outstanding amounts (balance sheet)		920,424	885,894
Retreatments: items excluded		(1,454)	(1,304)
<i>o/w insurance – Guarantee deposits paid</i>		<i>(1,454)</i>	<i>(1,304)</i>
Gross value of accounting amounts (balance sheet) after retreatments		918,970	884,590
Financing commitments		216,571	192,273
Guarantee commitments		94,727	79,095
Gross value of off balance-sheet accounting amounts		311,298	271,368
Total of accounting amounts (balance-sheet and off balance-sheet)		1,230,268	1,155,958

(1) Included in line Cash, due from central banks.

(2) This amount is presented net of impairment (EUR 295 million as at 31 December 2022 - see Note 4.4)

ASSET AT AMORTISED COST: OUTSTANDING AMOUNTS SUBJECT TO IMPAIRMENT AND PROVISIONS BY IMPAIRMENT STAGE AND BY ACCOUNTING CATEGORY

Table 3.8.B

	31.12.2022		31.12.2021	
	Outstanding amounts	Impairment /provisions	Outstanding amounts	Impairment /provisions
<i>(In EUR m)</i>				
Financial assets at fair value through other comprehensive income	37,199	8	43,180	8
Performing assets outstanding (Stage 1)	37,192	1	43,172	1
Underperforming assets outstanding (Stage 2)	1	1	1	1
Doubtful assets outstanding (Stage 3)	6	6	7	6
Financial assets at amortised cost ⁽¹⁾	881,771	11,031	841,410	11,357
Performing assets outstanding (Stage 1)	820,736	1,042	781,316	1,148
Underperforming assets outstanding (Stage 2)	44,689	2,134	43,254	1,674
Doubtful assets outstanding (Stage 3)	16,346	7,855	16,840	8,535
<i>o/w lease financing</i>	29,500	896	30,508	889
<i>Performing assets outstanding (Stage 1)</i>	<i>24,340</i>	<i>110</i>	<i>24,733</i>	<i>113</i>
<i>Underperforming assets outstanding (Stage 2)</i>	<i>3,536</i>	<i>169</i>	<i>4,294</i>	<i>184</i>
<i>Doubtful assets outstanding (Stage 3)</i>	<i>1,624</i>	<i>617</i>	<i>1,481</i>	<i>592</i>
Financing commitments	216,571	467	192,273	427
Performing assets outstanding (Stage 1)	204,724	166	184,412	165
Underperforming assets outstanding (Stage 2)	11,564	251	7,650	231
Doubtful assets outstanding (Stage 3)	283	50	211	31
Guarantee commitments	94,727	431	79,095	461
Performing assets outstanding (Stage 1)	90,332	57	74,398	52
Underperforming assets outstanding (Stage 2)	3,716	116	3,926	82
Doubtful assets outstanding (Stage 3)	679	258	771	327
Total of accounting amounts (balance-sheet and off balance-sheet)	1,230,268	11,937	1,155,958	12,253

(1) Including Central Banks for EUR 204,553 million as at 31 December 2022 (versus EUR 177,510 million as at 31 December 2021).

In order to disclose its exposure to credit risk, the Group has decided to tabulate its assets outstanding and impairment by stage of impairment of the financial assets at amortised cost by Basel category, by geographical area, and by rating of the counterparty. Due to the absence of significant exposure to credit risk at the closing date for assets measured at fair value through other comprehensive income as well as for financing and guarantee commitments, this information is not presented below.

ASSETS AT AMORTISED COST: OUTSTANDING AMOUNTS AND IMPAIRMENTS BY BASEL PORTFOLIO

Table 3.8.C

31.12.2022								
<i>(In EUR m)</i>	Assets at amortised cost				Impairment			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Sovereign	220,569	291	215	221,075	6	2	77	85
Institutions	161,666	592	53	162,311	8	2	24	34
Corporates	247,792	20,415	9,237	277,444	622	1,402	4,266	6,290
o/w SME	42,271	7,859	5,746	55,876	226	317	1,829	2,373
Retail	190,709	23,391	6,841	220,941	406	728	3,488	4,622
o/w VSB	23,972	4,746	2,343	31,061	95	271	1,306	1,672
Others	-	-	-	-	-	-	-	-
Total	820,736	44,689	16,346	881,771	1,042	2,134	7,855	11,031

Table 3.8.D

31.12.2021								
<i>(In EUR m)</i>	Assets at amortised cost				Impairment			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Sovereign	193,939	549	106	194,594	6	2	67	75
Institutions	131,811	541	12	132,364	10	4	12	26
Corporates	258,698	20,695	9,090	288,483	569	1,037	4,433	6,039
o/w SME	41,566	9,377	6,207	57,150	190	440	2,067	2,697
Retail	195,752	21,420	7,570	224,742	561	628	4,017	5,206
o/w VSB	23,897	4,635	2,271	30,803	124	219	1,363	1,706
Others	1,116	49	62	1,227	2	3	6	11
Total	781,316	43,254	16,840	841,410	1,148	1,674	8,535	11,357

The financial assets measured at fair value through other comprehensive income mainly correspond to cash management for own account and to the management of the portfolio of HQLA (High Quality Liquid Assets) securities included in the liquidity reserves. These assets mainly correspond to Sovereigns classified in Stage 1.

The financing and guarantee commitments mainly correspond to outstanding amounts not drawn by Corporate customers. These assets are mainly classified in Stage 1.

ASSETS AT AMORTISED COST: OUTSTANDING AMOUNTS AND IMPAIRMENTS BY GEOGRAPHICAL ZONE

The geographic area chosen corresponds to the country of the counterparty. When this information is unavailable, it is the country of the issuing entity that is used.

Table 3.8.E

	31.12.2022							
	Assets at amortised cost				Impairment			
(In EUR m)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
France	442,513	26,042	8,054	476,609	480	1,166	3,240	4,886
Western European countries (excl. France)	157,496	5,569	1,695	164,760	220	273	767	1,260
Eastern European countries EU	51,781	6,455	1,088	59,324	144	256	640	1,040
Eastern Europe excluding EU	2,945	2,032	524	5,501	2	149	121	272
North America	82,014	1,479	165	83,658	21	113	43	177
Latin America and Caribbean	5,757	472	319	6,548	5	11	88	104
Asia-Pacific	37,999	616	572	39,187	14	6	258	278
Africa and Middle East	40,231	2,024	3,929	46,184	156	160	2,698	3,014
Total	820,736	44,689	16,346	881,771	1,042	2,134	7,855	11,031

Over 80% of all financing and guarantee commitments have Western Europe, North America or France as their country of counterparty.

Table 3.8.F

	31.12.2021							
	Assets at amortised cost				Impairment			
(In EUR m)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
France	401,258	27,315	8,082	436,655	461	961	3,585	5,007
Western European countries (excl. France)	152,010	5,065	2,482	159,557	202	212	944	1,358
Eastern European countries EU	49,483	4,364	1,104	54,951	132	230	646	1,008
Eastern Europe excluding EU	19,748	1,486	362	21,596	148	21	297	466
North America	79,582	1,463	161	81,206	22	78	49	149
Latin America and Caribbean	7,573	561	195	8,329	6	13	73	92
Asia-Pacific	34,960	724	621	36,305	17	12	351	380
Africa and Middle East	36,702	2,276	3,833	42,811	160	147	2,590	2,897
Total	781,316	43,254	16,840	841,410	1,148	1,674	8,535	11,357

ASSET AT AMORTISED COST: OUTSTANDING AMOUNTS SUBJECT TO IMPAIRMENT AND PROVISIONS BY RATING OF COUNTERPARTY

Classification in Stage 1 or Stage 2 does not depend on the absolute probability of default but on the elements that make it possible to assess the significant increase in credit risk (see accounting principles), including the relative change in the probability of default since initial recognition. Therefore, there is no direct relationship between the counterparty rating, presented in the table below, and the classification by stage of impairment.

Table 3.8.G

31.12.2022								
(In EUR m)	Assets at amortised cost				Impairment			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
1	59,826	874	-	60,700	1	3	-	4
2	186,818	889	-	187,707	4	5	-	9
3	50,465	622	-	51,087	8	5	-	13
4	85,773	1,431	-	87,204	69	15	-	84
5	84,343	4,322	-	88,665	246	146	-	392
6	22,694	10,044	-	32,738	186	532	-	718
7	2,832	7,082	-	9,914	21	445	-	466
Default (8, 9, 10)	-	-	9,378	9,378	-	-	4,071	4,071
Other method	327,985	19,425	6,968	354,378	507	983	3,784	5,274
Total	820,736	44,689	16,346	881,771	1,042	2,134	7,855	11,031

Table 3.8.H

31.12.2021								
(In EUR m)	Outstanding amounts				Impairment			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
1	56,273	54	-	56,327	1	-	-	1
2	160,207	156	-	160,363	3	1	-	4
3	40,391	175	-	40,566	8	3	-	11
4	79,668	980	-	80,648	65	8	-	73
5	80,740	4,271	-	85,011	256	86	-	342
6	22,442	9,998	-	32,440	184	446	-	630
7	3,158	7,346	-	10,504	26	474	-	500
Default (8, 9, 10)	-	-	9,311	9,311	-	-	4,485	4,485
Other method	338,437	20,274	7,529	366,240	605	656	4,050	5,311
Total	781,316	43,254	16,840	841,410	1,148	1,674	8,535	11,357

2. IMPAIRMENT OF FINANCIAL ASSETS

BREAKDOWN

Table 3.8.I

<i>(In EUR m)</i>	Amount as at 31.12.2021	Allocations	Write- backs available	Net impairment losses	Write- backs used	Currency and scope effects	Amount as at 31.12.2022
Financial assets at fair value through other comprehensive income							
Impairment on performing outstanding (Stage 1)	1	1	(1)	-		-	1
Impairment on underperforming outstanding (Stage 2)	1	-	-	-		-	1
Impairment on doubtful outstanding (Stage 3)	6	1	-	1	-	(1)	6
Total	8	2	(1)	1	-	(1)	8
Financial assets measured at amortised cost	-	-	-	-	-	-	-
Impairment on performing assets outstanding (Stage 1)	1,148	770	(724)	46		(152)	1,042
Impairment on underperforming assets outstanding (Stage 2)	1,674	1,717	(1,163)	554		(94)	2,134
Impairment on doubtful assets outstanding (Stage 3)	8,535	3,827	(2,963)	864	(1,282)	(262)	7,855
Total	11,357	6,314	(4,850)	1,464	(1,282)	(508)	11,031
<i>o/w lease financing and similar agreements</i>	889	378	(295)	83	(59)	(17)	896
<i>Impairment on performing assets outstanding (Stage 1)</i>	113	50	(51)	(1)		(2)	110
<i>Impairment on underperforming assets outstanding (Stage 2)</i>	184	92	(96)	(4)		(11)	169
<i>Impairment on doubtful assets outstanding (Stage 3)</i>	592	236	(148)	88	(59)	(4)	617

VARIATIONS OF PROVISIONS ACCORDING TO CHANGES IN THE AMOUNT OF FINANCING AND GUARANTEE COMMITMENTS

Due to lack of significant variations of depreciations on financial assets measured at fair value through other comprehensive income, this information is not presented in the table below.

Table 3.8.J

<i>(In EUR m)</i>	Stage 1	<i>Of which lease financing receivables</i>	Stage 2	<i>Of which lease financing receivables</i>	Stage 3	<i>Of which lease financing receivables</i>	Total
Amount as at 31.12.2021	1,148	113	1,674	184	8,535	592	11,357
Production & Acquisition ⁽¹⁾	394	40	153	14	128	9	675
Derecognition ⁽²⁾	(163)	(7)	(216)	(9)	(1,725)	(79)	(2,104)
Transfer from stage 1 to stage 2 ⁽³⁾	(55)	(6)	613	36	-	-	558
Transfer from stage 2 to stage 1 ⁽³⁾	19	3	(202)	(26)	-	-	(183)
Transfer to stage 3 ⁽³⁾	(9)	(1)	(136)	(16)	941	90	796
Transfer from stage 3 ⁽³⁾	1	-	88	2	(167)	(10)	(78)
Allocations & Write-backs without stage transfer ⁽³⁾	(154)	(30)	172	(17)	382	28	400
Currency effect	15	-	8	-	20	(5)	43
Scope effect	(155)	(2)	(18)	(1)	(262)	(8)	(435)
Other variations	1	-	(2)	2	3	-	2
Amount as at 31.12.2022	1,042	110	2,134	169	7,855	617	11,031

(1) The amounts of impairment presented in the line Production and Acquisition in Stage 2/Stage 3 could include contracts originated in Stage 1 and reclassified in Stage 2/Stage 3 during the period.

(2) Including repayments, disposals and debt waivers.

(3) The amounts presented in the transfers include variations due to amortisation. Transfers to Stage 3 correspond to outstanding amounts initially classified as Stage 1 which, during the period, were downgraded directly to Stage 3, or to Stage 2 and later to Stage 3.

BREAKDOWN OF TRANSFERS BETWEEN STAGES FOR FINANCIAL ASSETS AT AMORTISED COST AS AT 31 DECEMBER 2022

The amounts presented in the transfers below include variations due to amortisation and new drawdowns on the contracts active during the financial year.

To describe the transfers between steps:

- The starting stage corresponds to the stage of the outstanding balance as on 31 December of the previous year.
- The end stage corresponds to the stage of the outstanding balance at the end of the financial year (even in the event of several changes during the financial year).

Table 3.8.K

<i>(In EUR m)</i>	Stage 1		Stage 2		Stage 3		Stock of outstanding amounts transferred as of December 31	Stock of impairment associated with transferred outstanding amounts
	Outstanding amounts	Impairment	Outstanding amounts	Impairment	Outstanding amounts	Impairment		
Transfer from Stage 1 to Stage 2	(19,221)	(55)	15,060	613	-	-	15,060	613
Transfer from Stage 2 to Stage 1	8,244	19	(10,548)	(202)	-	-	8,244	19
Transfer from Stage 3 to Stage 1	265	1	-	-	(360)	(36)	265	1
Transfer from Stage 3 to Stage 2	-	-	904	88	(1,019)	(131)	904	88
Transfer from Stage 1 to Stage 3	(2,356)	(9)	-	-	2,438	570	2,438	570
Transfer from Stage 2 to Stage 3	-	-	(2,083)	(136)	1,892	371	1,892	371
Currency effect on contracts that change Stage	212	-	65	-	1	-	278	-

3. CREDIT RISK PROVISIONS

BREAKDOWN

Table 3.8.L

<i>(In EUR m)</i>	Amount as at 31.12.2021	Allocations	Write- backs available	Net impairment losses	Currency and scope effects	Amount as at 31.12.2022
Financing commitments						
Provisions on performing assets outstanding (Stage 1)	165	146	(147)	(1)	2	166
Provisions on underperforming assets outstanding (Stage 2)	231	173	(150)	23	(3)	251
Provisions on doubtful assets outstanding (Stage 3)	31	73	(85)	(12)	31	50
Total	427	392	(382)	10	30	467
Guarantee commitments						
Provisions on performing assets outstanding (Stage 1)	52	54	(49)	5	-	57
Provisions on underperforming assets outstanding (Stage 2)	82	78	(41)	37	(3)	116
Provisions on doubtful assets outstanding (Stage 3)	327	159	(188)	(29)	(40)	258
Total	461	291	(278)	13	(43)	431

VARIATIONS OF PROVISIONS ACCORDING TO CHANGES IN THE AMOUNT OF FINANCING AND GUARANTEE COMMITMENTS

Table 3.8.M

	Provisions								Total
	On financing commitments				On guarantee commitments				
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	
<i>(In EUR m)</i>									
Amount as at 31.12.2021	165	231	31	427	52	82	327	461	888
Production & Acquisition ⁽¹⁾	69	17	11	97	19	10	21	50	147
Derecognition ⁽²⁾	(48)	(48)	(14)	(110)	(10)	(11)	(75)	(96)	(206)
Transfer from stage 1 to stage 2 ⁽³⁾	(16)	80	-	64	(5)	23	-	18	82
Transfer from stage 2 to stage 1 ⁽³⁾	3	(23)	-	(20)	1	(9)	-	(8)	(28)
Transfer to stage 3 ⁽³⁾	-	(5)	21	16	-	(2)	31	29	45
Transfer from stage 3 ⁽³⁾	-	1	(2)	(1)	-	1	(11)	(10)	(11)
Allocations & Write-backs without stage transfer ⁽³⁾	(9)	(5)	3	(11)	(2)	26	(35)	(11)	(22)
Currency effect	2	3	-	5	-	1	6	7	12
Scope effect	-	-	-	-	(1)	(2)	(7)	(10)	(10)
Other variations	-	-	-	-	3	(3)	1	1	1
Amount as at 31.12.2022	166	251	50	467	57	116	258	431	898

(1) The amounts of impairment presented in the Production and Acquisition line in Stage 2/Stage 3 may include originated contracts in Stage 1 reclassified in Stage 2/Stage 3 during the period.

(2) Including repayments, disposals and debt waivers.

(3) The amounts presented in transfers include variations due to amortisation. Transfers to Stage 3 correspond to outstanding amounts initially classified as Stage 1 which, during the period, were downgraded directly to Stage 3, or to Stage 2 and later to Stage 3.

BREAKDOWN OF TRANSFERS BETWEEN STAGES FOR OFF-BALANCE SHEET COMMITMENTS AS AT 31 DECEMBER 2022

The amounts presented in the transfers hereinafter include the variations due to amortisation and new drawdowns on the contracts active during the financial year.

To describe the transfers between steps:

- The starting stage corresponds to the stage of the outstanding balance as on 31 December of the previous year.
- The end stage corresponds to the stage of the outstanding balance at the end of the financial year (even in the event of several changes during the financial year).

Table 3.8.N

<i>(In EUR m)</i>	Financing commitments						Total of transferred outstanding amounts subject to impairment	Total impact of transfers on provisions
	Stage 1		Stage 2		Stage 3			
	Outstanding amounts subject to impairment and provisions	Provisions	Outstanding amounts subject to impairment and provisions	Provisions	Outstanding amounts subject to impairment and provisions	Provisions		
Transfer from Stage 1 to Stage 2	(2,707)	(16)	2,216	80	-	-	2,216	80
Transfer from Stage 2 to Stage 1	839	3	(1,464)	(23)	-	-	839	3
Transfer from Stage 3 to Stage 1	9	-	-	-	(14)	(1)	9	-
Transfer from Stage 3 to Stage 2	-	-	27	1	(21)	(1)	27	1
Transfer from Stage 1 to Stage 3	(94)	-	-	-	73	4	73	4
Transfer from Stage 2 to Stage 3	-	-	(113)	(5)	67	17	67	17
Currency effect on contracts that change Stage	44	-	39	-	-	-	83	-

Table 3.8.O

<i>(In EUR m)</i>	Guarantee commitments						Total of transferred outstanding amounts subject to impairment	Total impact of transfers on provisions
	Stage 1		Stage 2		Stage 3			
	Outstanding amounts subject to impairment and provisions	Provisions	Outstanding amounts subject to impairment and provisions	Provisions	Outstanding amounts subject to impairment and provisions	Provisions		
Transfer from Stage 1 to Stage 2	(1,632)	(5)	1,287	23	-	-	1,287	23
Transfer from Stage 2 to Stage 1	428	1	(602)	(9)	-	-	428	1
Transfer from Stage 3 to Stage 1	7	-	-	-	(8)	(1)	7	-
Transfer from Stage 3 to Stage 2	-	-	57	1	(50)	(10)	57	1
Transfer from Stage 1 to Stage 3	(107)	-	-	-	76	14	76	14
Transfer from Stage 2 to Stage 3	-	-	(116)	(2)	106	17	106	17
Currency effect on contracts that change Stage	23	-	6	-	1	-	30	-

4. QUALITATIVE INFORMATION OF CHANGES IN IMPAIRMENT/PROVISIONS ON CREDIT RISK

The variations in credit risk impairment and provisions since 31 December 2021 are mainly linked to:

- The transfer to covered losses of Stage 3 loans for EUR 1.3 billion included in the Derecognition item. This is in line with the Group strategy regarding the monitoring of non-performing loans (NPL), through write-offs and sales of its portfolios of defaulted exposures.

Uncovered losses amount to EUR 318 million.

- The transfer of EUR 4.7 billion of outstanding loans to Stage 3 as a result of the defaults observed. This transfer resulted in an increase in impairment and provisions of EUR 841 million mainly including:

- 13 % on the offshore portfolios of Russian customers;
- 87 % on the other portfolios.

Particularly, this variation concerns:

- EUR 2.6 billion of outstanding amounts for which the impairment and provisions amount to EUR 586 million as at 31 December 2022. These contracts were in Stage 1 as at 31 December 2021;
- EUR 2.1 billion of outstanding amounts for which the impairment and provisions amount to EUR 404 million as at 31 December 2022. These contracts were in Stage 2 as at 31 December 2021.
- The transfer of loans to Stage 2 due to downgraded ratings, transfer to “sensitive” or 30 days overdue for EUR 18.6 billion. This transfer was linked in particular to the economic environment affected by geopolitical tensions linked to the war in Ukraine and high economic uncertainties. It resulted in a EUR 639 million increase in impairment and provisions including:
 - 24 % on the offshore portfolios of Russian customers;
 - 76 % on the other portfolios.
- The sale of Rosbank and the insurance subsidiaries in Russia (see Note 2.1) resulted, excluding currency effect (EUR 48 million in the Currency effect item), a EUR 445 million decrease in impairment and provisions, included in the Scope item.

5. COST OF RISK

ACCOUNTING PRINCIPLES

Cost of risk only includes net reversals of impairments and loss allowances for credit risk, losses on irrecoverable loans and amounts recovered on amortised receivables.

The Group proceed to a write off by recognising a loss on the bad loan and a reversal of impairment in Cost of risk when a debt is forgiven or when there are no longer any hopes of future recovery. The lack of future hopes of recovery is documented when a certificate issued as proof that the debt is uncollectible is delivered by the relevant authority or when strong circumstantial evidences are identified (years in default, provisions at 100%, lack of recent recoveries, specificities of the case).

However, a write-off in accounting terms does not imply debt forgiveness in the legal sense as recovery actions on cash due by the counterparty are pursued particularly if the latter's fortune improve. In case of recoveries on an exposure previously written-off, such recoveries are recognised as Amounts recovered on irrecoverables loans on the year of collection.

Table 3.8.P

<i>(In EUR m)</i>	2022	2021
Net allocation to impairment losses	(1,465)	(633)
<i>On financial assets at fair value through other comprehensive income</i>	(1)	1
<i>On financial assets at amortised cost</i>	(1,464)	(634)
Net allocations to provisions	(23)	9
<i>On financing commitments</i>	(10)	44
<i>On guarantee commitments</i>	(13)	(35)
Losses not covered on irrecoverable loans	(318)	(193)
Amounts recovered on irrecoverable loans	132	137
Effect from guarantee not taken into account for the calculation of impairment	27	(20)
Total	(1,647)	(700)
<i>o/w cost of risk on sound outstanding classified in Stage 1</i>	(59)	(100)
<i>o/w cost of risk on doubtful loans classified in Stage 2</i>	(618)	350
<i>o/w cost of risk on doubtful loans classified in Stage 3</i>	(970)	(950)

NOTE 3.9 - COMMITMENTS AND ASSETS PLEDGED AND RECEIVED AS SECURITIES

ACCOUNTING PRINCIPLES

LOAN COMMITMENTS

The nominal amount of loan commitments is detailed in the table below. Loan commitments that are not considered as financial derivatives or that are not measured at fair value through profit or loss for trading purpose are initially recognised at fair value in the balance sheet. Thereafter, they are provisioned as necessary in accordance with the accounting principles for impairment and provisions (see Note 3.8).

GUARANTEE COMMITMENTS

The nominal amount of guarantee commitments is detailed in the table hereafter. When considered as non-derivative financial instruments, the financial guarantees issued by the Group are initially recognised in the balance sheet at fair value. Thereafter, they are measured at either the amount of the obligation or the amount initially recognised (whichever is higher) less, when appropriate, the cumulative amortisation of a guarantee commission. Where there is objective evidence of impairment, a provision for financial guarantees given is recognised on the liabilities side of the balance sheet (see Note 3.8).

SECURITIES COMMITMENTS

Securities bought and sold, which are booked to Financial assets at fair value through profit or loss, Financial assets at fair value through other comprehensive income and Financial assets at amortised cost are recognised on the balance sheet at the settlement-delivery date. Between the trade date and the settlement-delivery date, securities receivable or deliverable are not recognised on the balance sheet. Changes in the fair value of the securities measured at fair value through profit or loss and the securities measured at fair value through other comprehensive income between the trade date and the settlement-delivery date are booked to profit or loss or to equity, depending on the accounting classification of the securities in question.

ASSETS PLEDGED AS AND RECEIVED AS COLLATERAL

The financial assets pledged as collateral are carried in the balance sheet whenever the Group has not transferred to the recipients of collateral the contractual rights to receive asset cash flows or substantially all the risks inherent to their ownership.

Likewise, the Group does not recognise on its balance sheet the assets received as collateral if the contractual rights to receive these asset cash flows and substantially all the risks and rewards inherent to their ownership have not been transferred to it.

1. COMMITMENTS

COMMITMENTS GRANTED

Table 3.9.A

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Loan commitments		
To banks	84,882	60,870
To customers	228,036	200,224
<i>Issuance facilities</i>	83	83
<i>Confirmed credit lines</i>	202,401	185,065
<i>Others</i>	25,552	15,076
Guarantee commitments		
On behalf of banks	6,598	5,279
On behalf of customers ⁽¹⁾	88,779	74,433
Securities commitments		
Securities to be delivered	38,200	32,999
Acquisition of tangible assets commitments		
Purchase of vehicles and underlying assets subject to an operating lease	6,344	4,682

(1) Including capital and performance guarantees given to the holders of UCITS managed by entities of the Group.

COMMITMENTS RECEIVED

Table 3.9.B

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Loan commitments		
From banks	86,440	69,878
Guarantee commitments		
From banks	127,233	121,852
Other commitments ⁽¹⁾	178,486	161,679
Securities commitments		
Securities to be received	38,452	35,391

(1) These commitments include the guarantee granted by French government related to the State Guaranteed Loans (see Note 1.6).

2. FINANCIAL ASSETS PLEDGED AND RECEIVED AS SECURITY

FINANCIAL ASSETS PLEDGED

Table 3.9.C

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Book value of assets pledged as security for liabilities ⁽¹⁾	357,694	331,262
Book value of assets pledged as security for transactions in financial instruments ⁽²⁾	85,671	85,822
Book value of assets pledged as security for off-balance sheet commitments	3,709	2,715
Total	447,074	419,799

(1) Assets pledged as security for liabilities mainly include loans given as guarantees for liabilities (guarantees notably provided to the central banks).

(2) Assets pledged as security for transactions in financial instruments mainly include security deposit.

FINANCIAL ASSETS RECEIVED AS SECURITY AND AVAILABLE FOR THE ENTITY

Table 3.9.D

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Fair value of securities purchased under resale agreements	150,615	100,327

The Group generally purchases securities under resale agreements under normal market terms and conditions. It may re-use the securities received under resale agreement by selling them outright, selling them under repurchase agreements or pledging them as security, provided that it returns these or equivalent securities to the counterparty to the resale agreement at its term. Securities purchased under resale agreements are not recognised on the balance sheet. Their fair value, as shown above, includes securities sold or pledged as collateral.

NOTE 3.10 - TRANSFERRED FINANCIAL ASSETS

ACCOUNTING PRINCIPLES

Transferred financial assets that are not derecognised include securities lending transactions and repurchase agreements as well as certain loans transferred to consolidated securitisation vehicles.

The tables below show securities lending and repurchase agreements that only concern securities recognised on the asset side of the balance sheet.

Securities involved in a repurchase agreement or securities lending transaction are held in their original position on the asset side of the Group's balance sheet. For repurchase agreements, the obligation to return the amounts deposited is recorded under Liabilities on the liabilities side of the balance sheet, with the exception of the transactions initiated under trading activities, which are recorded under Financial liabilities at fair value through profit or loss.

Securities involved in a reverse repurchase agreement or a securities borrowing transaction are not recorded in the Group's balance sheet. For securities received under a reverse repurchase agreement, the right to recover the amounts delivered by the Group is recorded under Customer Loans and receivables or Due from banks on the asset side of the balance sheet, with the exception of transactions initiated under trading activities which are recorded under Financial assets at fair value through profit or loss. If the borrowed securities are subsequently sold, a debt representing the return of these securities to their lender is recorded on the liabilities side of the Group's balance sheet, under Financial liabilities at fair value through profit or loss.

Securities lending and securities borrowing transactions that are fully matched by cash are assimilated to repurchase and reverse repurchase agreements and are recorded and recognised as such in the balance sheet.

With securities lending and repurchase agreements, the Group remains exposed to issuer default (credit risk) and to increases or decreases in the value of securities value (market risk). The underlying securities cannot simultaneously be used as collateral in other transactions.

1. TRANSFERRED FINANCIAL ASSETS NOT DERECOGNISED

REPURCHASE AGREEMENTS

Table 3.10.A

	31.12.2022		31.12.2021	
	Carrying amount of transferred assets	Carrying amount of associated liabilities	Carrying amount of transferred assets	Carrying amount of associated liabilities
<i>(In EUR m)</i>				
Securities at fair value through profit or loss	14,992	11,876	18,705	15,304
Securities at fair value through other comprehensive income	11,355	9,090	11,251	9,062
Securities at amortised cost	249	239	-	-
Total	26,596	21,205	29,956	24,366

SECURITIES LENDING

Table 3.10.B

	31.12.2022		31.12.2021	
	Carrying amount of transferred assets	Carrying amount of associated liabilities	Carrying amount of transferred assets	Carrying amount of associated liabilities
<i>(In EUR m)</i>				
Securities at fair value through profit or loss	12,455	-	14,373	-
Securities at fair value through other comprehensive income	249	-	241	-
Securities at amortised cost	8	-	8	-
Total	12,712	-	14,622	-

SECURITISATION ASSETS FOR WHICH THE COUNTERPARTIES TO THE ASSOCIATED LIABILITIES HAVE RECOURSE ONLY TO THE TRANSFERRED ASSETS

Table 3.10.C

	31.12.2022	31.12.2021
<i>(In EUR m)</i>		
Customers loans		
Carrying amount of transferred assets	4,613	5,461
Carrying amount of associated liabilities	4,188	4,977
Fair value of transferred assets (A)	4,750	5,628
Fair value of associated liabilities (B)	4,188	4,991
Net position (A)-(B)	562	637

The Group remains exposed to the majority of the risks and rewards associated with these receivables; furthermore, these receivables may not be used as collateral or sold outright as part of another transaction.

2. TRANSFERRED FINANCIAL ASSETS PARTIALLY OR FULLY DERECOGNISED

As at 31 December 2022, the Group carried out no material transactions resulting in the partial or full derecognition of financial assets leaving the Group with a continuing involvement in said assets.

NOTE 3.11 - OFFSETTING FINANCIAL ASSETS AND FINANCIAL LIABILITIES

ACCOUNTING PRINCIPLES

A financial asset and a financial liability are offset and the net amount presented on the balance sheet when the Group has a legally enforceable right to set off the recognised amounts and intends either to settle the asset and liability on a net basis, or to realise the asset and settle the liability simultaneously. The legal right to set off the recognised amounts must be enforceable in all circumstances, in both the normal course of business and in the event of default of one of the counterparties. In this respect, the Group recognises in its balance sheet the net amount of derivative financial instruments traded with certain clearing houses where they achieve net settlement through a daily cash margining process, or where their gross settlement system has features that eliminate or result in insignificant credit and liquidity risk, and that process receivables and payables in a single settlement process or cycle.

The following tables present the amounts of financial assets and financial liabilities set off on the Group's consolidated balance sheet. The gross outstanding amounts of these financial assets and financial liabilities are matched with the consolidated outstanding amounts presented in the balance sheet (net balance sheet amounts), after indicating the amounts set off on the balance sheet for these various instruments (amounts offset) and aggregating them with the outstanding amounts of other financial assets and financial liabilities not subject to a Master Netting Agreement or similar agreement (amounts of assets and liabilities not eligible for offsetting).

These tables also indicate the amounts which may be offset, as they are subject to a Master Netting Agreement or similar agreement, but whose characteristics make them ineligible for offsetting in the consolidated financial statements under IFRS. This information is provided in comparison with the accounting treatment applied under US GAAP. This affects in particular financial instruments that may only be offset in the event of the default, insolvency or bankruptcy of one of the counterparties, as well as instruments pledged by cash or securities collateral. These mainly include over-the-counter interest rate options, interest rate swaps and securities purchased/sold under resale/repurchase agreements.

Net positions resulting from these various offsettings are not intended to represent the Group's actual exposure to counterparty risk through these financial instruments, insofar as counterparty risk management uses other risk mitigation strategies in addition to netting and collateral agreements.

1. AT 31 DECEMBER 2022

ASSETS

Table 3.11.A

	Impact of offsetting on the balance sheet			Impact of Master Netting Agreements (MNA) and similar agreements ⁽¹⁾				
	Amount of assets not subject to offsetting	Gross amount	Amount offset	Net amount presented on the balance sheet	Financial instruments recognised in the balance sheet	Cash collateral received	Financial instruments received as collateral	Net amount
<i>(In EUR m)</i>								
Derivative financial instruments (see Notes 3.1 and 3.2)	11,397	192,172	(94,785)	108,784	(70,657)	(9,292)	-	28,835
Securities lent	3,951	8,809	-	12,760	(6,996)	(39)	-	5,725
Securities purchased under resale agreements (see Notes 3.1 and 3.5)	50,098	200,497	(99,980)	150,615	(7,927)	(1,634)	(61,768)	79,286
Guarantee deposits pledged (see Note 4.4)	54,730	14,154	-	68,884	-	(14,154)	-	54,730
Other assets not subject to offsetting	1,145,775	-	-	1,145,775	-	-	-	1,145,775
Total	1,265,951	415,632	(194,765)	1,486,818	(85,580)	(25,119)	(61,768)	1,314,351

LIABILITIES

Table 3.11.B

	Impact of offsetting on the balance sheet			Impact of Master Netting Agreements (MNA) and similar agreements ⁽¹⁾				
	Amount of liabilities not subject to offsetting	Gross amount	Amount offset	Net amount presented on the balance sheet	Financial instruments recognised in the balance sheet	Cash collateral pledged	Financial instruments pledged as collateral	Net amount
<i>(In EUR m)</i>								
Derivative financial instruments (see Notes 3.1 and 3.2)	14,778	198,239	(94,785)	118,232	(70,657)	(14,154)	-	33,421
Amount payable on borrowed securities (see Note 3.1)	32,235	18,866	-	51,101	(6,996)	-	-	44,105
Securities sold under repurchase agreements (see Notes 3.1 and 3.6)	43,652	170,222	(99,980)	113,894	(7,927)	-	(51,400)	54,567
Guarantee deposits received (see Note 4.4)	63,341	10,965	-	74,306	-	(10,965)	-	63,341
Other liabilities not subject to offsetting	1,056,503	-	-	1,056,503	-	-	-	1,056,503
Total	1,210,509	398,292	(194,765)	1,414,036	(85,580)	(25,119)	(51,400)	1,251,937

(1) Fair value of financial instruments and collateral, capped at the net book value of the balance sheet exposure, so as to avoid any over-collateralisation effect.

2. AT 31 DECEMBER 2021

ASSETS

Table 3.11.C

	Impact of offsetting on the balance sheet			Impact of Master Netting Agreements (MNA) and similar agreements ⁽¹⁾				
	Amount of assets not subject to offsetting	Gross amount	Amount offset	Net amount presented on the balance sheet	Financial instruments recognised in the balance sheet	Cash collateral received	Financial instruments received as collateral	Net amount
<i>(In EUR m)</i>								
Derivative financial instruments (see Notes 3.1 and 3.2)	17,748	176,550	(80,704)	113,594	(70,403)	(13,415)	(129)	29,647
Securities lent	7,210	7,413	-	14,623	(6,266)	-	-	8,357
Securities purchased under resale agreements (see Notes 3.1 and 3.5)	27,841	168,315	(95,828)	100,328	(9,925)	(511)	(38,360)	51,532
Guarantee deposits pledged (see Note 4.4)	63,074	14,510	-	77,584	-	(14,510)	-	63,074
Other assets not subject to offsetting	1,158,320	-	-	1,158,320	-	-	-	1,158,320
Total	1,274,193	366,788	(176,532)	1,464,449	(86,594)	(28,436)	(38,489)	1,310,930

LIABILITIES

Table 3.11.D

	Impact of offsetting on the balance sheet			Impact of Master Netting Agreements (MNA) and similar agreements ⁽¹⁾				
	Amount of assets not subject to offsetting	Gross amount	Amount offset	Net amount presented on the balance sheet	Financial instruments recognised in the balance sheet	Cash collateral pledged	Financial instruments pledged as collateral	Net amount
<i>(In EUR m)</i>								
Derivative financial instrument (see Notes 3.1 and 3.2)	22,503	175,233	(80,704)	117,032	(70,404)	(14,510)	-	32,118
Amount payable on borrowed securities (see Note 3.1)	28,647	17,174	-	45,821	(6,266)	-	-	39,555
Securities sold under repurchase agreements (see Notes 3.1 and 3.6)	27,794	162,950	(95,828)	94,916	(9,925)	-	(35,158)	49,833
Guarantee deposits received (see Note 4.4)	58,742	13,926	-	72,668	-	(13,926)	-	58,742
Other liabilities not subject to offsetting	1,063,149	-	-	1,063,149	-	-	-	1,063,149
Total	1,200,835	369,283	(176,532)	1,393,586	(86,595)	(28,436)	(35,158)	1,243,397

(1) Fair value of financial instruments and collateral, capped at the net book value of the balance sheet exposure, so as to avoid any over-collateralisation effect.

NOTE 3.12 - CONTRACTUAL MATURITIES OF FINANCIAL LIABILITIES

Table 3.12.A

<i>(In EUR m)</i>	Up to 3 months	3 months to 1 year	1 to 5 Years	More than 5 years	31.12.2022
Due to central banks	8,361	-	-	-	8,361
Financial liabilities at fair value through profit or loss	197,843	29,651	39,005	34,119	300,618
Due to banks	49,803	39,639	42,213	1,333	132,988
Customer deposits	475,608	27,233	23,101	4,822	530,764
Debt securities issued	34,158	24,030	46,583	28,405	133,176
Subordinated debts	3	-	6,062	9,881	15,946
Other liabilities	100,859	1,969	2,864	1,861	107,553
Total liabilities	866,635	122,522	159,828	80,421	1,229,406
Loan commitments granted and others ⁽¹⁾	139,147	44,876	110,979	24,260	319,262
Guarantee commitments granted	44,414	23,233	14,540	13,190	95,377
Total commitments granted	183,561	68,109	125,519	37,450	414,639

(1) This line includes commitments relating to the purchase of vehicles and underlying equipment subject to an operating lease.

The flows presented in this note are based on contractual maturities. However, for certain elements of the balance sheet, assumptions could be applied.

When there are no contractual terms, as well as for trading financial instruments (e.g.: derivatives), maturities are presented in the first column (up to 3 months).

The guarantee commitments given are scheduled on the basis of the best possible estimate of disposal; if not available, they are presented in the first column (up to 3 months).

NOTE 4 - OTHER ACTIVITIES

NOTE 4.1 - FEE INCOME AND EXPENSE

ACCOUNTING PRINCIPLES

Fee income and Fee expense combine fees on services rendered and received, as well as fees on commitments, that cannot be assimilated to interest. Fees that can be assimilated to interest are integrated into the effective interest rate on the associated financial instrument and are recorded under Interest and similar income and Interest and similar expense (see Note 3.7).

Transactions with customers include the fees from retail customers from the Group retail banking activities (in particular credit card fees, account management fees or application fees outside the effective interest rate).

Sundry services provided include the fees from customers from the other Group activities (in particular, interchange fees, funds management fees or fees on insurance products sold within the network).

The Group recognises fee income or expense for an amount equivalent to the remuneration for the service provided and depending on the progress transferring control of these services:

- fees for ongoing services, such as some payment services, custody fees, or digital service subscriptions are recognised as income over the life of the service;
- fees for one-off services, such as fund activity, finder's fees received, arbitrage fees, or penalties on payment incidents are recognised as income when the service is provided.

The amount equivalent to the remuneration for the service provided is composed of fixed and variable contractual compensation, less any payments due to customers (for example, in case of promotional offers). The variable compensation (for example, discounts based on the provided services volume over a period of time or fees payable subject to the achievement of a performance target, etc.) are included in the amount equivalent to the remuneration for the service provided if and only if this compensation is highly probable not to be subsequently reduced significantly.

The possible mismatch between the payment date of the service provided and the date of execution of the service gives assets and liabilities depending on the type of contract and mismatch which are recognised under Other Assets and Other Liabilities (see Note 4.4):

- customer contracts generate trade receivables, accrued income or prepaid income;
- supplier contracts generate trade payables, accrued expenses or prepaid expenses.

In syndication deals, the effective interest rate for the share of the issuance retained on the Group's balance sheet is comparable to that applied to the other members of the syndicate including, when needed, a share of the underwriting fees and participation fees; the balance of these fees for services rendered is then recorded under Fee income at the end of the syndication period. Arrangement fees are recorded as income when the placement is legally complete.

Table 4.1.A

	2022			2021		
	Income	Expense	Net	Income	Expense	Net
<i>(In EUR m)</i>						
Transactions with banks	133	(110)	23	161	(107)	54
Transactions with customers	3,100		3,100	3,028		3,028
Financial instruments operations	2,475	(2,432)	43	2,288	(2,379)	(91)
Securities transactions	495	(991)	(496)	532	(1,105)	(573)
Primary market transactions	162		162	213		213
Foreign exchange transactions and derivatives instruments	1,818	(1,441)	377	1,543	(1,274)	269
Loan and guarantee commitments	974	(424)	550	894	(261)	633
Various services	2,653	(1,195)	1,458	2,791	(1,095)	1,696
Asset management fees	329		329	659		659
Means of payment fees	1,072		1,072	921		921
Insurance product fees	200		200	256		256
Underwriting fees of UCITS	75		75	93		93
Other fees	977	(1,195)	(218)	862	(1,095)	(233)
Total	9,335	(4,161)	5,174	9,162	(3,842)	5,320

NOTE 4.2 - INCOME AND EXPENSE FROM OTHER ACTIVITIES

ACCOUNTING PRINCIPLES

LEASING ACTIVITIES

Leases granted by the Group which do not transfer to the lessee virtually all the risks and benefits associated with ownership of the leased asset are classified as operating leases.

Assets held under operating leases, including investment property, are recorded on the balance sheet under Tangible and intangible fixed assets at their acquisition cost, less depreciation and impairment (see Note 8.4). Leased assets are depreciated, excluding residual value, over the life of the lease; the latter corresponds to the non-cancellable lease term adjusted for any option to extend the contract that the lessee is reasonably certain to exercise and any early termination options that the lessee is reasonably certain not to exercise (see Note 8.4).

Lease payments are recognised as income according to the straight-line method over the term of the lease. Meanwhile, the purpose of the accounting treatment of the income from invoices for maintenance services related to operating leases is to reflect, over the term of the service agreement, a constant margin between this income and the expenses incurred in providing the service.

Income and expenses, and capital gains or losses on investment properties and leased assets, as well as income and expense on maintenance services related to operating lease activities, are recorded under Income and expenses from other activities on the Real estate leasing and Equipment leasing lines.

These lines also include the losses incurred in the event of a decline in the unguaranteed residual value of finance-lease transactions, and the capital gains or losses on disposal related to unleased assets once the lease finance agreements are terminated.

The leases granted by the Group entities may include the maintenance service of the leased equipment. In this case, the portion of rentals corresponding to this maintenance service is spread over the duration of the service (generally the lease contract duration) and, when necessary, considers the progress of the service provided when it is not linear.

REAL ESTATE DEVELOPMENT ACTIVITIES

As the sale of real estate off plan (housing, office property, retail areas, etc.) is an ongoing service, the margin of this activity is progressively recognised over the construction programme's duration until the delivery date to the customer. It is recognised under income when this margin is positive and under expenses when this margin is negative.

The margin recognised at each closing period reflects the programme's estimated margin forecast and its stage of completion at the end of the period which depends on the progress in terms of marketing and the project.

Table 4.2.A

(In EUR m)	2022			2021		
	Income	Expense	Net	Income	Expense	Net
Real estate development	69	-	69	79	-	79
Real estate leasing	34	(130)	(96)	40	(56)	(16)
Equipment leasing ⁽¹⁾	12,490	(9,466)	3,024	11,630	(9,532)	2,098
Other activities	628	(928)	(300)	488	(850)	(362)
Total	13,221	(10,524)	2,697	12,237	(10,438)	1,799

(1) The amount recorded under this heading is mainly due to income and expenses related to long-term leasing and car fleet management businesses. Most of the Group's long-term lease agreements are 36-month to 48-month leases.

NOTE 4.3 - INSURANCE ACTIVITIES



Insurance activities (life insurance, personal protection and non-life insurance) add to the range of products included in the banking services offered to Group customers.

These activities are carried out by dedicated subsidiaries, subject to regulations specific to the insurance sector.

The rules for measuring and accounting for risks associated with insurance contracts are specific to the Insurance sector as well as the presentation of income and expenses on the Group's insurance activities that are disclosed in this note and which are classified on the basis of their function.

DEFERRED APPLICATION OF IFRS 9 BY INSURANCE SUBSIDIARIES

The amendments to IFRS 17 and IFRS 4 published by IASB on 25 June 2020 as well as the regulation (EU) 2020/2097 published by the European commission on 15 December 2020 allow financial conglomerates falling within the scope of Directive 2002/87/EC to defer until 1 January 2023 the implementation of IFRS 9 by their entities belonging to the insurance sector.

The Group has therefore maintained the decision that all its insurance subsidiaries will defer the effective date of IFRS 9 and will continue to apply IAS 39 as adopted by the European Union.

The Group maintained the necessary arrangements to forbid all transfers of financial instruments between its insurance sector and any other sector in the Group that would lead to a derecognition of the instrument by the seller, except for transfers of financial instruments measured at fair value through profit or loss by both sectors involved in such transfers.

In accordance with the ANC recommendation of 2 June 2017 related to the consolidated statements of banking institutions with the international accounting standards, separate lines in the consolidated financial statements for clarification purposes: Investments of insurance activities under balance sheet assets, Insurance contracts related liabilities under balance sheet liabilities and Net income from insurance activities under Net banking income in the income statement.

The main subsidiaries concerned are Sogécap, Antarius, Sogelife, Oradea Vie, Komerčni Pojistovna A.S. and Sogessur.

1. INSURANCE CONTRACTS RELATED LIABILITIES

ACCOUNTING PRINCIPLES

UNDERWRITING RESERVES OF INSURANCE COMPANIES

Underwriting reserves correspond to the commitments of insurance companies with respect to policyholders and the beneficiaries of policies.

In accordance with IFRS 4 on insurance contracts, life and non-life underwriting reserves continue to be measured under the same local regulations, with the exception of certain prudential provisions that are cancelled (liquidity risk provision) or recalculated economically (mainly, overall management reserve).

Risks covered by non-life insurance policies are principally linked to home, car and accident protection guarantees. Underwriting reserves comprise reserves for unearned premiums (share of premium income relating to subsequent financial years) and for outstanding claims.

Risks covered by life insurance policies are principally death, invalidity and incapacity for work. Life insurance underwriting reserves mainly comprise actuarial reserves, which correspond to the difference between the present value of commitments falling to the insurer and those falling to the policyholder, and the reserve for claims incurred but not settled.

In saving-life insurance products:

- Underwriting reserves of saving-life insurance contracts invested in EUR-denominated policies with profit sharing clauses consist primarily of mathematical provisions and provisions for profit-sharing;
- Underwriting reserves of saving-life insurance contracts invested in unit-linked policies or with a significant insurance clause (mortality, invalidity, etc.) are measured at the inventory date according to the realisation value of the assets underlying these contracts.

Under the principles defined in IFRS 4, and in compliance with local regulations applicable with respect thereto, life insurance policies with discretionary profit-sharing features are subject to “mirror accounting”, whereby any changes in the value of financial assets liable to affect policyholders are recorded in Deferred profit-sharing. This reserve is calculated to reflect the potential rights of policyholders to unrealised gains on financial instruments measured at fair value or their potential share of unrealised losses.

To demonstrate the recoverability of the deferred profit-sharing asset in the event of an unrealised net loss, two approaches are verified by the Group in order to show that the liquidity requirements caused by an unfavourable economic environment would not require assets to be sold in the event of unrealised losses:

- the first approach consists in simulating deterministic (“standardised” or extreme) stress scenarios. This is used to show that in these scenarios no significant losses would be realised on the assets existing at the balance sheet date for the scenarios tested;
- the aim of the second approach is to ensure that in the long or medium term, the sale of assets to meet liquidity needs would not generate any significant losses. The approach is verified considering projections based on extreme scenarios.

Moreover, a Liability Adequacy Test (LAT) is also carried out quarterly at the level of each consolidated entities operating in the insurance. This test involves comparing the carrying amount of insurance liabilities with the average economic value using a stochastic model of future cash flows. This test takes into account all of the future cash flows from policies, including benefits, management charges, fees, policy options and guarantees related to the contracts; It does not include future premiums. If the test concludes that the book value is insufficient, the value of insurance liabilities will be adjusted with a corresponding entry in the income statement.

CLASSIFICATION OF FINANCIAL LIABILITIES

At initial recognition, financial liabilities resulting from the Group’s insurance activities are classified in the following accounting categories:

- financial liabilities measured at fair value through profit or loss: these are derivative financial liabilities;
- financial liabilities measured at fair value option through profit or loss: these are non-derivative financial liabilities that were initially designated by the Group to be measured at fair value through profit or loss (using the option). These include investment contracts without both discretionary profit-sharing clauses and insurance component, that do not meet the definition of an insurance contract under IFRS 4 (unit-linked insurance contracts only) and are thus governed by IAS 39.

BREAKDOWN

Table 4.3.A

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Underwriting reserves of insurance companies	138,140	151,148
Financial liabilities of insurance companies	3,548	4,140
<i>Financial liabilities at fair value through profit or loss</i>	579	520
<i>Financial liabilities at fair value through profit or loss (fair value option)</i>	2,969	3,620
Total	141,688	155,288

UNDERWRITING RESERVES OF INSURANCE COMPANIES

Table 4.3.B

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Life insurance underwriting reserves for unit-linked policies	42,850	44,138
Other life insurance underwriting reserves	93,134	94,280
Non-life insurance underwriting reserves	2,147	2,020
Deferred profit-sharing booked in liabilities	9	10,710
Total	138,140	151,148
Attributable to reinsurers	(681)	(776)
Deferred profit-sharing booked in assets ⁽¹⁾	(1,175)	-
Underwriting reserves of insurance net of the share attributable to reinsurers	136,284	150,372

(1) In accordance with the CNC Recommendation of 19 December 2008, a recoverability test was carried out on the provisions for deferred profit-sharing booked as assets, to verify that the deduction of this amount from the future profit-sharing of policyholders is highly probable. The accounting method used to determine the deferred profit-sharing booked as assets takes into account the fair value of the assets compared to their historical value. The recoverability test uses cash flow forecasts relying on different economic scenarios based on historical collection and repurchases; this test is conclusive, as the results achieved do not call for the sale of assets with an unrealised loss. Secondly, cash flows projections were carried out based on a scenario in a deteriorated environment in terms of turnover, market conditions and exit rate. Thus, in a scenario of a rate increase (immediate and maintained over the projection horizon) and a fall in turnover of up to more than 50%, the sales of assets necessary to meet liquidity needs on the projection horizon do not generate capital losses based on the inventory situation.

STATEMENT OF CHANGES IN UNDERWRITING RESERVES EXCLUDING DEFERRED PROFIT SHARING

Table 4.3.C

<i>(In EUR m)</i>	Life insurance underwriting reserves for unit-linked policies	Other life insurance underwriting reserves	Non-life insurance underwriting reserves
Reserves as at 1 January 2022	44,138	94,280	2,020
Net allocation to insurance reserves	1,600	(2,576)	172
Revaluation of unit-linked policies	(4,702)	-	-
Charges deducted from unit-linked policies	(284)	-	-
Transfers and allocation adjustments	821	(821)	-
New customers	958	444	-
Profit-sharing	268	1,479	-
Others	51	328	(45)
Reserves as at 31 December 2022	42,850	93,134	2,147

In accordance with IFRS 4 and Group accounting standards, the Liability Adequacy Test (LAT) was performed as at 31 December 2022. This test assesses whether recognised insurance liabilities are adequate, using current estimates of future cash flows under insurance policies. The result of the test as at 31 December 2022 does not show any insufficiency of technical liabilities.

UNDERWRITING RESERVES OF INSURANCE COMPANIES BY REMAINING MATURITY

Table 4.3.D

<i>(In EUR m)</i>	Up to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	31.12.2022
Underwriting reserves of insurance companies	4,643	9,836	38,758	84,903	138,140

2. INVESTMENTS OF INSURANCE ACTIVITIES

ACCOUNTING PRINCIPLES

CLASSIFICATION OF FINANCIAL INSTRUMENTS

When initially recognised, financial assets from Group insurance activities are classified into one of the following four categories:

- financial assets at fair value through profit or loss: these are financial assets held for trading purposes (see definition in Note 3.1), which by default include derivative financial assets not qualifying as hedging instruments and non-derivative financial assets designated by the insurance entity upon initial recognition to be carried at fair value through profit or loss (using the option). In particular, insurance entities measure at fair value using the option the financial assets representing unit-linked contracts in order to eliminate the accounting mismatch with the related insurance liabilities, as well as interests in UCITS over which a significant influence exists;
- available-for-sale financial assets: these are non-derivative financial assets held for an indeterminate period, which the insurance entity may sell at any time. By default, they are any assets that do not fall into one of the one of the other categories. These instruments are measured at fair value against Unrealised or deferred gains and losses. Interests accrued or paid on debt securities are recognised in profit or loss using the effective interest rate method while dividend income earned on equity securities

is recorded under Net gains and losses on available-for-sale financial assets. If there is an objective evidence on an individual basis, the total accumulated unrealised loss previously recorded in shareholders' equity is reclassified in profit or loss under Net Income from insurance activities;

- loans and receivables: these include non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are not held for trading purposes, not held for sale from the time they are originated or acquired, and not designated upon initial recognition to be carried at fair value through profit or loss (in accordance with the fair value option). They are measured at amortised cost, and impairment, determined on an individual basis, may be recorded if appropriate;
- held-to-maturity financial assets: these are non-derivative financial assets with fixed or determinable payments and a fixed maturity, that are quoted in an active market and which the Group has the intention and ability to hold to maturity. They are measured at their amortised cost and may be subject to impairment as appropriate whether objective evidence of impairment exists individually.

All these categories are presented on the insurance entity's balance sheet under the Investments of insurance companies, which also includes investment properties held by insurance entities and hedge derivatives assessed in accordance with the accounting principles respectively presented in Note 8.4 and Note 3.2.

RECLASSIFICATION OF FINANCIAL ASSETS

After their initial recognition, financial assets may not be later reclassified as Financial assets at fair value through profit or loss.

A non-derivative financial asset initially recognised under Financial assets at fair value through profit or loss as an asset held for trading purposes may only be reclassified out of this category under specific conditions framed by IAS 39 standard.

IMPAIRMENT

Impairment of financial assets measured at amortised cost

For debt instruments not measured at fair value through net income, the criteria used by the insurance entity's insurance entities to assess individually objective evidence of impairment include the following conditions:

- a significant decline in the counterparty's financial situation leads to a high probability of said counterparty being unable to fulfil its overall commitments, implying then a risk of loss for the insurance entity (the appreciation of this deterioration can be based on the evolution of the rating of the issuers or the variations of the credit spreads changes observed on these markets);
- the occurrence of late payment of coupons and more generally of arrears of more than 90 days;
- or, regardless of whether or not any past-due payments are recorded. There is objective evidence of impairment or legal proceedings have been initiated (bankruptcy, legal settlement, compulsory liquidation).

If there is objective evidence that loans or other receivables, or financial assets classified as held-to-maturity financial assets, are impaired, an impairment is recognised for the difference between the carrying amount and the present value of estimated future recoverable cash flows, taking into account any guarantees. This discount is calculated using the financial assets' original effective interest rate. The amount of this impairment is deducted from the carrying value of the impaired financial asset.

The allocations and reversals of impairments are recorded under net income from investments in the Net income from insurance activities. The impaired loans or receivables are remunerated for accounting purposes by the reversal over time of the discounting to present value, which is recorded under interest income in the Net income from insurance activities.

Impairment of available-for-sale financial assets

An available-for-sale financial asset is impaired if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of this asset.

For listed equity instruments, a significant or prolonged decline in their price below their acquisition cost constitutes objective evidence of impairment. For this purpose, insurance entities consider as impaired listed shares showing an unrealised loss greater than 50% of their acquisition price on the balance sheet date, as well as listed shares for which the quoted prices have been below their acquisition price on every trading day for at least the last 24 months before the balance sheet date. Further factors, such as the financial situation of the issuer or its development outlook, can lead the insurance entities to consider that the cost of its investment may not be recovered even if the abovementioned criteria are not met. An impairment loss is then recorded through net income equal to the difference between the last quoted price of the security on the balance sheet date and its acquisition price.

For unlisted equity instruments, the criteria used to assess the evidence of impairment are identical to those mentioned above. The value of these instruments at the balance sheet date is determined using the valuation methods described in Note 3.4.

The criteria for the impairment of debt instruments are similar to those for the impairment of financial assets measured at amortised cost.

When a decline in the fair value of an available-for-sale financial asset has been recognised directly in shareholders' equity under Unrealised or deferred gains and losses and subsequent objective evidence of impairment emerges, insurance entities recognise the total accumulated unrealised loss previously recorded in shareholders' equity in the income statement among under net income from investments in the Net income from insurance activities for equity instruments and under Cost of risk for debt instruments.

This cumulative loss is measured as the difference between the acquisition cost (net of any repayments of principal and amortisation) and the present fair value, less any impairment of the financial asset that has already been recorded through profit or loss.

Impairment losses recognised through profit or loss on an equity instrument classified as available-for-sale are only reversed through profit or loss when the instrument is sold. Once an equity instrument has been recognised as impaired, any further loss of value is recorded as an additional impairment loss. For debt instruments, however, an impairment loss is reversed through profit or loss if they subsequently recover in value following an improvement in the issuer's credit risk.

OTHER ACCOUNTING PRINCIPLES

Accounting principles relative to fair value, initial recognition of financial instruments, derecognition of financial instruments, derivative financial instruments, interest income and expense, transferred financial assets and offsetting of financial instruments are similar to those described in Note 3 "Financial instruments".

OVERVIEW

Table 4.3.E

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Financial assets at fair value through profit or loss (trading portfolio)	837	211
<i>Shares and other equity instruments</i>	17	36
<i>Trading derivatives</i>	820	175
Financial assets at fair value through profit or loss (fair value option)	78,319	84,448
<i>Bonds and other debt instruments</i>	32,942	34,280
<i>Shares and other equity instruments</i>	44,980	49,592
<i>Loans, receivables and repo transactions</i>	397	576
Hedging derivatives	121	353
Available-for-sale financial assets	74,263	88,486
<i>Debt instruments</i>	59,296	74,084
<i>Equity instruments</i>	14,967	14,402
Due from banks ⁽²⁾	4,282	4,771
Customer loans	82	69
Held-to-maturity financial assets	-	22
Real estate investments	511	538
Total investments of insurance activities ⁽¹⁾⁽²⁾	158,415	178,898

(1) Investments in other Group companies that are made in representation of unit-linked liabilities are kept in the Group's consolidated balance sheet without any significant impact thereon.

(2) o/w EUR 1,270 million of current accounts as at 31 December 2022 vs EUR 1,207 million as at 31 December 2021.

ANALYSIS OF FINANCIAL ASSETS DEPENDING ON THEIR CONTRACTUAL CHARACTERISTICS

The following table shows the carrying value of the financial assets included in Net investments from insurance activities, whereby those assets whose contractual conditions give rise to cash-flows on set dates which are solely payments of principal and interest (basic instruments). Basic instruments held among a trading portfolio or those are managed and whose performance is evaluated on a fair value basis (i.e., financial instruments measured at fair value through profit or loss using fair value option) are presented in the column Other instruments.

Table 4.3.F

	31.12.2022					
	Carrying amount			Fair value		
<i>(In EUR m)</i>	Basic instruments	Other instruments	Total	Basic instruments	Other instruments	Total
Financial assets at fair value through profit or loss	-	79,156	79,156	-	79,156	79,156
Hedging derivatives	-	121	121	-	121	121
Available-for-sale financial assets	57,155	17,108	74,263	57,155	17,108	74,263
Due from banks	2,627	1,655	4,282	2,648	1,659	4,307
Customer loans	82	-	82	82	-	82
Held-to-maturity financial assets	-	-	-	-	-	-
Total financial investments	59,864	98,040	157,904	59,885	98,044	157,929

Table 4.3.G

	31.12.2021					
	Carrying amount			Fair value		
<i>(In EUR m)</i>	Basic instruments	Other instruments	Total	Basic instruments	Other instruments	Total
Financial assets at fair value through profit or loss	-	84,659	84,659	-	84,659	84,659
Hedging derivatives	-	353	353	-	353	353
Available-for-sale financial assets	71,537	16,949	88,486	71,537	16,949	88,486
Due from banks	2,559	2,212	4,771	2,717	2,265	4,982
Customer loans	69	-	69	70	-	70
Held-to-maturity financial assets	22	-	22	22	-	22
Total financial investments	74,187	104,173	178,360	74,346	104,226	178,572

FAIR VALUE OF FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE

Table 4.3.H

<i>(In EUR m)</i>	31.12.2022			
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value through profit or loss using fair value option	17	815	5	837
Financial assets at fair value through profit or loss using the fair value option	66,013	10,261	2,045	78,319
Hedging derivatives	-	121	-	121
Available-for-sale financial assets	63,100	4,465	6,698	74,263
Total	129,130	15,662	8,748	153,540

Table 4.3.I

<i>(In EUR m)</i>	31.12.2021			
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value through profit or loss using fair value option	36	174	1	211
Financial assets at fair value through profit or loss using the fair value option	72,819	9,638	1,991	84,448
Hedging derivatives	-	353	-	353
Available-for-sale financial assets	78,236	4,827	5,423	88,486
Total	151,091	14,992	7,415	173,498

CHANGES IN AVAILABLE FOR SALE FINANCIAL ASSETS

Table 4.3.J

<i>(In EUR m)</i>	2022
Balance as at 1 January	88,486
Acquisitions	9,861
Disposals / redemptions	(12,146)
Transfers to held-to-maturity financial assets	-
Change in scope and others	(706)
Gains and losses on changes in fair value recognised directly in equity during the period	(11,094)
Changes in impairment of debt instruments recorded in profit or loss	-
Impairment on equity instruments recognised in profit or loss	(147)
Translation differences	9
Balance as at 31 December	74,263

UNREALISED GAINS AND LOSSES ON AVAILABLE FOR SALE FINANCIAL ASSETS RECOGNISED IN OTHER COMPREHENSIVE INCOME

Table 4.3.K

<i>(In EUR m)</i>	31.12.2022		
	Capital gains	Capital losses	Net revaluation
Unrealised gains and losses of insurance companies	88	(960)	(872)
<i>On available-for-sale equity instruments</i>	2,527	(289)	2,238
<i>On available-for-sale debt instruments and assets reclassified as loans and receivables</i>	570	(5,670)	(5,100)
<i>Deferred profit-sharing</i>	(3,009)	4,999	1,990

Table 4.3.L

<i>(In EUR m)</i>	31.12.2021		
	Capital gains	Capital losses	Net revaluation
Unrealised gains and losses of insurance companies	431	(82)	349
<i>On available-for-sale equity instruments</i>	2,892	(70)	2,822
<i>On available-for-sale debt instruments and assets reclassified as loans and receivables</i>	5,904	(292)	5,612
<i>Deferred profit-sharing</i>	(8,365)	280	(8,085)

FINANCIAL ASSETS RECEIVED AS SECURITY AND AVAILABLE FOR THE ENTITY

Table 4.3.M

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Fair value of securities purchased under resale agreements	2	4

The Group generally purchases securities under resale agreements under normal market terms and conditions. It may re-use the securities received under resale agreement by selling them outright, selling them under repurchase agreements or pledging them as security, provided that it returns these or equivalent securities to the counterparty to the resale agreement at its term. Securities purchased under resale agreements are not recognised on the balance sheet. Their fair value, as shown above, includes securities sold or pledged as collateral.

3. NET INCOME FROM INSURANCE ACTIVITIES

ACCOUNTING PRINCIPLES

INCOME AND EXPENSE RELATED TO INSURANCE CONTRACTS

Income and expense related to insurance contracts issued by Group insurance companies, associated fee income and expense, and income and expense related to investments of insurance companies are recorded under Net income from insurance activities in the income statement.

Other income and expense are recorded under the appropriate headings.

Changes in the provision for deferred profit-sharing are recorded under Net income from insurance activities in the income statement or under Unrealised or deferred gains and losses under the appropriate headings for the underlying assets in question.

The following table shows the breakdown (after eliminating intercompany transactions):

- income and expense from insurance activities and associated investments on a separate line under Net Banking Income: Net income from insurance activities;
- funding costs of insurance activities recorded under Interest and similar expense;
- impairment debt instruments of insurance activities and the deferred profit-sharing recorded under Cost of risk.

Table 4.3.N

<i>(In EUR m)</i>	2022	2021
Net premiums	14,228	15,692
Net income from investments	1,414	3,540
Cost of benefits (including changes in reserves) ⁽¹⁾	(13,367)	(16,984)
Other net technical income (expense)	(64)	(10)
Net income from insurance activities	2,211	2,238
Funding costs	(5)	(5)
Cost of risk	-	-
<i>o/w impairment of debt instruments</i>	-	2
<i>o/w which deferred profit sharing</i>	-	(2)

(1) o/w EUR 1,022 million in respect of deferred profit-sharing at 31 December 2022 (vs EUR 2,966 million at 31 December 2021).

NET INCOME FROM INVESTMENTS

Table 4.3.O

<i>(In EUR m)</i>	2022	2021
Dividend income on equity instruments	1,085	878
Interest income	1,607	1,664
<i>On available-for-sale financial assets</i>	1,429	1,472
<i>On loans and receivables</i>	150	161
<i>Other net interest income</i>	28	31
Net gains or losses on financial instruments at fair value through profit or loss	(1,105)	848
Net gains or losses on available-for-sale financial instruments	(182)	145
<i>Capital gain or loss on sale of debt instruments</i>	(139)	25
<i>Capital gain or loss on sale of equity instruments</i>	104	142
<i>Impairment values on equity instruments</i>	(147)	(22)
Net gains or losses on real estate investments	9	5
Total net income from investments	1,414	3,540

4. MANAGEMENT OF INSURANCE RISKS

The Group carries out its insurance activities through the distribution and reinsurance acceptance of a wide range of life insurance, protection and health insurance, and non-life insurance policies. Since the life insurance business is predominant on the French market in the Group's insurance activities, the market risks of financial assets in terms of technical liabilities constitute the most significant exposure. Within market risks, the insurance business line is sensitive to shocks in interest rates, equity markets and credit spreads. In connection with the life insurance savings activity, a risk of withdrawals is also significant.

Managing these risks is key to the Insurance business line's activity. It is carried out by qualified and experienced teams, with major bespoke IT resources. Risks undergo regular monitoring and are reported to the General Management of both the entities concerned and the business lines.

Risk management techniques are based on the following:

- heightened security for the risk acceptance process, with the aim of guaranteeing that the price schedule matches the policyholder's risk profile and the guarantees provided;
- regular monitoring of indicators on product claims rates in order to adjust certain product parameters, such as pricing or the level of guarantee, if necessary;
- implementation of a reinsurance plan to protect the business line from major/serial claims;
- application of policies on risk, provisioning and reinsurance.

Management of risks linked to the financial markets and to ALM is an integral part of the investment strategy just like objectives on long-term performance. The optimisation of these two factors is highly influenced by the asset/liability balance. Liability commitments (guarantees offered to customers, maturity of policies), as well as the amounts booked under the major items on the balance sheet (shareholders' equity, income, provisions, reserves, etc.) are analysed by the Finance and Risk Department of the insurance business line.

Risk management related to financial markets (interest rates, credit and shares) and to ALM is based on the following:

- monitoring short- and long-term cash flows (match between the term of a liability and the term of an asset, liquidity risk management);
- particular monitoring of policyholder behaviour (redemption);
- close monitoring of financial markets;
- hedging of exchange rate risks (both rising and falling);
- defining thresholds and limits per counterparty, per rating issuer and per category of assets;
- stress tests, the results of which are presented annually at entities' Board of Directors' meetings, as part of the ORSA report (Own Risk and Solvency Assessment), transferred to the ACPR after approval by the Board;
- application of policies related to ALM and investment risks.

BREAKDOWN OF NET INVESTMENTS BY RATING OF BASIC INSTRUMENTS

The following table shows the gross carrying amounts after eliminating intercompany transactions.

Table 4.3.P

<i>(In EUR m)</i>	31.12.2022			
	Available-for-sale financial assets	Due from banks	Customer loans	Total
AAA	2,766	207	-	2,973
AA+ / AA / AA-	28,315	759	-	29,074
A+ / A / A-	13,254	447	-	13,701
BBB+ / BBB / BBB-	12,213	185	-	12,398
BB+ / BB / BB-	600	-	-	600
B+ / B / B-	-	-	-	-
CCC+ / CCC / CCC-	-	-	-	-
CC+ / CC / CC-	-	-	-	-
Lower than CC-	-	-	-	-
Without rating	7	1,029	82	1,118
Total before impairment	57,155	2,627	82	59,864
Impairment	-	-	-	-
Carrying amount	57,155	2,627	82	59,864

The rating scale is the scale used for Solvency 2 purposes, which calls for the second highest rating determined by the rating agencies (Standard & Poor's, Moody's Investors Service and Fitch Ratings) to be used. The ratings in question apply to issues or, where these are not available, to issuers.

NOTE 4.4 - OTHER ASSETS AND LIABILITIES

1. OTHER ASSETS

Table 4.4.A

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Guarantee deposits paid ⁽¹⁾	68,884	77,584
Settlement accounts on securities transactions	3,895	4,265
<i>o/w due from clearing houses bearing credit risk</i>	262	262
Prepaid expenses	1,385	1,120
Miscellaneous receivables ⁽²⁾	9,336	8,473
<i>o/w miscellaneous receivables bearing credit risk ⁽³⁾</i>	3,928	3,778
Miscellaneous receivables - insurance	1,991	1,874
Gross amount	85,491	93,316
Impairments	(419)	(418)
<i>Credit risk ⁽³⁾</i>	(295)	(284)
<i>Other risks</i>	(124)	(134)
Net amount	85,072	92,898

(1) Mainly relates to guarantee deposits paid on financial instruments, their fair value is assumed to be the same as their book value net of impairment for credit risk.

(2) Miscellaneous receivables primarily include trade receivables, fee income and income from other activities to be received. The operating leases receivables equal to EUR 1,258 million as of 31 December 2022, compared to EUR 952 million as of 31 December 2021.

(3) Net value of miscellaneous receivables bearing credit risk amounts to EUR 3,633 million as of 31 December 2022, compared to EUR 3,494 million as of 31 December 2021 (see Note 3.8).

2. OTHER LIABILITIES

Table 4.4.B

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Guarantee deposits received ⁽¹⁾	74,306	72,668
Settlement accounts on securities transactions	4,759	5,343
Expenses payable on employee benefits	2,610	2,754
Lease liability	2,104	2,318
Deferred income	1,297	1,688
Miscellaneous payables ⁽²⁾	17,097	12,623
Miscellaneous payables - insurance	5,380	8,911
Total	107,553	106,305

(1) Mainly relates to guarantee deposits received on financial instruments, their fair value is assumed to be the same as their book value.

(2) Miscellaneous payables primarily include trade payables, fee expense and expense from other activities to be paid.

NOTE 5 - PERSONNEL EXPENSES AND EMPLOYEE BENEFITS



MAKE
IT
SIMPLE

Employee benefits correspond to the compensation granted by the Group to its employees in exchange for work carried out during the annual reporting period.

All forms of compensation for work rendered are recorded in the expenses:

- whether it be paid to employees or to outside social security agencies;
- whether it be paid during the annual reporting period or to be paid by the Group in the future as entitlements to employees (pension plans, retirement benefits...);
- whether it be paid in cash or in Societe Generale shares (free share plans, stock options).

NOTE 5.1 - PERSONNEL EXPENSES AND RELATED PARTY TRANSACTIONS

ACCOUNTING PRINCIPLES

Personnel expenses include all expenses related to personnel, including employee benefits and expenses related to payments based on Societe Generale shares.

Short-term employee benefits are recorded under Personnel expenses during the period according to the services provided by the employee.

The accounting principles relating to post-employment benefits and other long-term benefits are described in Note 5.2.

Personnel expenses include related party transactions, within the meaning of IAS 24.

The Group's related parties include the members of the Board of Directors, corporate officers (the Chairman, the Chief Executive Officer and the Deputy Chief Executive Officers), their respective spouses and any children residing in the family home, subsidiaries which are either controlled exclusively or jointly by the Group, and companies over which Societe Generale exercises significant influence.

1. PERSONNEL EXPENSES

Table 5.1.A

<i>(In EUR m)</i>	2022	2021
Employee compensation	(7,244)	(6,785)
Social security charges and payroll taxes	(1,655)	(1,734)
Net pension expenses - defined contribution plans	(709)	(764)
Net pension expenses - defined benefit plans	(61)	(136)
Employee profit-sharing and incentives	(383)	(345)
Total	(10,052)	(9,764)
<i>Including net expenses from share - based payments</i>	<i>(196)</i>	<i>(197)</i>

2. RELATED-PARTY TRANSACTIONS

REMUNERATION OF THE GROUP'S MANAGERS

This includes amounts effectively paid by the Group to Directors and corporate officers as remuneration (including employer contributions) and other benefits as indicated below according to the nomenclature of IAS 24 – paragraph 17.

Table 5.1.B

<i>(In EUR m)</i>	2022	2021
Short-term benefits	10.0	9.9
Post-employment benefits	0.4	0.4
Long-term benefits	-	-
Termination benefits	-	-
Share-based payments	2.4	2.8
Total	12.8	13.1

RELATED-PARTY TRANSACTIONS

The transactions with members of the Board of Directors, Chief Executive Officers and members of their families included in this note only comprise loans and guarantees outstanding at 31 December 2022 for a total amount of EUR 2.3 million. All other transactions with these individuals are insignificant.

TOTAL AMOUNTS PROVISIONED OR BOOKED BY THE SOCIETE GENERALE GROUP FOR THE PAYMENT OF PENSIONS AND OTHER BENEFITS

The total amount provisioned or booked by the Societe Generale Group at 31 December 2022 under IAS 19 for the payment of pensions and other benefits to Societe Generale's Chief Executive Officers (Ms Lebot and Mr Aymerich and the three staff-elected Directors) is EUR 5.7 million.

NOTE 5.2 - EMPLOYEE BENEFITS

ACCOUNTING PRINCIPLES

Employee benefits are divided into four categories:

- Short-term employee benefits;
- Post-employment benefits, including defined contributions plans and defined benefit plans such as pension plans and retirement benefits;
- Others long-term employee benefits which are employee benefits not expected to be settled wholly before twelve months, such as defined variable compensation paid in cash and not indexed to the Societe Generale share, long service awards and time saving accounts;
- Termination benefits.

SHORT-TERM EMPLOYEE BENEFITS

Short-term employee benefits are recognised as Expenses payable on employee benefits. The settlement is expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service, such as fixed and variable compensation, annual leave, taxes and social security contributions, mandatory employer contributions and profit-sharing.

POST-EMPLOYMENT BENEFITS

Post-employment benefits can be broken down into two categories: defined contribution pension plans or defined benefit pension plans.

Post-employment defined contribution plans

Defined contribution plans limit the Group's liability to the subscriptions paid into the plan but do not commit the Group to a specific level of future benefits. Contributions paid are recorded as an expense for the current year.

Post-employment defined benefit plans

Defined benefit plans commit the Group, either formally or constructively, to pay a certain amount or level of future benefits and therefore bear the associated medium or long-term risk.

Provisions are recognised on the liabilities side of the balance sheet under Provisions, to cover the whole of these retirement obligations. These provisions are assessed regularly by independent actuaries using the projected unit credit method. This valuation technique incorporates assumptions about demographics, early retirement, salary rises and discount and inflation rates.

Group can choose to finance defined benefit plans by assets held by a long-term employee benefit fund or by qualifying insurance policies. Funding assets, made by funds or insurance policies, are classified as plan assets if assets are held by an entity (fund) that is legally separate from the reporting entity and are available to be used only to pay employee benefits. When these plans are financed from external funds classified as plan assets, the fair value of these funds is subtracted from the provision to cover the obligations. When these plans are financed from funds not classified as plan assets, these funds, classified as separate assets, are displayed separately in the assets of the balance sheet under Financial assets at fair value through profit or loss.

Differences arising from changes in calculation assumptions (early retirements, discount rates, etc.) and differences between actuarial assumptions and real performance are recognised as actuarial gains and losses. Actuarial gains and losses, as well as the return on plan assets excluding amounts expensed as net interest on the net defined benefit liability (or asset) and any change in the effect of the asset ceiling are components used to re-measure the net defined benefit liability (or asset). These components are immediately and fully recognised in shareholder's equity among Unrealised or deferred gains and losses and they cannot be subsequently reclassified as income.

Differences arising from changes in calculation assumptions (early retirements, discount rates, etc.) and differences between actuarial assumptions and real performance are recognised as actuarial gains and

losses. Actuarial gains and losses, as well as the return on plan assets excluding amounts expensed as net interest on the net defined benefit liability (or asset) and any change in the effect of the asset ceiling are components used to re-measure the net defined benefit liability (or asset). These components are immediately and fully recognised in shareholder's equity among Unrealised or deferred gains and losses.

These items cannot be subsequently reclassified as income and are presented under Retained earnings on the liabilities side of the balance sheet and on a separate line under the Statement of net income and unrealised or deferred gains and losses.

When a new or amended plan comes into force, past service cost is immediately recognised in profit or loss.

An annual charge is recorded under Personnel expenses for defined benefit plans consisting of the additional entitlements vested by each employee (current service cost), past service cost resulting from a plan amendment or a curtailment, the financial expense resulting from the discount rate and the interest income on plan assets (net interest on the net defined benefit liability or asset), plan settlements.

OTHER LONG-TERM BENEFITS

Other long-term employee benefits are benefits other than post-employment and termination benefits, that are paid to employees more than twelve months after the end of the annual period in which they provided the related services.

Other long-term benefits are measured and recognised in the same way as post-employment benefits, with the exception of actuarial gains and losses, which are immediately recognised as profit or loss.

TERMINATION BENEFITS

Termination benefits refer to the benefits to be granted to an employee following the termination by the entity of the staff member's employment contract before the normal retirement age or the decision of the staff member to voluntarily leave in exchange for these benefits.

Termination benefits payable more than 12 months after the closing date shall be discounted.

DETAIL OF PROVISIONS FOR EMPLOYEE BENEFITS

Table 5.2.A

<i>(In EUR m)</i>	Provisions as at 31.12.2021	Allocations	Write- backs available	Net allocation	Write- backs used	Actuarial gains and losses	Currency and scope effects	Provisions as at 31.12.2022
Post-employment benefits	1,711	93	(80)	13	(96)	(454)	(3)	1,171
Other long-term benefits	422	282	(37)	245	(60)	-	(3)	604
Termination benefits ⁽¹⁾	168	153	(47)	106	(31)	(13)	(3)	227
Total	2,301	528	(164)	364	(187)	(467)	(9)	2,002

(1) Termination benefits include in particular the expenses from voluntary redundancy related to the New French Retail Banking organisation project presented by the Group in Q4 2021, which led to the legal merger of Crédit du Nord and Societe Generale on 1 January 2023. The accounting treatment of the expenses for these measures has been equated with the post-employment benefits.

1. EMPLOYMENT DEFINED CONTRIBUTION PLANS

The main defined contribution plans provided to employees of the Group are located in France, in the United Kingdom and in the United States.

In France, they include state pension plans and other national pension plans such as AGIRC-ARRCO, as well as pension schemes put in place by certain Group entities whose only commitment is to pay annual contributions (PERCO).

In the United Kingdom, the employer pays contributions according to the age of the employees (from 2.5 to 10% of the salary) and can make extra contributions up to 4.5% for the voluntary additional employee contributions.

In the United States, employers fully match the first 8% of employee contributions, within the limit of USD 10,000.

2. POST-EMPLOYMENT DEFINED BENEFIT PLANS

Post-employment pension plans include schemes offering annuities, plans offering retirement bonuses and mixed plans (cash balance). Benefits paid out in annuities supplement the pensions paid by the mandatory basic plans.

The main defined benefit plans are located in France, in Switzerland, in the United Kingdom and in the United States.

In France, the supplementary pension plan for executive managers, set up in 1991, allocates an annual allowance to beneficiaries covered by Societe Generale. This allowance depends in particular on the beneficiary's seniority within Societe Generale. Since 4 July 2019, date of publication of the ordinance ending the so-called "random rights" defined benefit pension plans in application of the *Loi Pacte*, this plan is closed to new employees and the rights of beneficiaries were frozen on 31 December 2019.

In Switzerland, the plan is managed by a personal protection insurance institution (the Foundation), comprised of employer and employee representatives. The employer and its employees pay contributions to the Foundation. Pension benefits are revalued at a guaranteed rate of return and converted to annuities (or lump-sum payment) also at a guaranteed conversion rate (cash balance scheme). Because of this minimum guaranteed return, the plan is considered similar to a defined benefit plan.

In recent years, the Societe Generale Group has actively implemented a policy of converting defined benefit plans to defined contribution plans.

In the United Kingdom, the defined benefit plan has been closed to new employees for nearly 20 years, and the benefits of the last beneficiaries were frozen in 2015. The plan is managed by an independent institution (Trustee).

Similarly, in the United States, defined benefit plans were closed to new employees in 2015 and the vesting of new benefits was frozen.

RECONCILIATION OF ASSETS AND LIABILITIES RECORDED IN THE BALANCE SHEET

Table 5.2.B

<i>(In EUR m)</i>	31.12.2022			
	France	United Kingdom	Others	Total
A - Present value of defined benefit obligations	875	576	847	2,298
B - Fair value of plan assets	72	604	506	1,182
C - Fair value of separate assets	1,002	-	-	1,002
D - Change in asset ceiling	-	-	22	22
A - B - C + D = Net balance	(199)	(28)	363	136
On the liabilities side of the balance sheet	805	-	367	1,171
On the assets side ⁽¹⁾ of the balance sheet	1,004	28	4	1,036

(1) o/w EUR 1,002 million of separate assets recorded under Financial assets at fair value through profit or loss and EUR 33 million linked to surplus assets under Other assets.

Table 5.2.C

<i>(In EUR m)</i>	31.12.2021			
	France	United Kingdom	Others	Total
A - Present value of defined benefit obligations	1,277	934	1,125	3,336
B - Fair value of plan assets	77	1,003	618	1,699
C - Fair value of separate assets	1,330	-	1	1,331
D - Change in asset ceiling	-	-	-	-
A - B - C + D = Net balance	(130)	(69)	505	306
On the liabilities side of the balance sheet	1,201	-	510	1,711
On the assets side ⁽¹⁾ of the balance sheet	1,331	69	5	1,405

(1) o/w EUR 1,331 million of separate assets recorded under Financial assets at fair value through profit or loss and EUR 74 million linked to surplus assets under Other assets.

COMPONENTS OF THE COST OF DEFINED BENEFITS

Table 5.2.D

<i>(In EUR m)</i>	2022	2021
Current service cost including social security contributions	90	132
Employee contributions	(5)	(5)
Past service cost/curtailments	(20)	2
Transfer via the expense	0	0
Net interest	2	2
A - Components recognised in income statement	67	131
Actuarial gains and losses on assets	802	(159)
Actuarial gains and losses due to changes in demographic assumptions	2	(11)
Actuarial gains and losses due to changes in economic and financial assumptions	(917)	(46)
Actuarial gains and losses due to experience	(1)	(20)
Change in asset ceiling	22	0
B - Components recognised in unrealised or deferred gains and losses	(92)	(236)
C = A + B Total components of the cost of defined benefits	(25)	(105)

CHANGES IN THE PRESENT VALUE OF DEFINED BENEFIT OBLIGATIONS

Table 5.2.E

<i>(In EUR m)</i>	2022	2021
Balance as at 1 January	3,336	3,319
Current service cost including social security contributions	90	132
Past service cost/curtailments	(20)	2
Settlements	-	0
Net interest	43	28
Actuarial gains and losses due to changes in demographic assumptions	2	(11)
Actuarial gains and losses due to changes in economic and financial assumptions	(917)	(45)
Actuarial gains and losses due to experience	(1)	(20)
Foreign exchange adjustment	(10)	102
Benefit payments	(190)	(156)
Change in consolidation scope	(33)	(0)
Transfers and others	(2)	(15)
Balance as at 31 December	2,298	3,336

CHANGES IN THE FAIR VALUE OF FUNDING ASSETS

Table 5.2.F

<i>(In EUR m)</i>	Plan assets		Separate assets	
	2022	2021	2022	2021
Balance as at 1 January	1,699	1,655	1,331	1,150
Interest expenses on assets	29	22	12	4
Actuarial gains and losses on assets	(466)	(24)	(336)	183
Foreign exchange adjustment	(10)	103	-	-
Employee contributions	5	5	-	-
Employer contributions to plan assets	13	16	-	-
Benefit payments	(79)	(78)	(5)	(4)
Change in consolidation scope	(9)	-	-	-
Transfers and others	-	-	-	(2)
Change in asset ceiling	(22)	-	-	-
Balance as at 31 December	1,160	1,699	1,002	1,331

INFORMATION AND TERMS REGARDING FUNDING ASSETS

Funding assets include plan assets and separate assets.

Funding assets represent around 95% of Group obligations, with different rates depending on the country.

Accordingly defined benefit plan obligations in France, the United Kingdom and the United States are fully hedged, while they are not funded in Germany.

The breakdown of the fair value of plan assets is as follows: 65% bonds, 16% equities and 19% other investments. Directly held Societe Generale shares are not significant.

Funding assets excess is EUR 257 million.

Employer contributions to be paid to post-employment defined benefit plans for 2023 are estimated at EUR 14 million.

Plan hedging strategies are defined locally in connection with the Finance and Human Resources departments of the entities, by ad hoc structures (Trustees, Foundations, Joint structures etc.) if necessary. Besides, liability investment or financing strategies are monitored at Group level through a global governance system. Committee meetings, with the participation of representatives of the Human Resources Department, the Finance Department and the Risk Division, are organised in order to define Group guidelines for employee benefits investment and management, to validate decisions and to follow up the associated risks for the Group.

Depending on the duration of each plan and local regulations, funding assets are invested in equities and/or in fixed income products, whether guaranteed or not.

The actual returns on plan and separate assets can be broken down as follows:

Table 5.2.G

<i>(In EUR m)</i>	2022	2021
Plan assets	(437)	(2)
Separate assets	(325)	191

MAIN ASSUMPTIONS DETAILED BY GEOGRAPHICAL AREA

Table 5.2.H

	31.12.2022	31.12.2021
Discount rate		
France	3.62%	0.85%
United-Kingdom	4.80%	1.81%
Others	4.07%	1.55%
Long-term inflation		
France	2.45%	2.07%
United-Kingdom	3.30%	3.47%
Others	2.01%	1.79%
Future salary increase		
France	1.48%	1.44%
United-Kingdom	N/A	N/A
Others	1.40%	1.35%
Average remaining working lifetime of employees (in years)		
France	7.84	8.37
United-Kingdom	3.07	4.09
Others	8.83	9.12
Duration (in years)		
France	11.63	13.90
United-Kingdom	12.69	16.21
Others	11.94	14.55

Assumptions by geographical area are weighted average by the defined benefit obligations (DBO).

The discount yield curves used are AA corporate bonds yield curves (source: Merrill Lynch) observed at the end of October for USD, GBP and EUR, and corrected at the end of December if the change in discount rates had a significant impact.

Inflation rates used for EUR and GBP monetary areas are market rates observed at the end of October and corrected at the end of December if the change had a significant impact. Inflation rates used for the other monetary areas are the long-term targets of the central banks.

The average remaining working lifetime of employees is calculated taking into account turnover assumptions.

The assumptions described above have been applied to post-employment benefit plans.

SENSITIVITIES OF DEFINED BENEFIT OBLIGATIONS TO THE CHANGES IN MAIN ACTUARIAL ASSUMPTION

Table 5.2.I

<i>(Percentage of item measured)</i>	31.12.2022	31.12.2021
<i>Variation in discount rate</i>	+0.5%	+0.5%
Impact on the present value of defined benefit obligations at 31 December N	-6%	-7%
<i>Variation in long-term inflation</i>	+0.5%	+0.5%
Impact on the present value of defined benefit obligations at 31 December N	4%	4%
<i>Variation in future salary increase</i>	+0.5%	+0.5%
Impact on the present value of defined benefit obligations at 31 December N	1%	2%

Disclosed sensitivities are averages of the variations weighted by the present value of the defined benefit obligations. Note that a 100 bp increase in discount rates and inflation rates would result in a 11% decrease in liabilities and a rise of 7% in liabilities, respectively. A decrease in the discount rates and the inflation rates of 100 bp would result in a 13% increase in liabilities and a 6% decrease in liabilities, respectively.

BREAKDOWN OF FUTURE PAYMENTS OF BENEFITS

Table 5.2.J

<i>(In EUR m)</i>	2022	2021
N+1	166	157
N+2	150	147
N+3	163	154
N+4	165	165
N+5	152	166
N+6 à N+10	853	816

NOTE 6 - INCOME TAX



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Income tax expenses are presented separately from other taxes which are classified among Other operating expenses. They are calculated according to the rates and tax regulations applicable in the countries where each consolidated entity is located.

Income tax presented in the income statement includes current taxes and deferred taxes:

- current taxes correspond to the amount of taxes due (or refundable) as calculated according to the taxable profit base for the reporting period.
- deferred taxes correspond to the amount of taxes resulting from past transactions and that will be payable (or refundable) in a future reporting period.

ACCOUNTING PRINCIPLES

CURRENT TAXES

Current tax is based on the taxable profits of each consolidated taxable entity and determined in accordance with the rules established by the local taxation authorities, upon which income taxes are payable. This tax expense also includes net allowances for tax adjustments pertaining to income tax.

Tax credits arising in respect of interest from loans and income from securities are recorded in the relevant interest account as they are applied in settlement of income taxes for the year. The related tax charge is included under Income tax in the income statement.

DEFERRED TAXES

Deferred taxes are recognised whenever the Group identifies a temporary difference between the book value and tax value of balance sheet assets and liabilities that will affect future tax payments.

Deferred tax assets and liabilities are measured in each consolidated taxable entity and in accordance with the rules established by the local taxation authorities, upon which their income taxes are payable. This amount is based on the tax rate enacted or substantively enacted which is expected to apply when the asset is realised or the liability settled. These deferred taxes are adjusted in the event of changes to tax rates. This amount is not discounted to present value.

Deferred tax assets can result from deductible temporary differences or from tax loss carry-forwards. These deferred tax assets are recorded only if the entity concerned is likely to recover these assets within a set time. These temporary differences or tax loss carry-forwards can also be used against future taxable profit.

Tax loss carry-forwards are subject to an annual review taking into account the tax system applicable to each relevant tax entity and a realistic projection of their tax income or expense: any previously unrecognised deferred tax assets are recorded in the balance sheet to the extent it has become probable that future taxable profit will allow the deferred tax asset to be recovered; however, the carrying value of deferred tax assets already recognised in the balance sheet is reduced where a risk of total or partial non-recovery occurs.

Current and deferred taxes are recognised in the consolidated income statement under Income tax. However, deferred taxes related to gains and losses recorded under Unrealised or deferred gains and losses are also recognised under the same heading in shareholders' equity.

TAX UNCERTAINTIES

There may be uncertainty over the tax treatments applied by the Group. If it is probable that the tax Authority will not accept some tax treatments, these uncertainties shall be booked under Tax expenses/income by the counterpart of Provisions for tax adjustments recorded among Tax liabilities.

Information on the nature and the amount of the associated risks is not disclosed when the Group considers that such disclosure could seriously undermine its position in a dispute with other parties on the object of the provision.

1. BREAKDOWN OF THE TAX EXPENSE

Table 6.A

<i>(In EUR m)</i>	2022	2021
Current taxes	(1,274)	(1,272)
Deferred taxes	(286)	(425)
Total	(1,560)	(1,697)

RECONCILIATION OF THE DIFFERENCE BETWEEN THE GROUP'S STANDARD TAX RATE AND ITS EFFECTIVE TAX RATE

Table 6.B

<i>(In EUR m)</i>	2022		2021	
	%	EUR m	%	EUR m
Income before tax, excluding net income from companies accounted for using the equity method and impairment losses on goodwill		4,492		8,143
Group effective tax rate	34.72%		20.84%	
Permanent differences	0.77%	35	0.75%	61
Differential on securities with tax exemption or taxed at reduced Rate ⁽¹⁾	-13.20%	(593)	1.28%	104
Tax rate differential on profits taxed outside France	2.33%	104	3.13%	255
Changes in the measurement of deferred tax assets / liabilities ⁽²⁾	1.21%	54	2.41%	196
Normal tax rate applicable to French companies (including 3.3% national contribution)	25.83%		28.41%	

(1) In 2022, this amount includes the tax effect of the disposal of Rosbank.

(2) In 2021, this amount includes a EUR 130 million decrease in the unrecognised portion of deferred tax assets for the French tax group.

In compliance with the French tax provisions that define the ordinary corporate tax rate, the latter was lowered to 25% in 2022 (article 219 of the French Tax code), plus the existing national contribution (CSB) of 3.3%, *i.e.* a compound tax rate of 25.83%.

Long-term capital gains on affiliates are exempt from this corporate tax, except for a 12% fee on the gross amount.

Furthermore, under the parent-subsidiary regime, dividends from companies in which Societe Generale's equity interest is at least 5% are tax exempt, subject to taxation of a portion of fees and expenses of 1% or 5% at the full statutory tax rate.

2. TAX ASSETS AND LIABILITIES

TAX ASSETS

Table 6.C

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Current tax assets	819	982
Deferred tax assets	3,877	3,830
<i>o/w deferred tax assets on tax loss carry-forwards</i>	1,662	1,719
<i>o/w deferred tax assets on temporary differences</i>	2,215	2,111
Total	4,696	4,812

TAX LIABILITIES

Table 6.D

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Current tax liabilities	735	760
Provisions for tax adjustments	72	76
Deferred tax liabilities	831	741
Total	1,638	1,577

The Group performs an annual review of its capacity to use tax loss carry-forwards, taking into account the tax system applicable to each tax entity (or tax group) concerned and a realistic forecast of its tax results. For this purpose, the tax results are determined based on the projected performance of the businesses. This performance corresponds to the estimated budget (scenario SG Central) over three years (from 2023 to 2025), extrapolated to 2026, which corresponds to a “normative” year.



These budgets notably take into account the impacts of the commitments to energy and environmental transition and regional development detailed in the Declaration of Non-Financial Performance.

The tax results also take into consideration the accounting and tax adjustments (including the reversal of the deferred tax assets and liabilities bases on temporary differences) applicable to the entities and jurisdictions concerned. These adjustments are determined on the basis of historical tax results and on the Group's tax expertise. An extrapolation of the tax results is performed from 2026 on and over a timeframe considered reasonable and depending on the nature of the activities carried out within each tax entity.

On principle, the appreciation of the macro-economic factors selected and the internal estimates used to determine the tax results involve risks and uncertainties about their materialisation over the estimated timeframe for the absorption of the losses. These risks and uncertainties are especially related to possible changes in the applicable tax rules (computation of the tax result, as well as allocation rules for tax loss carry-forwards) or materialisation of the assumptions selected. These uncertainties are mitigated by robustness checks of the budgetary and strategic assumptions.

The updated projections show that the Group's activated tax loss-carry forwards may likely be used against its future taxable income.

3. DEFERRED TAX ASSETS RECOGNISED ON TAX LOSS CARRY-FORWARDS AND DEFERRED TAX ASSETS NOT RECOGNISED

As at 31 December 2022, based on the tax system of each entity and a realistic projection of their tax income, the projected period for deferred tax assets recovery is indicated in the table below:

Table 6.E

<i>(In EUR m)</i>	31.12.2022	Statutory time limit on carry-forwards	Expected recovery period
Total deferred tax assets relating to tax loss carry-forwards	1,662	-	-
<i>o/w French tax group</i>	1,404	<i>Unlimited ⁽¹⁾</i>	<i>8 years</i>
<i>o/w US tax group</i>	193	<i>20 years ⁽²⁾</i>	<i>7 years</i>
<i>Others</i>	65	-	-

(1) In accordance with the 2013 French Finance Act, the deduction of previous losses is limited to EUR 1 million plus 50% of the fraction of the taxable income for the fiscal year exceeding this limit. The non-deductible portion of losses may be carried forward to the following fiscal years with no time limit and under the same conditions.

(2) Tax losses generated before 31 December 2011.

The main deferred taxes not recognised as assets in the balance sheet by tax group are presented in the table below. They may be recognised in the balance sheet when it becomes probable that a future taxable profit will allow their recovery.

Table 6.F

<i>(In EUR m)</i>	31.12.2022	31.12.2021
French tax group	520	520
US tax groups	277	291
SG Singapore	82	82
SG de Banques en Guinée Equatoriale ⁽¹⁾	36	40
SG Kleinwort Hambros Limited	29	33

(1) Including EUR 10 million of tax carry forward and EUR 26 million temporary differences as at 31 December 2022, versus respectively EUR 9 million and EUR 31 million as at 31 December 2021.

Others deferred tax relating to tax loss carry-forwards and temporary differences not recognised as assets in the balance sheet respectively amounts to EUR 50 million and EUR 2 million as at 31 December 2022.

At the same time, United States of America non-recognised differed tax assets have reduced of EUR 14 million due to the recognition in the balance sheet in 2022 of EUR 33 million differed taxes and to a foreign exchange effect of EUR +19 million.

With regard to the tax treatment of the loss caused by the actions of Jérôme Kerviel, Societe Generale considers that the judgment of the Versailles Court of Appeal of 23 September 2016 does not call into question its validity in light of the 2011 opinion of the French Supreme Administrative Court (Conseil d'Etat) and its established case law which was recently confirmed again in this regard. Consequently, Societe Generale considers that the related tax loss remains recoverable against the future taxable income (see Note 9).

PILLAR II: TAX REFORM – GLOBAL MINIMUM CORPORATE TAX RATE

In October 2021, 137 of the 140 jurisdictions members of the OECD Inclusive Framework on Base Erosion and Profit Shifting (BEPS) committed to the principle of establishing a global minimum corporate tax rate of 15% on the profit. This set of measures would be applied Country-by-Country to multinational enterprises earnings with revenue exceeding EUR 750 million.

A set of rules referred to as “Pillar II” was published by the OECD on 20 December 2021, followed by the publication of a draft European directive on 22 December 2021 regarding their implementation within the European Union. Following the unanimous agreement of the Member States, this Directive was formally adopted and published in the Official Journal of the European Union on 22 December 2022. The rules are to be implemented through the tax systems of the 27 Member States before 31 December 2023 for application to the fiscal years opened from 1 January 2024 on.

A project structure has been set up at Group level in order to perform the preliminary analysis of the provisions in this Directive, to conduct a study of the impacts for the Group and take the necessary measures to ensure compliance with it when it comes into force.

NOTE 7 - SHAREHOLDERS' EQUITY



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Equity are the resources contributed to the Group by external shareholders as capital, as well as the cumulative and undistributed results (retained earnings). It also includes resources received when financial instruments are issued and for which the issuer has no contractual obligation to deliver cash to the holders of these instruments.

Equity has no contractual maturity, and when compensation is awarded to shareholders or holders of other equity instruments, it does not affect the income statement but directly reduces the retained earnings in the equity.

The statement "Changes in Shareholders' Equity" presents the various changes that affect the components of equity over the reporting period.

NOTE 7.1 - TREASURY SHARES AND SHAREHOLDERS' EQUITY ISSUED BY THE GROUP

ACCOUNTING PRINCIPLES

TREASURY SHARES

Societe Generale shares held by the Group are deducted from consolidated equity irrespective of the purpose for which they are held. Income on these shares is recognised in Retained earnings.

Recognition of shares issued by Group subsidiaries, which are bought and sold by the Group, is described in Note 2.

SHAREHOLDERS' EQUITY ISSUED BY THE GROUP

Financial instruments issued by the Group are booked in whole or in part to debt or to equity depending on whether or not they contractually oblige the issuer to deliver cash to the holders of the securities.

When they are classified as equity, securities issued by Societe Generale are recorded under Other equity instruments. If they are issued by Group subsidiaries, these securities are recognised under Non-controlling interests. External costs associated with issuing equity instruments are deducted directly from equity at their after-tax amount.

When they are classified as debt instruments, securities issued by the Group are recorded under Debt securities issued or Subordinated debt depending on their characteristics. They are accounted for in the same way as other financial liabilities measured at amortised cost (see Note 3.6).

1. ORDINARY SHARES AND CAPITAL RESERVES

Table 7.1.A

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Issued capital	1,062	1,067
Issuing premiums and capital reserves	21,377	21,513
Elimination of treasury stock	(1,191)	(667)
Total	21,248	21,913

ORDINARY SHARES ISSUED BY SOCIETE GENERALE S.A.

Table 7.1.B

<i>(Number of shares)</i>	31.12.2022	31.12.2021
Ordinary shares	849,883,778	853,371,494
<i>Including treasury stock with voting rights ⁽¹⁾</i>	48,737,016	22,209,068
<i>Including shares held by employees</i>	79,097,967	67,299,221

(1) Excluding Societe Generale shares held for trading purposes or in respect of the liquidity contract.

As at 31 December 2022, 16,247,062 Societe Generale shares were acquired on the market at a cost price of EUR 468 million, for the purpose of cancellation, in accordance with the decision of the General Meeting of 19 May 2021. The capital reduction by cancellation of securities was carried out on 1 February 2022.

On 18 July 2022, a capital increase, reserved for Group employees and retirees as part of the Global Employee Share Ownership Plan open in 43 countries, was carried out for a total amount of EUR 235 million, resulting in the issuance of 12,759,346 new Societe Generale shares.

As at 31 December 2022, Societe Generale S.A.'s fully paid up capital amounted to EUR 1,062,354,722.50 and was made up of 849,883,778 shares with a nominal value of EUR 1.25.

2. TREASURY STOCK

As at 31 December 2022, the Group held 50,082,406 of its own shares as treasury stock, for trading purposes or for the active management of shareholders' equity, representing 5.9% of the capital of Societe Generale S.A.

The amount deducted by the Group from its equity for treasury shares (and related derivatives) came to EUR 1,191 million, including EUR 67 million in shares held for trading activities.

The change in treasury stock over 2022 breaks down as follows:

Table 7.1.C

<i>(In EUR m)</i>	Liquidity contract	Trading activities	Treasury stock and active management of shareholders' equity	Total
Disposals net of purchases	1	(28)	(497)	(524)
Capital gains net of tax on treasury stock and treasury share derivatives, booked under shareholders' equity	-	(11)	(55)	(66)

The variation of EUR -497 million in treasury shares and active capital management is mainly due to:

- EUR +468 million relating to the capital reduction on 1 February 2022 by cancellation of 16,247,062 Societe Generale shares acquired in 2021.
- EUR -914 million relating to the acquisition on the market of 41,674,813 Societe Generale shares, for the purpose of cancellation, in accordance with the decision of the General Meeting of 17 May 2022. The capital reduction by cancellation of shares was carried out on 1 February 2023.

3. SHAREHOLDERS' EQUITY ISSUED BY THE GROUP

PERPETUAL DEEPLY SUBORDINATED NOTES

Given the discretionary nature of the decision to pay dividends to shareholders, the perpetual deeply subordinated notes have been classified as equity and recognised under Other equity instruments.

As at 31 December 2022, perpetual deeply subordinated notes issued by Societe Generale S.A. and recognised under Group shareholders' equity in Other equity instruments totalled EUR 9,136 million, valued at historical rate.

The change in the amount of undated deeply subordinated notes issued by the Group is explained by two issuances made over the year.

Table 7.1.E

Issuance Date	Amount in local currency at 31.12.2021	Repurchases and redemptions in 2022	Amount in local currency at 31.12.2022	Amount in millions of euros at historical rate	Remuneration
18 December 2013	USD 1,750 M		USD 1,750 M	1,273	7.875%, from 18 December 2023, USD 5-year Mid Swap Rate +4.979%
29 September 2015	USD 1,250 M		USD 1,250 M	1,111	8% from 29 September 2025, USD 5-year Mid Swap rate +5.873%
6 April 2018	USD 1,250 M		USD 1,250 M	1,035	6.750% from 6 April 2028, USD 5-year Mid Swap rate +3.929%
4 October 2018	USD 1,250 M		USD 1,250 M	1,105	7.375% from 4 October 2023, USD 5-year Mid Swap rate +4.302%
16 April 2019	SGD 750 M		SGD 750 M	490	6.125% from 16 April 2024, SGD 5-year Mid Swap rate +4.207%
12 September 2019	AUD 700 M		AUD 700 M	439	4.875% from 12 September 2024, AUD 5-year Mid Swap rate +4.036%
18 November 2020	USD 1,500 M		USD 1,500 M	1,264	5.375% from 18 November 2030, USD 5-year Mid Swap rate +4.514%
26 May 2021	USD 1,000 M		USD 1,000 M	818	4.75% from 26 May 2026, USD 5-year Mid Swap rate +3.931%
15 July 2022	-		SGD 200 M	141	8.25% from 15 December 2027, SGD 5-year Mid Swap rate + 5.6%
22 November 2022	-		USD 1,500 M	1,460	9.3750% from 22 May 2028, USD 5-year Mid Swap rate + 5.385%

OTHER EQUITY INSTRUMENTS ISSUED BY SUBSIDIARIES

The perpetual subordinated notes that are issued by the Group's subsidiaries and include discretionary clauses relating to the payment of interest are classified as equity instruments.

As at 31 December 2022, the amount of other equity instruments issued by the Group's subsidiaries and recognised under Non-controlling interests totalled EUR 800 million.

Table 7.1.F

Issuance Date	Amount	Remuneration
18 December 2014 (step-up clause after 12 years)	800 EUR M	4.125%, from 2026 5-year Mid-Swap rate + 4.150% annually

SUMMARY OF CHANGES IN EQUITY INSTRUMENTS ISSUED

Changes related to the perpetual subordinated notes and deeply subordinated notes included in Shareholder's equity, Group share are detailed below:

Table 7.1.G

	2022			2021		
	Deeply subordinated notes	Perpetual subordinated notes	Total	Deeply subordinated notes	Perpetual subordinated notes	Total
<i>(In EUR m)</i>						
Remuneration paid booked under reserves	(581)	-	(581)	(623)	-	(623)
Changes in nominal values	1,602	-	1,602	(1,517)	(244)	(1,761)
Tax savings on remuneration payable to shareholders and recorded under profit or loss	150	-	150	177	9	186
Issuance fees relating to subordinated notes	(9)	-	(9)	(4)	-	(4)

4. EFFECT OF THE CHANGES IN THE SCOPE OF CONSOLIDATION

The impact of changes in the consolidation scope recognised in shareholders' equity (EUR -88 million in Group share and EUR +543 million in Non-controlling interests) mainly relates to the decrease in the ownership interest in ALD from 79.82% to 75.94% (see Note 2.1).

NOTE 7.2 - EARNINGS PER SHARE AND DIVIDENDS

ACCOUNTING PRINCIPLES

The earnings per share are measured by dividing the net income attributable to ordinary shareholders by the weighted average number of shares outstanding over the period, excluding treasury shares. The net earnings attributable to ordinary shareholders are adjusted for the preferred shareholders rights, such as holders of preferred shares, subordinated securities or deeply subordinated notes classified in equity. The diluted earnings per share take into account the potential dilution of shareholders' interests in the event where dilutive instruments (stock options or free share plans) are converted into ordinary shares. This dilutive effect is determined using the share buyback method.

1. EARNINGS PER SHARE

Table 7.2.A

<i>(In EUR m)</i>	2022	2021
Net income, Group share	2,018	5,641
Attributable remuneration to subordinated and deeply subordinated notes	(587)	(586)
Issuance fees related and deeply subordinated notes	(9)	(4)
Net income attributable to ordinary shareholders	1,422	5,051
Weighted average number of ordinary shares outstanding ⁽¹⁾	822,437,425	846,261,490
Earnings per ordinary share (in euros)	1.73	5.97
Average number of ordinary shares used in the dilution calculation	-	-
Weighted average number of ordinary shares used in the calculation of diluted net earnings per share	822,437,425	846,261,490
Diluted earnings per ordinary share (in euros)	1.73	5.97

(1) Excluding treasury shares.

2. DIVIDENDS PAID

Dividends paid by the Group in 2022 amounted to EUR 2,125 million and are detailed in the following table:

Table 7.2.B

<i>(In EUR m)</i>	2022			2021		
	Group Share	Non-controlling interests	Total	Group Share	Non-controlling interests	Total
Paid in shares	-	-	-	-	-	-
Paid in cash	(1,371)	(754)	(2,125)	(468)	(193)	(661)
Total	(1,371)	(754)	(2,125)	(468)	(193)	(661)

NOTE 7.3 - UNREALISED OR DEFERRED GAINS AND LOSSES

BREAKDOWN OF CHANGES OF UNREALISED OR DEFERRED GAINS AND LOSSES

Table 7.3.A

	31.12.2022				
				<i>o/w</i>	
<i>(In EUR m)</i>	Gross value	Tax	Net value	Net Group share	Non-controlling interests
Translation differences	690	(12)	678	722	(44)
Revaluation of debt instruments at fair value through other comprehensive income	(597)	112	(485)	(325)	(160)
Revaluation of available-for-sale financial assets	(873)	217	(656)	(636)	(20)
Revaluation of hedging derivatives	(232)	(59)	(291)	(308)	17
Subtotal of unrealised gains and losses with subsequent recycling in the income statement	(1,012)	258	(754)	(547)	(207)
Actuarial gains and losses on defined benefit plans ⁽²⁾	93	(27)	66	56	10
Revaluation of own credit risk of financial liabilities at fair value through profit or loss ⁽³⁾	325	(85)	240	242	(2)
Revaluation of equity instruments at fair value through other comprehensive income	34	(2)	32	31	1
Subtotal of unrealised gains and losses without subsequent recycling in the income statement	452	(114)	338	329	9
Total	(560)	144	(416)	(218)	(198)

Table 7.3.B

	Changes of the period				
				o/w	
(In EUR m)	Gross value	Tax	Net value	Net Group share	Non-controlling interests
Allocation to retained earnings					
Actuarial gains and losses on defined benefit plans	(235)	60	(175)	(170)	(5)
Revaluation of own credit risk of financial liabilities at fair value through profit or loss	40	(10)	30	30	-
Total	(195)	50	(145)	(140)	(5)
Translation differences ⁽¹⁾	1,820	(12)	1,808	1,804	4
Revaluation of debt instruments at fair value through other comprehensive income	(731)	147	(584)	(434)	(150)
Revaluation of available-for-sale financial assets	(1,223)	321	(902)	(885)	(17)
Revaluation of hedging derivatives	(380)	(53)	(433)	(441)	8
Variation of unrealised gains and losses with subsequent recycling in the income statement	(514)	403	(111)	44	(155)
Actuarial gains and losses on defined benefit plans ⁽²⁾	92	(26)	66	56	10
Revaluation of own credit risk of financial liabilities at fair value through profit or loss ⁽³⁾	671	(174)	497	499	(2)
Revaluation of equity instruments at fair value through other comprehensive income	(26)	2	(24)	(25)	1
Variation of unrealised gains and losses without subsequent recycling in the income statement	737	(198)	539	530	9
Total of variation	223	205	428	574	(146)
Total of changes	28	255	283	434	(151)

Table 7.3.C

	31.12.2021				
				o/w	
<i>(In EUR m)</i>	Gross value	Tax	Net value	Net Group share	Non-controlling interests
Translation differences	(1,130)	-	(1,130)	(1,082)	(48)
Revaluation of debt instruments at fair value through other comprehensive income	134	(35)	99	109	(10)
Revaluation of available-for-sale financial assets	350	(104)	246	249	(3)
Revaluation of hedging derivatives	148	(6)	142	133	9
Subtotal of unrealised gains and losses with subsequent recycling in the income statement	(498)	(145)	(643)	(591)	(52)
Actuarial gains and losses on defined benefit plans ⁽²⁾	236	(61)	175	170	5
Revaluation of own credit risk of financial liabilities at fair value through profit or loss ⁽³⁾	(386)	99	(287)	(287)	-
Revaluation of equity instruments at fair value through other comprehensive income	60	(4)	56	56	-
Subtotal of unrealised gains and losses without subsequent recycling in the income statement	(90)	34	(56)	(61)	5
Total	(588)	(111)	(699)	(652)	(47)

(1) The variation in Group's translation differences of EUR 1,804 million is mainly related to the depreciation of euro against the US dollar (EUR 736 million) and to the variation of the translation on the Russian Rouble due to the sale of Rosbank (EUR 1,022 million).

(2) Gains and losses presented in these items are transferred into Retained earnings for the next financial year opening.

(3) During the derecognition of a financial liability, potential realised gains and losses attributable to Group own credit risk are subject to transfer into Retained earnings for the next financial year opening.

NOTE 8 - ADDITIONAL DISCLOSURES

NOTE 8.1 - SEGMENT REPORTING

1. DEFINITION OF SEGMENT REPORTING

The Group is managed on a matrix basis that takes into account its different business lines and the geographical breakdown of its activities. Segment reporting information is therefore presented under both criteria.

The Group includes in the results of each sub-division all operating income and expenses directly related to its activity. Income for each sub-division, except for the Corporate Centre, also includes the return on equity allocated to it, based on the estimated rate of return on Group equity. The return on the sub-division's book equity is then reallocated to the Corporate Centre. Transactions between sub-divisions are carried out under the same terms and conditions as those applying to non-Group customers.

The Group's core businesses are managed through three strategic pillars:

- French Retail Banking, which includes the domestic networks Societe Generale, Crédit du Nord and Boursorama;
- International Retail Banking & Financial Services, which consists of:
 - International Retail Banking, including consumer finance activities;
 - Financial Services to Corporates (operational vehicle leasing and fleet management, equipment and vendor finance);
 - Insurance activities.
- Global Banking and Investor Solutions which comprises:
 - Global Markets and Investors Services;
 - Financing and Advisory;
 - Asset and Wealth Management.

In addition to the strategic pillars, the Corporate Centre acts as the Group's central funding department. As such, it recognises the carrying cost of equity investments in subsidiaries and related dividend payments, as well as income and expenses stemming from the Group's Asset and Liability Management (ALM) and income from the Group's management of its assets (management of its industrial and bank equity portfolio and of its real estate assets). Income or expenses that do not relate directly to the activity of the core businesses are also allocated to the Corporate Centre.

Segment income take intra-Group transactions into account, while these transactions are eliminated from segment assets and liabilities.

The tax rate levied on each business line is based on the standard tax rate applicable in each country where the division makes profits. Any difference with respect to the Group's tax rate is allocated to the Corporate Centre.

For the purpose of segment reporting by geographical region, segment profit or loss and assets and liabilities are presented based on the location of the booking entities.

2. SEGMENT REPORTING BY DIVISION AND SUB-DIVISION

Table 8.1.A

	2022										
	French Retail Banking *	International Retail Banking and Financial Services				Global Banking and Investor Solutions				Corporate Centre ⁽¹⁾	Total Group Societe Generale
		Inter-national Retail Banking	Financial Services	Insurance	Total	Global Markets and Investors Services	Financing and advisory	Asset management *	Total		
<i>(In EUR m)</i>											
Net banking income	8,839	5,153	2,957	1,012	9,122	6,708	3,374	10,082	16	28,059	
Operating expenses ⁽²⁾	(6,473)	(2,794)	(1,149)	(391)	(4,334)	(4,705)	(1,929)	(6,634)	(1,189)	(18,630)	
Gross operating income	2,366	2,359	1,808	621	4,788	2,003	1,445	3,448	(1,173)	9,429	
Cost of risk	(483)	(637)	(68)	-	(705)	5	(426)	(421)	(38)	(1,647)	
Operating income	1,883	1,722	1,740	621	4,083	2,008	1,019	3,027	(1,211)	7,782	
Net income from investments accounted for using the equity method	8	1	-	-	1	6	3	6	-	15	
Net income / expense from other assets ⁽⁴⁾	57	11	-	-	11	3	-	6	(3,364)	(3,290)	
Value adjustments on goodwill	-	-	-	-	-	-	-	-	-	-	
Earnings before Tax	1,948	1,734	1,740	621	4,095	2,017	1,022	3,039	(4,575)	4,507	
Income tax	(504)	(441)	(394)	(161)	(996)	(458)	(118)	(576)	516	(1,560)	
Consolidated Net Income	1,444	1,293	1,346	460	3,099	1,559	904	2,463	(4,059)	2,947	
Non controlling interests	(1)	453	267	3	723	35	1	36	171	929	
Net income, Group Share	1,445	840	1,079	457	2,376	1,524	903	2,427	(4,230)	2,018	
Segment assets	300,473	124,734	45,735	162,483	332,952	591,685	172,360	-	764,045	89,348	1,486,818
Segment liabilities ⁽³⁾	308,602	89,678	15,532	149,005	254,215	637,903	72,044	-	709,947	141,272	1,414,036

Table 8.1.B

2021

	International Retail Banking and Financial Services					Global Banking and Investor Solutions				Corporate Centre ⁽¹⁾	Total Group Societe Generale
	French Retail Banking *	International Retail Banking	Financial Services	Insurance	Total	Global Markets and Investors Services *	Financing and advisory *	Asset management *	Total *		
<i>(In EUR m)</i>											
Net banking income	8,489	5,000	2,154	963	8,117	5,650	2,929	239	8,818	374	25,798
Operating expenses ⁽²⁾	(6,248)	(2,914)	(916)	(373)	(4,203)	(4,301)	(1,765)	(184)	(6,250)	(889)	(17,590)
Gross operating income	2,241	2,086	1,238	590	3,914	1,349	1,164	55	2,568	(515)	8,208
Cost of risk	(125)	(429)	(75)	-	(504)	(2)	(63)	-	(65)	(6)	(700)
Operating income	2,116	1,657	1,163	590	3,410	1,347	1,101	55	2,503	(521)	7,508
Net income from investments accounted for using the equity method	1	-	-	-	-	4	-	-	4	1	6
Net income / expense from other assets ⁽⁴⁾	23	18	1	(1)	18	(8)	(1)	-	(9)	603	635
Value adjustments on goodwill	-	-	-	-	-	-	-	-	-	(114)	(114)
Earnings before Tax	2,140	1,675	1,164	589	3,428	1,343	1,100	55	2,498	(31)	8,035
Income tax	(592)	(405)	(270)	(165)	(840)	(284)	(155)	(13)	(452)	187	(1,697)
Consolidated Net Income	1,548	1,270	894	424	2,588	1,059	945	42	2,046	156	6,338
Non controlling interests	(2)	334	169	3	506	27	1	-	28	165	697
Net income, Group Share	1,550	936	725	421	2,082	1,032	944	42	2,018	(9)	5,641
Segment assets	299,249	135,993	41,362	181,148	358,503	505,796	149,202	315	655,313	151,384	1,464,449
Segment liabilities ⁽³⁾	304,877	101,650	13,834	166,055	281,539	636,754	57,221	31	694,006	113,164	1,393,586

* Following the steering changes at the end of 2021 resulting from the sale of Lyxor, Private Banking is part of the pillar French Retail Banking since 1 January 2022. The 2021 data have been restated mainly to reflect this transfer.

- (1) Income and expenses, as well as assets and liabilities that are not directly related to business line activities are allocated to the Corporate Centre. Corporate Centre income includes, in particular, some consequences of the Group's centralised management of litigation and of transactions leading to changes in the consolidation scope.
- (2) These amounts include Personnel expenses, Other operating expenses and Amortisation, depreciation and impairment of tangible and intangible fixed assets.
- (3) Segment liabilities correspond to debts (i.e. total liabilities excluding equity).
- (4) The Net income / expense from other assets items as at 31 December 2022, mainly includes the impacts of the sale of Rosbank and the Group's insurance subsidiaries in Russia (see Note 2.1).

3. SEGMENT REPORTING BY GEOGRAPHICAL REGION

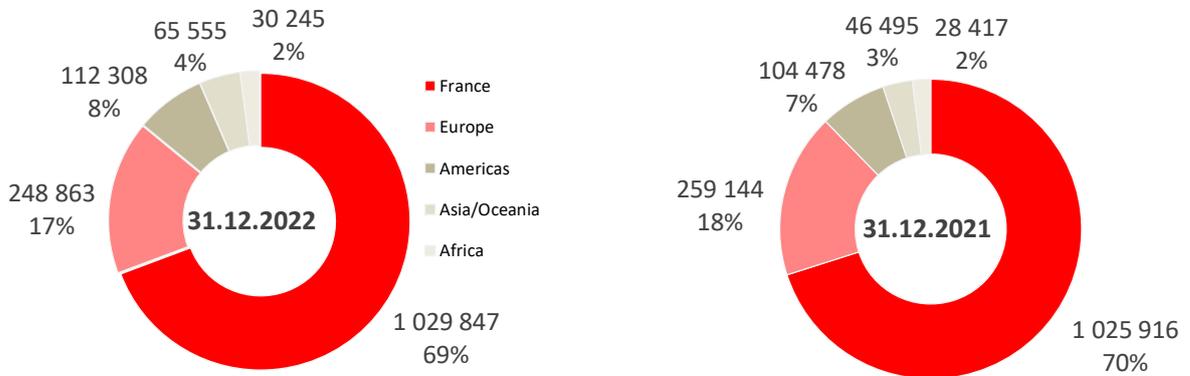
GEOGRAPHICAL BREAKDOWN OF NET BANKING INCOME (IN MILLIONS OF EUROS)



As at 31 December 2022, the amount of Net Banking Income is EUR 28,059 million compared to EUR 25,798 million as at 31 December 2021.

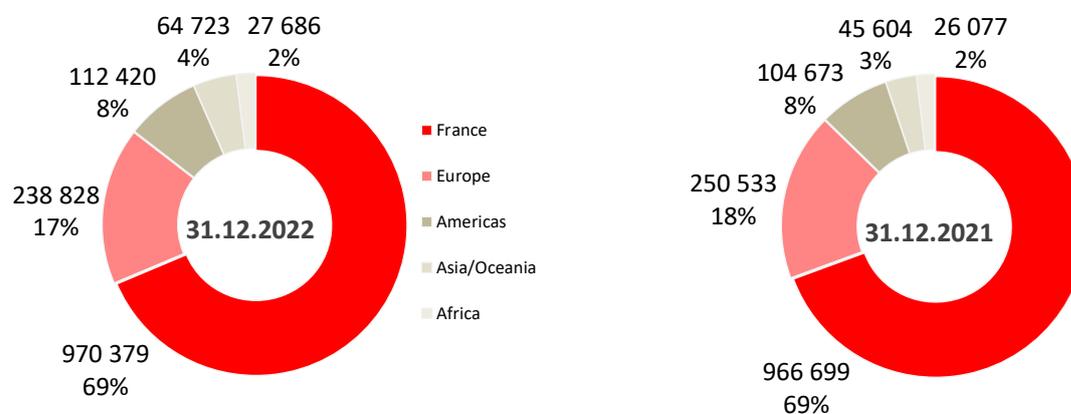
GEOGRAPHICAL BREAKDOWN OF BALANCE SHEET ITEMS (IN MILLIONS OF EUROS)

ASSETS



As at 31 December 2022, the amount of assets is EUR 1,486,818 million compared to EUR 1,464,449 million as at 31 December 2021.

LIABILITIES



As at 31 December 2022, the amount of liabilities (except shareholder equity) is EUR 1,414,036 million compared to EUR 1,393,586 million as at 31 December 2021.

Segment liabilities correspond to debts (total liabilities excluding equity).

NOTE 8.2 - OTHER OPERATING EXPENSES

ACCOUNTING PRINCIPLES

The Group records operating expenses under expenses, according to the type of services to which they refer and the rate of use of said services.

Rentals include real estate and equipment leasing expenses, which do not result in a recognition of a lease liability and right-of-use asset (see Note 8.4).

Taxes and levies are only booked when the triggering event provided for by law occurs. If the obligation to pay the tax arises from the gradual operation of an activity, the expense must be spread out over the same period. Finally, if the obligation to pay is generated when a threshold is reached, the expense is only recorded once the threshold is reached.

Taxes and levies cover all contributions levied by a public authority and include the contributions paid to the Single Resolution Fund and the Deposit Insurance and Resolution Fund, the systemic risk tax, and contributions for ACPR control costs, which are recognised in profit or loss at the start of the financial year. The Company social solidarity contribution (C3S), based on income generated in previous financial year, is fully recognised in profit or loss as at 1 January of the current financial year.

Other mainly includes building maintenance and other costs, travel and business expenses, and advertising expenses.

Table 8.2.A

<i>(In EUR m)</i>	2022	2021
Rentals	(348)	(323)
Taxes and levies	(1,359)	(993)
Data & telecom (excluding rentals)	(2,574)	(2,371)
Consulting fees	(1,351)	(1,157)
Other	(1,377)	(1,337)
Total	(7,009)	(6,181)

CONTRIBUTION TO BANK RESOLUTION MECHANISMS

The European regulatory framework designed to enhance financial stability was updated by the Directive 2014/59/UE of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms (*Bank Recovery and Resolution Directive*).

The European Regulation UE n°806/2014 of 15 July 2014 then determined the financing means of resolution mechanisms within the European Banking Union through the establishment of a Single Resolution Fund (SRF). In addition to this instrument, the National Resolution Fund (NRF) exists for institutions subject to this resolution mechanisms, but that have no SRF.

The Single Resolution Fund, established in January 2016, shall receive annual contributions from the participating European financial institutions. By the end of 2023, the available financial means of the Fund shall reach at least 1% of the amount of covered deposits of all these participating financial institutions. A share of the annual contributions can be provided through irrevocable payment commitments.

In 2022, the Group's contributions to the SRF and the NRF were as follows:

- cash contributions (85%) for a total of EUR 863 million (versus EUR 586 million in 2021) of which EUR 811 million for the SRF and EUR 52 million for the NRF. These contributions are non-tax-deductible in France and have been recorded in the income statement in Other administrative expenses, among Taxes and levies;
- irrevocable payment commitments (15%) backed by a cash collateral for EUR 142 million related to the SRF (versus EUR 96 million in 2021) recorded as an asset in the balance sheet, among Other assets.

NOTE 8.3 - PROVISIONS

ACCOUNTING PRINCIPLES

Under balance sheet liabilities, Provisions are comprised of provisions for financial instruments, disputes and employee benefits.

OVERVIEW

Table 8.3.A

<i>(In EUR m)</i>	Provisions as at 31.12.2021	Allocations	Write-backs available	Net allocation	Write- backs used	Currency and others	Provisions as at 31.12.2022
Provisions for credit of risk on off balance sheet commitments (see Note 3.8)	888	683	(660)	23	-	(13)	898
Provisions for employee benefits (see Note 5)	2,301	528	(164)	364	(187)	(476)	2,002
Provisions for mortgage savings plans and accounts commitments	316	32	(223)	(191)	-	-	125
Other provisions	1,345	616	(347)	269	(43)	(17)	1,554
Total	4,850	1,859	(1,394)	465	(230)	(506)	4,579

1. COMMITMENTS UNDER MORTGAGE SAVINGS AGREEMENTS

ACCOUNTING PRINCIPLES

In France, *Comptes d'épargne-logement* (CEL or mortgage savings accounts) and *Plans d'épargne-logement* (PEL or mortgage savings plans) are special savings schemes for individual customers which are governed by Law 65-554 of 10 July 1965. These products combine an initial deposit phase in the form of an interest-earning savings account, followed by a lending phase where the deposits are used to provide mortgage loans. The lending phase is subject to the prior existence of the savings phase and is therefore inseparable from it. The savings deposits collected and loans granted are measured at amortised cost.

These instruments create two types of commitments for the Group: the obligation to pay interest on customer savings for an indeterminate future period at an interest rate established at the inception of the mortgage savings agreement, and the obligation to subsequently lend to the customer at an interest rate also established at the inception of the savings agreement.

If it is clear that commitments under the PEL/CEL agreements will have negative consequences for the Group, a provision is recorded on the liabilities side of the balance sheet. Any changes in these provisions are recognised as Net banking income under net interest income. These provisions only relate to commitments arising from PEL/CEL that are outstanding at the date of calculation.

Provisions are calculated for each generation of mortgage savings plans (PEL), with no netting between different PEL generations, and for all mortgage saving accounts (CEL) making up a single generation.

During the deposit phase, the underlying commitment used to determine the amount to be provisioned is calculated as the difference between the average expected amount of deposits and the minimum expected amount. These two amounts are determined statistically on the basis of the historical observations of past customer behaviour.

During the lending phase, the underlying commitment to be provisioned includes loans already granted but not yet drawn at the date of calculation, and future loans that are considered statistically probable on the basis of deposits that are currently recognised in the balance sheet at the date of calculation and on the basis of historical observations of past customer behaviour.

A provision is recognised if the discounted value of expected future earnings for a given generation of PEL/CEL is negative. Earnings are estimated on the basis of interest rates available to individual customers for equivalent savings and loan products, with a similar estimated life and date of inception.

OUTSTANDING DEPOSITS IN PEL/CEL ACCOUNTS

Table 8.3.B

<i>(In EUR m)</i>	31.12.2022	31.12.2021
PEL accounts	17,846	18,789
<i>Less than 4 years old</i>	773	714
<i>Between 4 and 10 years old</i>	8,774	10,411
<i>More than 10 years old</i>	8,299	7,664
CEL accounts	1,629	1,513
Total	19,475	20,302

OUTSTANDING HOUSING LOANS GRANTED WITH RESPECT TO PEL/CEL ACCOUNTS

Table 8.3.C

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Less than 4 years old	-	0
Between 4 and 10 years old	1	3
More than 10 years old	6	7
Total	7	10

PROVISIONS FOR COMMITMENTS LINKED TO PEL/CEL ACCOUNTS

Table 8.3.D

<i>(In EUR m)</i>	31.12.2021	Allocations	Write-backs	31.12.2022
PEL accounts	302	1	(224)	79
<i>Less than 4 years old</i>	2	1	-	3
<i>Between 4 and 10 years old</i>	36	-	(34)	2
<i>More than 10 years old</i>	264	-	(190)	74
CEL accounts	14	31	-	45
Total	316	32	(223)	125

The increase in interest rates (to which the level of provisioning is sensitive) explains the sharp decrease in the provisions for mortgage savings accounts and plans observed in 2022. These provisions are still mainly related to the commitment to remunerate cash deposits. The level of provisions amounts to 0.7% of the total outstanding stock as at 31 December 2022.

METHODS USED TO ESTABLISH PROVISION VALUATION INPUTS

The inputs used to estimate future customer behaviour are derived from historical observations of customer behaviour patterns over a long period (more than 10 years). The values of these inputs can be adjusted whenever changes are made to regulations that may undermine the effectiveness of past data as an indicator of future customer behaviour.

The values of the different market inputs used, notably interest rates and margins, are calculated on the basis of observable data and constitute a best estimate, at the date of valuation, of the future value of these

items for the period in question, in line with the Retail Banking division's policy of interest rate risk management.

The discount rates used are derived from the zero-coupon swaps vs. Euribor yield curve at the valuation date, averaged over a 12-month period.

2. OTHER PROVISIONS

Other provisions include provisions for restructuring (except staff costs), provisions for commercial litigation and provisions for future repayment of funds in connection with customer financing transactions.

The Group is subject to an extensive legal and regulatory framework in the countries where it operates. In this complex legal context, the Group and some of its former and current representatives may be involved in various legal actions, including civil, administrative and criminal proceedings. The vast majority of these proceedings are part of the Group's current business. In recent years, litigation with investors and the number of disputes involving financial intermediaries such as banks and investment advisors has increased, partly due to a difficult financial environment.

It is by nature difficult to foresee the outcome of disputes, regulatory proceedings and acts involving Group entities, particularly if they are initiated by various categories of complainants, if the amount of claims for damages is not specified or is indeterminate or if the proceedings have no precedent.

In preparing its financial statements, the Group assesses the consequences of the legal, regulatory or arbitration proceedings in which it is involved. A provision is booked when losses from these proceedings become probable and the amount can be estimated reliably.

To assess the probability of losses and the amount of these losses, and thus to determine the amount of provisions to book, estimations are important. Management makes these estimates by exercising its judgment and taking into account all information available when financial statements are prepared. In particular, the Group takes into account the nature of the dispute, the underlying facts, ongoing proceedings and court decisions already taken, as well as its experience and the experiences of other companies dealing with similar cases (assuming that the Group has knowledge thereof) and, where appropriate, the opinion and reports of experts and independent legal advisers.

Each quarter, the Group carries out a detailed examination of outstanding disputes that present a significant risk. The description of those disputes is presented in Note 9 "Information on risks and litigation".

NOTE 8.4 - TANGIBLE AND INTANGIBLE FIXED ASSETS

ACCOUNTING PRINCIPLES

TANGIBLE AND INTANGIBLE FIXED ASSETS

Tangible and intangible fixed assets include operating and investment fixed assets. Equipment assets held for operating leases purpose are included in operating tangible assets, while buildings held for leasing purposes are included in investment property.

Tangible and intangible fixed assets are carried at their purchase price on the asset side of the balance sheet, less depreciation, amortisation and impairment.

The purchase price of fixed assets includes borrowing costs incurred to fund a lengthy construction period for the fixed assets, along with all other directly attributable expenses. Investment subsidies received are deducted from the cost of the relevant assets. Software developed internally is recorded on the asset side of the balance sheet in the amount of the direct cost of development.

As soon as they are fit for use, fixed assets are depreciated or amortised using the component-based approach. Each component is depreciated or amortised over its own useful life. The Group has applied this approach to its operating properties, breaking down its assets into components with depreciation periods of 10 to 50 years. Depreciation periods for fixed assets other than buildings depend on their useful life, which is usually estimated at 3 to 20 years.

Any residual value of the asset is deducted from its depreciable amount. If there is a subsequent decrease or increase in this initial residual value, the depreciable amount of the asset is adjusted, leading to a prospective modification of the depreciation schedule.

Depreciation and amortisation are recorded in the income statement under Amortisation, depreciation and impairment of tangible and intangible fixed assets.

Fixed assets grouped into Cash Generating Units are tested for impairment whenever there is any indication that their value may have diminished. Allocations and reversals of provisions for impairment are recorded in profit or loss under Amortisation, depreciation and impairment of tangible and intangible fixed assets.

Realised capital gains and losses on operating fixed assets are recognised under Net income from other assets.

Investment properties are depreciated using the component-based method. Each component is depreciated over its own useful life, ranging from 10 to 50 years.

Profits or losses on operating lease assets and on investment property, including amortisation and depreciation, are recognised under Income from other activities and Expense from other activities (see Note 4.2).

RIGHTS-OF-USE FOR ASSETS LEASED BY THE GROUP

Lease

Definition of the lease

A contract is, or contains, a lease if it conveys to the lessor the right to control the use of an identified asset for a period of time in exchange for consideration:

- Control is conveyed when the customer has both the right to direct the identified asset's use, and to obtain substantially all the economic benefits from that use throughout the lease period;
- The existence of an identified asset will depend on the absence, for the lessor, of substantive substitution rights for the leased asset; this condition is measured with regard to the facts and circumstances existing at the commencement of the contract. If the lessor has the option of freely substituting the leased asset, the contract can not be qualified as a lease, since its purpose is the provision of a capacity and not an asset;

- A capacity portion of an asset is still an identified asset if it is physically distinct (e.g. a floor of a building). Conversely, a portion of the capacity or of an asset that is not physically distinct does not constitute an identified asset (e.g. the lease of co-working area within a unit with no pre-defined location inside that unit).

Separation of lease and non-lease components

A contract may cover the lease of an asset by the lessor as well as the supply of additional services by that lessor. In this scenario, the lessee can separate the lease components from the non-lease components of the contract and treat them separately. The rental payments stipulated in the contract must be separated between the lease components and the non-lease components based on their individual prices (as directly indicated in the contract or estimated on the basis on all of the observable information). If the lessee cannot separate the lease components from the non-lease components (or services), the entire contract is treated as a lease.

Lease term

Definition of the lease term

The lease period to be applied in determining the rental payments to be discounted matches the non-cancellable period of the lease adjusted for:

- options to extend the contract that the lessee is reasonably certain to exercise;
- and early termination options that the lessee is reasonably certain not to exercise.



* if the lessee is reasonably certain to exercise that option

** if the lessee is reasonably certain not to exercise that option

The measurement of the reasonable certainty of exercising or not exercising the extension or early termination options shall take into account all the facts and circumstances that may create an economic incentive to exercise or not these options, specifically:

- the conditions for exercising these options (including measurement of the amount of the rental payments in case of an extension, or of the amount of penalties that may be imposed for early termination);
- substantial changes made to the leased premises (specific layouts, such as a bank vault);
- the costs associated with terminating the contract (negotiation costs, moving costs, research costs for a new asset that meets the lessee's requirements, etc.);
- the importance of the leased asset for the lessee, in view of its specific nature, its location, or the availability of substitute assets (specifically for branches located in commercially strategic sites, given their accessibility, expected traffic, or the prestige of the location);
- the history of renewals of similar contracts, as well as the strategy for the future use of the assets (based on the prospect of redeployment or rearrangement of a commercial branch network, for example).

When the lessee and the lessor each have the right to terminate the lease without the prior agreement of the other party and with no penalty other than a negligible one, the contract is no longer binding, and thus it no longer creates a lease liability.

In France, most property leases on premises occupied by branches are 9-year leases with an early-termination option at the end of 3 and 6-year term (leases referred to as "3/6/9"); at the end of the 9-year term, if no new agreement is signed, the initial lease is renewed by tacit agreement for a 5-year term. This 5-year term may be modified depending on the quality of the location, the completion of major investments, or the planned closure of a group of designated branches.

Changing the lease term

The term must be modified in case of a change of circumstances which lead the lessee to revise the exercise of the options included in the lease contract or in case of events which contractually oblige the lessee to exercise (or not) an option that had not been included (or is included) in the lease contract.

Following a change in the lease term, the lease obligation must be reassessed to reflect those changes by using a revised discount rate for the remaining estimated term of the contract.

Accounting treatment by the Group as a lessee

On the commencement date (on which the leased asset is made available for use), the lessee must record a lease liability on the liabilities side of the balance sheet and a right-of-use asset on the assets side of the balance sheet except for the exemptions described below.

In the income statement, the lessee must recognise an interest expense calculated on the lease liability under Net banking income and a depreciation of the right-of-use under Amortisation, depreciation and impairment of tangible and intangible fixed assets.

The rental payments will partly reduce the lease liability and partly remunerate this liability in the form of interest expense.

Exemptions and exclusions

The Group does not apply the new lease treatment to contracts with a term of less than one year (including renewal options), nor to contracts on low-value items by applying the exemption threshold of USD 5,000 as indicated in the standard's Basis for Conclusions (the threshold should be measured against the replacement cost per unit of the leased asset).

Rental payment amounts

The payments to be considered for the measurement of the lease liability include fixed and variable rental payments based on an index (e.g. consumer price index or construction cost index), plus, where applicable, the funds that the lessee expects to pay the lessor for residual value guarantees, purchase options, or early termination penalties.

However, variable lease payments that are indexed on the use of the leased asset (indexed on revenue or mileage, for example) are excluded from the measurement of lease liability. This variable portion of the rental payments is recorded in the net income over time according to fluctuations in contractual indexes fluctuations.

Rental payments have to be considered based on their amount net of value-added tax. In addition, for building leases, occupancy taxes and property taxes passed on by lessors will be excluded from lease liabilities because their amount, as set by the competent public authorities, is variable.

Recognition of the lease liability

The liability initial amount is equal to the discounted value of the rental payments that will be payable over the lease period.

This lease liability is then measured at the amortised cost using the effective interest rate method: part of each rental payment will then be booked as interest expenses in the income statement, and part will be gradually deducted from the lease liability on the balance sheet.

After the commencement date, the amount of the lease liability may be adjusted if the lease is amended, the lease period is re-estimated, or to account for contractual changes in the rental payments related to the application of indices or rates.

As applicable, the lessee must also recognise a provision in its liabilities to cover the costs of restoring the leased asset that would be assumed when the lease ends.

Recognition of the right-of-use

On the availability date of the leased asset, the lessee must enter a right-of-use asset, on the assets side of the balance sheet, for an amount equal to the initial value of the lease liability, plus, as applicable, initial

direct costs (e.g. issuance of an authenticated lease, registration fees, negotiation fees, front-end fee, leasehold right, lease premium, etc), advance payments, and restoration costs.

This asset is then depreciated on a straight-line basis over the lease period that is applied for measuring the lease liability.

After the commencement date, the asset's value may be adjusted if the lease is amended, as it is the case for the lease liability.

Rights-of-use is presented on the lessee's balance sheet under the items of fixed assets where properties of the same type that are held in full ownership are entered. If the lease stipulates the initial payment of a leasehold right to the former tenant of the premises, the amount of that right is stated as a separate component of the right of use and presented under the same heading as the latter.

Lease discount rates

The Group uses the lessees' incremental borrowing rate to discount the rental payments as well as the amount of lease liabilities. For the entities which can directly refinance themselves on their local markets, the incremental borrowing rate is set at the lessee entity level, not at the Group level, in consideration of the borrowing terms and that entity's credit risk. For the entities which refinance themselves through the Group, the incremental borrowing rate is set by the Group.

The discount rates are set according to the currency, the country of the lessee entities and the maturity estimated of the contracts.

CHANGES IN TANGIBLE AND INTANGIBLE FIXED ASSETS

Table 8.4.A

<i>(In EUR m)</i>	31.12.2021	Increases / allowances	Disposals / reversals	Other movements	31.12.2022
Intangible Assets					
Gross value	8,410	974	(146)	(258)	8,980
Amortisation and impairments	(5,677)	(637)	110	106	(6,098)
Tangible Assets (w/o assets under operating leases)					
Gross value	11,463	509	(519)	(422)	11,031
Depreciation and impairments	(6,859)	(544)	439	222	(6,742)
Assets under operating leases					
Gross value	31,080	12,075	(9,524)	(698)	32,933
Depreciation and impairments	(8,514)	(3,749)	3,070	331	(8,862)
Investment Property					
Gross value	32	9	(13)	2	30
Depreciation and impairments	(20)	(1)	2	-	(19)
Rights-of-use					
Gross value	3,181	402	(249)	(113)	3,221
Amortisation and impairments	(1,128)	(447)	119	71	(1,385)
Total	31,968	8,591	(6,711)	(759)	33,089

BREAKDOWN OF MINIMUM PAYMENTS RECEIVABLE ON OPERATING LEASE ASSETS

Table 8.4.B

<i>(In EUR m)</i>	31.12.2022	31.12.2021
Payments due in less than five years	25,016	22,371
<i>Payments due in less than one year</i>	8,081	8,319
<i>Payments due from one to two years</i>	6,628	5,905
<i>Payments due from two to three years</i>	5,788	5,090
<i>Payments due from three to four years</i>	3,639	2,437
<i>Payments due from four to five years</i>	880	620
Payments due in more than five years	43	168
Total	25,059	22,539

INFORMATIONS RELATIVE TO LEASES ON TANGIBLE ASSETS USED BY THE GROUP

	<p>Property Leases</p> <p>Most of the leases (more than 90%) involve building leases contracted for the lease of commercial and office space:</p> <ul style="list-style-type: none"> ▪ the commercial spaces are branches in the Group's French and international retail banking networks. In France, the majority of property leases contracted are 9-year commercial leases with early termination options at 3 and 6 years (so-called "3/6/9" leases). If a new contract is not signed by the end of that 9-year period, the initial lease is automatically extended; ▪ the office buildings are leased for certain departments reporting to the Group's French headquarters or the local head offices of the main foreign subsidiaries, and for certain locations in the main international financial centres: London, New York, Hong Kong... <p>Outside France, residual lease periods are generally below 10 years. In some countries, such as Russia, leases can be annual, with optional automatic renewal. In other locations, specifically London and New York, lease periods can be as long as 25 years.</p>
	<p>Equipment Leases</p> <p>Other leases (less than 10%) are mainly computer equipment leases and a very small percentage of vehicle leases.</p>

OVERVIEW TABLE OF LEASE TRANSACTION COSTS AND SUBLEASE INCOME

Table 8.4.C

<i>(In EUR m)</i>	31.12.2022			
	Real estate	IT	Others	Total
Lease	(440)	(47)	(8)	(495)
<i>Interest expenses on lease liabilities</i>	(37)	(0)	(0)	(37)
<i>Depreciation charge for right-of-use assets</i>	(361)	(42)	(4)	(407)
<i>Expense relating to short-term leases</i>	(29)	(1)	(3)	(33)
<i>Expense relating to leases of low-value assets</i>	(1)	(4)	(1)	(6)
<i>Expense relating to variable lease payments</i>	(12)	(0)	(0)	(12)
Sublease income	11	-	-	11

Table 8.4.D

	31.12.2021			
<i>(In EUR m)</i>	Real estate	IT	Others	Total
Lease	(470)	(45)	(8)	(523)
<i>Interest expenses on lease liabilities</i>	(39)	-	-	(39)
<i>Depreciation charge for right-of-use assets</i>	(385)	(41)	(3)	(429)
<i>Expense relating to short-term leases</i>	(36)	-	(3)	(39)
<i>Expense relating to leases of low-value assets</i>	(2)	(4)	(2)	(8)
<i>Expense relating to variable lease payments</i>	(8)	-	-	(8)
Sublease income	14	-	-	14

NOTE 8.5 - COMPANIES INCLUDED IN THE CONSOLIDATION SCOPE

Table 8.5.A

Country	Activity	Method *	Group ownership interest		Group voting interest		
			As at 31.12.2022	As at 31.12.2021	As at 31.12.2022	As at 31.12.2021	
South Africa							
(1)	SG JOHANNESBURG	Bank	FULL	100	100	100	100
Algeria							
	ALD AUTOMOTIVE ALGERIE SPA	Specialist Financing	FULL	75.94	79.81	99.99	99.99
	SOCIETE GENERALE ALGERIE	Bank	FULL	100	100	100	100
Germany							
	ALD AUTOLEASING D GMBH	Specialist Financing	FULL	75.94	79.82	100	100
	ALD INTERNATIONAL GMBH	Specialist Financing	FULL	75.94	79.82	100	100
	ALD INTERNATIONAL GROUP HOLDINGS GMBH	Specialist Financing	FULL	75.94	79.82	100	100
	ALD LEASE FINANZ GMBH	Specialist Financing	FULL	100	100	100	100
	BANK DEUTSCHES KRAFTFAHRZEUGG EWERBE GMBH	Specialist Financing	FULL	99.94	99.94	90	51
	BDK LEASING UND SERVICE GMBH	Specialist Financing	FULL	100	100	100	100
	CAR PROFESSIONAL FUHRPARKMANAGEMENT UND BERATUNGSGESELLSCHAFT MBH & CO. KG	Specialist Financing	FULL	75.94	79.82	100	100
	CARPOOL GMBH	Broker	FULL	75.94	79.82	100	100
(6)	FLEETPOOL GMBH	Specialist Financing	FULL	75.94	0	100	0
	GEFA BANK GMBH	Specialist Financing	FULL	100	100	100	100
	GEFA VERSICHERUNGSDIENST GMBH	Specialist Financing	EFS	100	100	100	100
	HANSEATIC BANK GMBH & CO KG	Specialist Financing	FULL	75	75	75	75
	HANSEATIC GESELLSCHAFT FUR BANKBETEILIGUNGEN MBH	Portfolio Management	FULL	75	75	100	100
	HSCE HANSEATIC SERVICE CENTER GMBH	Services	FULL	75	75	100	100
	INTERLEASING DELLO HAMBURG G.M.B.H.	Specialist Financing	FULL	75.94	79.82	100	100
	RED & BLACK AUTO GERMANY 4 UG (HAFTUNGSBESCHRANKT)	Financial Company	FULL	100	100	100	100
(2)	RED & BLACK AUTO GERMANY 5 UG (HAFTUNGSBESCHRANKT)	Financial Company	FULL	0	100	0	100
	RED & BLACK AUTO GERMANY 6 UG	Financial Company	FULL	100	100	100	100
	RED & BLACK AUTO GERMANY 7	Financial Company	FULL	100	100	100	100
	RED & BLACK AUTO GERMANY 8	Financial Company	FULL	100	100	100	100

	(6)	RED & BLACK AUTO GERMANY 9 UG (HAFTUNGSBESCHR ANKT)	Financial Company	FULL	100	0	100	0
		SG EQUIPMENT FINANCE GMBH	Specialist Financing	FULL	100	100	100	100
	(1)	SG FRANCFORT	Bank	FULL	100	100	100	100
		SOCIETE GENERALE EFFEKTEN GMBH	Financial Company	FULL	100	100	100	100
		SOCIETE GENERALE SECURITIES SERVICES GMBH	Specialist Financing	FULL	100	100	100	100
	(1)	SOGECAP DEUTSCHE NIEDERLASSUNG	Insurance	FULL	100	100	100	100
	(1)	SOGESSUR DEUTSCHE NIEDERLASSUNG	Insurance	FULL	100	100	100	100
Australia								
		SOCIETE GENERALE SECURITIES AUSTRALIA PTY LTD	Broker	FULL	100	100	100	100
	(1)	SOCIETE GENERALE SYDNEY BRANCH	Bank	FULL	100	100	100	100
Austria								
		ALD AUTOMOTIVE FUHRPARKMANAGEMENT UND LEASING GMBH	Specialist Financing	FULL	75.94	79.82	100	100
	(1)	SG VIENNE	Bank	FULL	100	100	100	100
Belarus								
		ALD AUTOMOTIVE LLC	Specialist Financing	FULL	75.94	79.82	100	100
Belgium								
		AXUS FINANCE SRL	Specialist Financing	FULL	75.94	79.82	100	100
		AXUS SA/NV	Specialist Financing	FULL	75.94	79.82	100	100
		BASTION EUROPEAN INVESTMENTS S.A.	Financial Company	FULL	60.74	60.74	100	100
		PARCOURS BELGIUM	Specialist Financing	FULL	75.94	79.82	100	100
	(1)	SG BRUXELLES	Bank	FULL	100	100	100	100
	(1)	SG EQUIPMENT FINANCE BENELUX B.V. BELGIAN BRANCH	Specialist Financing	FULL	100	100	100	100
		SOCIETE GENERALE IMMOBEL	Financial Company	FULL	100	100	100	100
Benin								
		SOCIETE GENERALE BENIN	Bank	FULL	93.43	93.43	94.1	94.1
Bermuda								
		CATALYST RE INTERNATIONAL LTD.	Insurance	FULL	100	100	100	100
Brazil								
		ALD AUTOMOTIVE S.A.	Specialist Financing	FULL	75.94	79.82	100	100
		ALD CORRETORA DE SEGUROS LTDA	Specialist Financing	FULL	75.94	79.82	100	100
		BANCO SOCIETE GENERALE BRASIL S.A.	Bank	FULL	100	100	100	100
		SOCIETE GENERALE EQUIPMENT FINANCE S/A - ARRENDAMENTO MERCANTIL	Specialist Financing	FULL	100	100	100	100
Bulgaria								
		ALD AUTOMOTIVE EOOD	Specialist Financing	FULL	75.94	79.82	100	100
Burkina Faso								
		SOCIETE GENERALE BURKINA FASO	Bank	FULL	51.27	51.27	52.61	52.61
Cayman Islands								

	AEGIS HOLDINGS (OFFSHORE) LTD.	Financial Company	FULL	100	100	100	100
Cameroon							
	SOCIETE GENERALE CAMEROUN	Bank	FULL	58.08	58.08	58.08	58.08
Canada							
	13406300 CANADA INC. (EX-SOCIETE GENERALE CANADA)	Bank	FULL	100	100	100	100
(1)	SOCIETE GENERALE (CANADA BRANCH)	Bank	FULL	100	100	100	100
	SOCIETE GENERALE CAPITAL CANADA INC	Broker	FULL	100	100	100	100
Chile							
	ALD AUTOMOTIVE LIMITADA	Specialist Financing	FULL	75.94	79.82	100	100
China							
	SOCIETE GENERALE (CHINA) LIMITED	Bank	FULL	100	100	100	100
	SOCIETE GENERALE LEASING AND RENTING CO. LTD	Specialist Financing	FULL	100	100	100	100
Colombia							
	ALD AUTOMOTIVE S.A.S	Specialist Financing	FULL	75.94	79.82	100	100
Congo							
	SOCIETE GENERALE CONGO	Bank	FULL	93.47	93.47	93.47	93.47
South Korea							
	SG SECURITIES KOREA CO., LTD.	Broker	FULL	100	100	100	100
(1)	SG SEOUL	Bank	FULL	100	100	100	100
Ivory Coast							
	SOCIETE GENERALE CAPITAL SECURITIES WEST AFRICA	Portfolio Management	FULL	71.25	71.25	99.98	99.98
	SOCIETE GENERALE COTE D'IVOIRE	Bank	FULL	73.25	73.25	73.25	73.25
Croatia							
	ALD AUTOMOTIVE D.O.O. ZA OPERATIVNI I FINANCIJSKI LEASING	Specialist Financing	FULL	75.94	79.82	100	100
	ALD FLEET SERVICES D.O.O ZA TRGOVINU I USLUGE	Specialist Financing	FULL	75.94	79.82	100	100
Curaçao							
(2)	SGA SOCIETE GENERALE ACCEPTANCE N.V	Financial Company	FULL	0	100	0	100
Denmark							
	ALD AUTOMOTIVE A/S	Specialist Financing	FULL	75.94	79.82	100	100
	NF FLEET A/S	Specialist Financing	FULL	60.75	63.85	80	80
United Arab Emirates							
(1)	SOCIETE GENERALE, DIFC BRANCH (EX-SOCIETE GENERALE DUBAI)	Bank	FULL	100	100	100	100
Spain							
	ALD AUTOMOTIVE S.A.U	Specialist Financing	FULL	75.94	79.82	100	100
	ALTURA MARKETS, SOCIEDAD DE VALORES, SA	Broker	EJV	50	50	50	50
(1)	GENEFIM SUCURSAL EN ESPANA	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SG EQUIPMENT FINANCE IBERIA, E.F.C. S.A.U (EX-SG	Specialist Financing	FULL	100	100	100	100

	EQUIPMENT FINANCE IBERIA, E.F.C, S.A.)						
	SOCGEN FINANCIACIONES IBERIA, S.L.	Bank	FULL	100	100	100	100
	SOCGEN INVERSIONES FINANCIERAS S.L. (EX-SOCGEN INVERSIONES FINANCIERAS SA)	Financial Company	FULL	100	100	100	100
(1)	SOCIETE GENERALE SUCCURSAL EN ESPANA	Bank	FULL	100	100	100	100
	SODEPROM	Real Estate and Real Estate Financing	FULL	100	100	100	100
(6)	SOLUCIONES DE RENTING Y MOVILIDAD, S.L. (SOCIEDAD UNIPERSONAL)	Specialist Financing	FULL	75.94	0	100	0
Estonia							
	ALD AUTOMOTIVE EESTI AS	Specialist Financing	FULL	56.96	59.87	75.01	75.01
United States of America							
	AEGIS HOLDINGS (ONSHORE) INC.	Financial Company	FULL	100	100	100	100
	SG AMERICAS EQUITIES CORP.	Financial Company	FULL	100	100	100	100
	SG AMERICAS OPERATIONAL SERVICES, LLC	Services	FULL	100	100	100	100
	SG AMERICAS SECURITIES HOLDINGS, LLC	Bank	FULL	100	100	100	100
	SG AMERICAS SECURITIES, LLC	Broker	FULL	100	100	100	100
	SG AMERICAS, INC.	Financial Company	FULL	100	100	100	100
	SG CONSTELLATION, INC.	Financial Company	FULL	100	100	100	100
	SG EQUIPMENT FINANCE USA CORP.	Specialist Financing	FULL	100	100	100	100
	SG MORTGAGE FINANCE CORP.	Financial Company	FULL	100	100	100	100
	SG MORTGAGE SECURITIES, LLC	Portfolio Management	FULL	100	100	100	100
	SG STRUCTURED PRODUCTS, INC.	Specialist Financing	FULL	100	100	100	100
(5)	SGAIH, INC.	Financial Company	FULL	0	100	0	100
(1)	SOCIETE GENERALE (NEW YORK)	Bank	FULL	100	100	100	100
	SOCIETE GENERALE FINANCIAL CORPORATION	Financial Company	FULL	100	100	100	100
	SOCIETE GENERALE INVESTMENT CORPORATION	Financial Company	FULL	100	100	100	100
	SOCIETE GENERALE LIQUIDITY FUNDING, LLC	Financial Company	FULL	100	100	100	100
Finland							
	AXUS FINLAND OY	Specialist Financing	FULL	75.94	79.82	100	100
	NF FLEET OY	Specialist Financing	FULL	60.75	63.85	80	80
France							
	29 HAUSSMANN EQUILIBRE	Portfolio Management	FULL	87.1	87.1	87.1	87.1
	29 HAUSSMANN EURO RDT	Portfolio Management	FULL	58.1	58.1	58.1	58.1

	29 HAUSSMANN SELECTION EUROPE - K	Financial Company	FULL	45.23	45.23	45.23	45.23
	29 HAUSSMANN SELECTION MONDE	Portfolio Management	FULL	68.7	68.7	68.7	68.7
	908 REPUBLIQUE	Real Estate and Real Estate Financing	ESI	40	32	40	40
	AIR BAIL	Specialist Financing	FULL	100	100	100	100
	AIX - BORD DU LAC - 3	Real Estate and Real Estate Financing	EJV	50	50	50	50
	AIX - BORD DU LAC - 4	Real Estate and Real Estate Financing	EJV	50	50	50	50
	ALD	Specialist Financing	FULL	75.94	79.82	75.94	79.82
	ALFORTVILLE BAIGNADE	Real Estate and Real Estate Financing	ESI	40	40	40	40
	AMPERIM	Real Estate and Real Estate Financing	EJV	50	50	50	50
	AMUNDI CREDIT EURO - P	Financial Company	FULL	57.43	57.43	57.43	57.43
	ANNEMASSE-ILOT BERNARD	Real Estate and Real Estate Financing	FULL	80	80	80	80
	ANTALIS SA	Financial Company	FULL	100	100	100	100
	ANTARES	Real Estate and Real Estate Financing	ESI	45	45	45	45
	ANTARIUS	Insurance	FULL	100	100	100	100
	ARTISTIK	Real Estate and Real Estate Financing	ESI	30	30	30	30
(3)	AVIVA INVESTORS RESERVE EUROPE	Financial Company	FULL	0	69.35	0	69.35
	BANQUE COURTOIS	Bank	FULL	100	100	100	100
	BANQUE FRANCAISE COMMERCIALE OCEAN INDIEN	Bank	FULL	50	50	50	50
	BANQUE KOLB	Bank	FULL	100	99.97	100	99.97
	BANQUE LAYDERNIER	Bank	FULL	100	100	100	100
	BANQUE NUGER	Bank	FULL	100	100	100	100
	BANQUE POUYANNE	Bank	ESI	35	35	35	35
	BANQUE RHONE ALPES	Bank	FULL	99.99	99.99	99.99	99.99
	BANQUE TARNEAUD	Bank	FULL	100	100	100	100
	BAUME LOUBIERE	Real Estate and Real Estate Financing	ESI	40	40	40	40
	BERLIOZ	Insurance	FULL	84.05	84.05	84.05	84.05
(3)	BOURSORAMA INVESTISSEMENT	Services	FULL	0	100	0	100
(6)	BOURSORAMA MASTER HOME LOANS FRANCE	Specialist Financing	FULL	100	0	100	0
	BOURSORAMA SA	Broker	FULL	100	100	100	100
	BREMANY LEASE SAS	Specialist Financing	FULL	75.94	79.82	100	100
	CARBURAUTO	Group Real Estate Management Company	EJV	50	50	50	50

	CENTRE IMMO PROMOTION	Real Estate and Real Estate Financing	FULL	60	60	60	60
	CHARTREUX LOT A1	Real Estate and Real Estate Financing	FULL	100	100	100	100
	COMPAGNIE FINANCIERE DE BOURBON	Specialist Financing	FULL	99.99	99.99	100	100
	COMPAGNIE FONCIERE DE LA MEDITERRANEE (CFM)	Group Real Estate Management Company	FULL	100	100	100	100
	COMPAGNIE GENERALE DE LOCATION D'EQUIPEMENTS	Specialist Financing	FULL	99.89	99.89	99.89	99.89
	CONTE	Group Real Estate Management Company	EJV	50	50	50	50
	CREDIT DU NORD	Bank	FULL	100	100	100	100
	DARWIN DIVERSIFIE 0-20	Portfolio Management	FULL	89.94	89.94	89.94	89.94
	DARWIN DIVERSIFIE 40-60	Portfolio Management	FULL	79.78	79.78	79.78	79.78
	DARWIN DIVERSIFIE 80-100	Portfolio Management	FULL	78.34	78.34	78.34	78.34
	DISPONIS	Specialist Financing	FULL	99.99	99.99	100	100
	ECHIQUEIR AGENOR EURO SRI MID CAP	Insurance	FULL	40.85	40.85	40.85	40.85
	ESNI - COMPARTIMENT SG-CREDIT CLAIMS - 1	Financial Company	FULL	100	100	100	100
	ETOILE CAPITAL	Financial Company	FULL	99.99	100	99.99	100
	ETOILE MULTI GESTION EUROPE-C	Insurance	FULL	51.59	51.59	51.59	51.59
	ETOILE MULTI GESTION USA - PART P	Insurance	FULL	35.18	35.18	35.18	35.18
	F.E.P. INVESTISSEMENTS	Real Estate and Real Estate Financing	FULL	100	80	100	100
	FCC ALBATROS	Portfolio Management	FULL	100	100	51	51
(6)	FCT LA ROCHE	Specialist Financing	FULL	100	0	100	0
	FEEDER LYX E ST50 D6	Portfolio Management	FULL	100	100	100	100
	FEEDER LYXOR CAC40 D2-EUR	Portfolio Management	FULL	100	100	100	100
(3)	FEEDER LYXOR CAC40 D6	Insurance	FULL	0	100	0	100
(2)	FEEDER LYXOR EURO STOXX 50 - D9	Financial Company	FULL	0	99.98	0	99.98
	FENWICK LEASE	Specialist Financing	FULL	99.99	99.99	100	100
	FINASSURANCE SNC	Insurance	FULL	98.89	98.89	99	99
	FRANFINANCE	Specialist Financing	FULL	99.99	99.99	99.99	99.99
	FRANFINANCE LOCATION	Specialist Financing	FULL	99.99	99.99	100	100
	GALYBET	Real Estate and Real Estate Financing	FULL	100	100	100	100
	GENEBANQUE	Bank	FULL	100	100	100	100
	GENECAL FRANCE	Specialist Financing	FULL	100	100	100	100

	GENECAR - SOCIETE GENERALE DE COURTAGE D'ASSURANCE ET DE REASSURANCE	Insurance	FULL	100	100	100	100
	GENECOMI FRANCE	Specialist Financing	FULL	100	99.64	100	99.64
	GENEFIM	Real Estate and Real Estate Financing	FULL	100	100	100	100
	GENEFINANCE	Portfolio Management	FULL	100	100	100	100
	GENEGIS I	Group Real Estate Management Company	FULL	100	100	100	100
	GENEGIS II	Group Real Estate Management Company	FULL	100	100	100	100
	GENEPIERRE	Real Estate and Real Estate Financing	FULL	56.56	56.68	56.56	56.68
	GENEVALMY	Group Real Estate Management Company	FULL	100	100	100	100
	(6) HAGA NYGATA	Specialist Financing	FULL	100	0	100	0
	(6) HIPPOLYTE	Specialist Financing	FULL	100	0	100	0
	HYUNDAI CAPITAL FRANCE (EX SEFIA)	Specialist Financing	ESI	49.95	99.89	50	100
	ILOT AB	Real Estate and Real Estate Financing	FULL	80	80	80	80
	IMMOBILIERE PROMEX	Real Estate and Real Estate Financing	ESI	35	35	35	35
	INVESTIR IMMOBILIER NORMANDIE	Real Estate and Real Estate Financing	FULL	100	100	100	100
	INVESTISSEMENT 81	Financial Company	FULL	100	100	100	100
	JSJ PROMOTION	Real Estate and Real Estate Financing	ESI	45	45	45	45
	LA CORBEILLERIE	Real Estate and Real Estate Financing	ESI	40	24	40	40
	LA FONCIERE DE LA DEFENSE	Real Estate and Real Estate Financing	FULL	100	99.99	100	100
	LES ALLEES DE L'EUROPE	Real Estate and Real Estate Financing	ESI	34	34	34	34
	LES JARDINS D'ALHAMBRA	Real Estate and Real Estate Financing	ESI	35	35	35	35
	LES JARDINS DE L'ALCAZAR	Real Estate and Real Estate Financing	ESI	30	30	30	30

LES MESANGES	Real Estate and Real Estate Financing	FULL	55	55	55	55
LES TROIS LUCS 13012	Real Estate and Real Estate Financing	FULL	100	100	100	100
LES VILLAS VINCENTI	Real Estate and Real Estate Financing	ESI	30	30	30	30
L'HESPEL	Real Estate and Real Estate Financing	ESI	30	30	30	30
LOTISSEMENT DES FLEURS	Real Estate and Real Estate Financing	ESI	30	30	30	30
LYON LA FABRIC	Real Estate and Real Estate Financing	EJV	50	50	50	50
LYX ACT EURO CLIMAT-D3EUR	Insurance	FULL	100	100	100	100
LYX ACT EURO CLIMAT-DEUR	Insurance	FULL	100	100	100	100
LYXOR ACTIONS EURO CLIMAT D4 EUR	Insurance	FULL	100	100	100	100
LYXOR GL OVERLAY F	Portfolio Management	FULL	87.27	87.27	87.27	87.27
LYXOR SKYFALL FUND	Insurance	FULL	88.98	88.98	88.98	88.98
MEDITERRANEE GRAND ARC	Real Estate and Real Estate Financing	EJV	50	50	50	50
NORBAIL IMMOBILIER	Real Estate and Real Estate Financing	FULL	100	100	100	100
NORBAIL SOFERGIE	Real Estate and Real Estate Financing	FULL	100	100	100	100
NORMANDIE REALISATIONS	Real Estate and Real Estate Financing	FULL	100	100	100	100
ONYX	Group Real Estate Management Company	EJV	50	50	50	50
OPCI SOGECAPIMMO	Real Estate and Real Estate Financing	FULL	100	100	100	100
ORADEA VIE	Insurance	FULL	100	100	100	100
ORPAVIMOB	Specialist Financing	FULL	100	100	100	100
(5) PACTIMO	Real Estate and Real Estate Financing	FULL	0	100	0	100
PARCOURS	Specialist Financing	FULL	75.94	79.82	100	100
PARCOURS ANNECY	Specialist Financing	FULL	75.94	79.82	100	100
PARCOURS BORDEAUX	Specialist Financing	FULL	75.94	79.82	100	100
PARCOURS NANTES	Specialist Financing	FULL	75.94	79.82	100	100

	PARCOURS STRASBOURG	Specialist Financing	FULL	75.94	79.82	100	100
	PARCOURS TOURS	Specialist Financing	FULL	75.94	79.82	100	100
	PAREL	Services	FULL	100	100	100	100
	PHILIPS MEDICAL CAPITAL FRANCE	Specialist Financing	FULL	60	60	60	60
	PIERRE PATRIMOINE	Financial Company	FULL	100	100	100	100
	PRAGMA	Real Estate and Real Estate Financing	FULL	100	100	100	100
(6)	PRIMONIAL DOUBLE IMMO	Real Estate and Real Estate Financing	FULL	100	0	100	0
	PRIORIS	Specialist Financing	FULL	94.89	94.89	95	95
	PROGEREAL (EX-PROGEREAL SA)	Real Estate and Real Estate Financing	ESI	25.01	25.01	25.01	25.01
	PROJECTIM	Real Estate and Real Estate Financing	FULL	100	60	100	60
	RED & BLACK AUTO LEASE FRANCE 1	Financial Company	FULL	75.94	79.82	100	100
	RED & BLACK CONSUMER FRANCE 2013	Financial Company	FULL	100	100	100	100
(2)	RED & BLACK HOME LOANS FRANCE 1	Financial Company	FULL	0	100	0	100
(6)	RED & BLACK HOME LOANS FRANCE 2	Financial Company	FULL	100	0	100	0
	RIVAPRIM REALISATIONS	Real Estate and Real Estate Financing	FULL	100	100	100	100
	S.C.I. DU DOMAINE DE STONEHAM	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SAGEMCOM LEASE	Specialist Financing	FULL	99.99	99.99	100	100
	SAINTE-MARTHE ILOT C	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SAINTE-MARTHE ILOT D	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SAINT-MARTIN 3	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SARL BORDEAUX-20-26 RUE DU COMMERCE	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SARL D'AMENAGEMENT DU MARTINET	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SARL DE LA VECQUERIE	Real Estate and Real Estate Financing	ESI	32.5	32.5	32.5	32.5
	SARL SEINE CLICHY	Real Estate and Real Estate Financing	FULL	100	100	100	100

	SAS AMIENS - AVENUE DU GENERAL FOY	Real Estate and Real Estate Financing	FULL	100	80	100	100
	SAS BF3 NOGENT THIERS	Real Estate and Real Estate Financing	ESI	20	20	20	20
	SAS BONDUES - COEUR DE BOURG	Real Estate and Real Estate Financing	ESI	25	20	25	25
	SAS COPRIM RESIDENCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SAS ECULLY SO'IN	Real Estate and Real Estate Financing	FULL	75	75	75	75
	SAS FOCH SULLY	Real Estate and Real Estate Financing	FULL	90	90	90	90
	SAS MERIGNAC OASIS URBAINE	Real Estate and Real Estate Financing	FULL	90	90	90	90
(2)	SAS MS FRANCE	Real Estate and Real Estate Financing	ESI	0	40	0	40
	SAS NOAHO AMENAGEMENT	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SAS NORMANDIE HABITAT	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SAS NORMANDIE RESIDENCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SAS NOYALIS	Real Estate and Real Estate Financing	ESI	28	28	28	28
	SAS ODESSA DEVELOPPEMENT	Real Estate and Real Estate Financing	ESI	49	49	49	49
	SAS PARNASSE	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SAS PAYSAGES	Real Estate and Real Estate Financing	FULL	51	51	51	51
	SAS PROJECTIM IMMOBILIER	Real Estate and Real Estate Financing	FULL	100	80	100	100
(6)	SAS RESIDENCE AUSTRALIS	Real Estate and Real Estate Financing	FULL	77	0	77	0
	SAS RESIDENCIAL	Real Estate and Real Estate Financing	FULL	68.4	68.4	68.4	68.4

	SAS ROANNE LA TRILOGIE	Real Estate and Real Estate Financing	ESI	41	41	41	41
	SAS SCENES DE VIE	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SAS SOAX PROMOTION	Real Estate and Real Estate Financing	FULL	58.5	58.5	58.5	58.5
	SAS SOGEBROWN POISSY	Real Estate and Real Estate Financing	FULL	100	50	100	50
	SAS SOGEMYSJ	Real Estate and Real Estate Financing	FULL	51	51	51	51
(5)	SAS SOGEPROM TERTIAIRE	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SAS SOJEPRIM	Real Estate and Real Estate Financing	FULL	100	80	100	100
	SAS TIR A L'ARC AMENAGEMENT	Real Estate and Real Estate Financing	EJV	50	40	50	50
	SAS TOUR D2	Real Estate and Real Estate Financing	JO	50	50	50	50
	SAS VILLENEUVE D'ASCQ - RUE DES TECHNIQUES BUREAUX	Real Estate and Real Estate Financing	EJV	50	40	50	50
	SCCV 282 MONTOLIVET 12	Real Estate and Real Estate Financing	FULL	60	60	60	60
	SCCV ALFORTVILLE MANDELA	Real Estate and Real Estate Financing	ESI	49	49	49	49
	SCCV BAC GALLIENI	Real Estate and Real Estate Financing	FULL	51	51	51	51
(2)	SCCV BAHIA	Real Estate and Real Estate Financing	FULL	0	51	0	51
	SCCV BOIS-GUILLAUME PARC DE HALLEY	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV BOURG BROU	Real Estate and Real Estate Financing	FULL	60	60	60	60
	SCCV BRON CARAVELLE	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV CAEN CASERNE MARTIN	Real Estate and Real Estate Financing	FULL	100	100	100	100

	SCCV CAEN PANORAMIK	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SCCV CANNES JOURDAN	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV CHARTREUX LOT C	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV CHARTREUX LOT E	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV CHARTREUX LOTS B-D	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV CHOISY LOGEMENT	Real Estate and Real Estate Financing	FULL	100	67	100	67
	SCCV CLICHY BAC D'ASNIERES	Real Estate and Real Estate Financing	FULL	75	100	75	100
	SCCV CLICHY BRC	Real Estate and Real Estate Financing	EJV	50	50	50	50
(6)	SCCV COLOMBES	Real Estate and Real Estate Financing	ESI	28.66	0	49	0
	SCCV COMPIEGNE - RUE DE L'EPARGNE	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCCV CUGNAUX-LEO LAGRANGE	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV DEVILLE-CARNOT	Real Estate and Real Estate Financing	FULL	60	60	60	60
	SCCV DUNKERQUE PATINOIRE DEVELOPPEMENT	Real Estate and Real Estate Financing	EJV	50	40	50	50
(6)	SCCV EIFFEL FLOQUET	Real Estate and Real Estate Financing	FULL	51	0	51	0
	SCCV EPRON - ZAC L'OREE DU GOLF	Real Estate and Real Estate Financing	FULL	70	70	70	70
	SCCV ESPACES DE DEMAIN	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV ETERVILLE ROUTE D'AUNAY	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV EURONANTES 1E	Real Estate and Real Estate Financing	EJV	50	50	50	50

	SCCV FAVERGES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV GAMBETTA LA RICHE	Real Estate and Real Estate Financing	ESI	25	25	25	25
	SCCV GIGNAC MOUSSELINE	Real Estate and Real Estate Financing	FULL	70	70	70	70
	SCCV GIVORS ROBICHON	Real Estate and Real Estate Financing	FULL	85	85	85	85
	SCCV HEROUVILLE ILOT A2	Real Estate and Real Estate Financing	ESI	33.33	33.33	33.33	33.33
	SCCV ISTRES PAPAILLE	Real Estate and Real Estate Financing	FULL	70	70	70	70
	SCCV JA LE HAVRE 22 COTY	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SCCV JDA OUISTREHAM	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV KYMA MERIGNAC	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCCV LA BAULE - LES JARDINS D'ESCOUBLAC	Real Estate and Real Estate Financing	ESI	25	25	25	25
	SCCV LA MADELEINE - PRE CATELAN	Real Estate and Real Estate Financing	FULL	51	40.8	51	51
	SCCV LA MADELEINE SAINT-CHARLES	Real Estate and Real Estate Financing	EJV	50	40	50	50
	SCCV LA PORTE DU CANAL	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV LACASSAGNE BRICKS	Real Estate and Real Estate Financing	ESI	49	49	49	49
	SCCV LE BOUSCAT CARRE SOLARIS	Real Estate and Real Estate Financing	ESI	25	25	25	25
(6)	SCCV LE CENTRAL C1.4	Real Estate and Real Estate Financing	ESI	33.4	0	33.4	0
(6)	SCCV LES BASTIDES FLEURIES	Real Estate and Real Estate Financing	FULL	64.29	0	64.29	0
	SCCV LES ECRIVAINS	Real Estate and Real Estate Financing	FULL	70	70	70	70

	SCCV LES PATIOS D'OR DE FLEURY LES AUBRAIS	Real Estate and Real Estate Financing	FULL	64	64	80	80
	SCCV LES SUCRES	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV LESQUIN PARC	Real Estate and Real Estate Financing	EJV	50	40	50	50
	SCCV L'IDEAL - MODUS 1.0	Real Estate and Real Estate Financing	FULL	80	80	80	80
	SCCV LILLE - JEAN MACE	Real Estate and Real Estate Financing	ESI	33.4	26.72	33.4	33.4
	SCCV LOOS GAMBETTA	Real Estate and Real Estate Financing	ESI	35	35	35	35
(6)	SCCV MARCQ EN BAROEUL GABRIEL PERI	Real Estate and Real Estate Financing	ESI	20	0	20	0
	SCCV MARQUETTE CALMETTE	Real Estate and Real Estate Financing	EJV	50	40	50	50
	SCCV MEHUL	Real Estate and Real Estate Financing	FULL	70	70	70	70
	SCCV MONROC - LOT 3	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV MONS EQUATION	Real Estate and Real Estate Financing	ESI	50	40	50	50
(2)	SCCV MONTREUIL ACACIA	Real Estate and Real Estate Financing	FULL	0	80	0	80
	SCCV NICE ARENAS	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV NOGENT PLAISANCE	Real Estate and Real Estate Financing	FULL	60	60	60	60
	SCCV NOISY BOISSIERE	Real Estate and Real Estate Financing	FULL	51	51	51	51
	SCCV PARIS ALBERT	Real Estate and Real Estate Financing	EJV	50	50	50	50
(2)	SCCV PARK OCEAN II	Real Estate and Real Estate Financing	ESI	0	35	0	35
	SCCV PRADES BLEU HORIZON	Real Estate and Real Estate Financing	EJV	50	50	50	50

	SCCV QUAI DE SEINE A ALFORTVILLE	Real Estate and Real Estate Financing	FULL	51	51	51	51
	SCCV QUAI NEUF BORDEAUX	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCCV ROUEN 27 ANGLAIS	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV ROUSSET - LOT 03	Real Estate and Real Estate Financing	FULL	70	70	70	70
	SCCV SAINT JUST DAUDET	Real Estate and Real Estate Financing	FULL	80	80	80	80
	SCCV SAY	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCCV SENGHOR	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCCV SENSORIUM BUREAUX	Real Estate and Real Estate Financing	EJV	50	40	50	50
	SCCV SENSORIUM LOGEMENT	Real Estate and Real Estate Financing	EJV	50	40	50	50
	SCCV SOGAB ILE DE FRANCE	Real Estate and Real Estate Financing	FULL	80	80	80	80
	SCCV SOGAB ROMAINVILLE	Real Estate and Real Estate Financing	FULL	80	80	80	80
	SCCV SOGEPROM LYON HABITAT	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV SOPRAB IDF (EX SCCV ROMAINVILLE DUMAS)	Real Estate and Real Estate Financing	FULL	70	70	70	70
	SCCV ST MARTIN DU TOUCH ILOT S9	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV SWING RIVE GAUCHE	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV TALENCE PUR	Real Estate and Real Estate Financing	FULL	95	95	95	95
(2)	SCCV TASSIN - 190 CDG	Real Estate and Real Estate Financing	ESI	0	35	0	35
(6)	SCCV TOULOUSE LES IZARDS	Real Estate and Real Estate Financing	FULL	51	0	51	0

	SCCV TRET CASSIN LOT 4	Real Estate and Real Estate Financing	FULL	70	70	70	70
	SCCV VERNAISON - RAZAT	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV VERNONNET- FIESCHI	Real Estate and Real Estate Financing	FULL	51	51	51	51
	SCCV VILLA CHANZY	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SCCV VILLA VALERIANE	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCCV VILLAS URBAINES	Real Estate and Real Estate Financing	FULL	80	80	80	80
	SCCV VILLENAVE D'ORNON GARDEN VO	Real Estate and Real Estate Financing	ESI	25	25	25	25
	SCCV VILLENEUVE D'ASCQ-RUE DES TECHNIQUES	Real Estate and Real Estate Financing	EJV	50	40	50	50
(6)	SCCV VILLENEUVE VILLAGE BONGARDE	Real Estate and Real Estate Financing	FULL	51	0	51	0
	SCCV VILLEURBANNE TEMPO	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV WAMBRECHIES RESISTANCE	Real Estate and Real Estate Financing	EJV	50	40	50	50
	SCI 1134, AVENUE DE L'EUROPE A CASTELNAU LE LEZ	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCI 637 ROUTE DE FRANS	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCI AQPRIM PROMOTION	Real Estate and Real Estate Financing	FULL	79.8	79.8	50	50
	SCI ASC LA BERGEONNERIE	Real Estate and Real Estate Financing	EJV	42	42	50	50
	SCI AVARICUM	Real Estate and Real Estate Financing	FULL	99	99	99	99
	SCI CENTRE IMMO PROMOTION RESIDENCES	Real Estate and Real Estate Financing	FULL	80	80	100	100
	SCI CHELLES AULNOY MENDES FRANCE	Real Estate and Real Estate Financing	EJV	50	50	50	50

	SCI DU PARC SAINT ETIENNE	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SCI ETAMPES NOTRE-DAME	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCI LA MANTILLA COMMERCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCI L'ACTUEL	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCI LAVOISIER	Real Estate and Real Estate Financing	FULL	80	80	80	80
(2)	SCI LE DOMAINE DU PLESSIS	Real Estate and Real Estate Financing	ESI	0	20	0	20
	SCI LE HAMEAU DES GRANDS PRES	Real Estate and Real Estate Financing	EJV	40	40	40	40
	SCI LE MANOIR DE JEREMY	Real Estate and Real Estate Financing	ESI	40	40	40	40
(2)	SCI LES BAINOTS	Real Estate and Real Estate Financing	ESI	0	40	0	40
	SCI LES CASTELLINES	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCI LES JARDINS DE LA BOURBRE	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SCI LES JARDINS D'IRIS	Real Estate and Real Estate Financing	FULL	60	60	60	60
	SCI LES JARDINS DU BLAVET	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SCI LES PORTES DU LEMAN	Real Estate and Real Estate Financing	FULL	70	70	70	70
(2)	SCI LIEUSAINTE RUE DE PARIS	Real Estate and Real Estate Financing	EJV	0	50	0	50
	SCI LINAS COEUR DE VILLE 1	Real Estate and Real Estate Financing	FULL	71	70	71	70
	SCI LOCMINE-LAMENNAIS	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCI L'OREE DES LACS	Real Estate and Real Estate Financing	FULL	70	70	70	70

	SCI MONTPELLIER JACQUES COEUR	Real Estate and Real Estate Financing	EJV	50	50	50	50
(6)	SCI PRIMO E+	Real Estate and Real Estate Financing	FULL	100	0	100	0
(6)	SCI PRIMO N+	Real Estate and Real Estate Financing	FULL	100	0	100	0
(6)	SCI PRIMO N+2	Real Estate and Real Estate Financing	FULL	100	0	100	0
(6)	SCI PRIMO N+3	Real Estate and Real Estate Financing	FULL	100	0	100	0
	SCI PROJECTIM HABITAT	Real Estate and Real Estate Financing	FULL	100	80	100	100
	SCI PROJECTIM MARCQ COEUR DE VILLE	Real Estate and Real Estate Financing	FULL	60	48	60	60
	SCI PRONY	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCI QUINTEFEUILLE	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCI RESIDENCE DU DONJON	Real Estate and Real Estate Financing	EJV	40	40	40	40
	SCI RHIN ET MOSELLE 1	Real Estate and Real Estate Financing	FULL	100	100	100	100
(2)	SCI RHIN ET MOSELLE 2	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SCI RIVAPRIM HABITAT	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCI RIVAPRIM RESIDENCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCI SAINT OUEN L'AUMONE - L'OISE	Real Estate and Real Estate Financing	EJV	38	38	38	38
	SCI SAINT-DENIS WILSON	Real Estate and Real Estate Financing	FULL	60	60	60	60
	SCI SCS IMMOBILIER D'ENTREPRISES	Real Estate and Real Estate Financing	FULL	52.8	52.8	66	66
	SCI SOGECIP	Real Estate and Real Estate Financing	FULL	80	80	100	100

	SCI SOGECTIM	Real Estate and Real Estate Financing	FULL	100	80	100	100
	SCI SOGEPROM LYON RESIDENCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCI TERRES NOUVELLES FRANCILIENNES	Real Estate and Real Estate Financing	FULL	80	80	80	80
	SCI TOULOUSE CENTREDA 3	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCI VILLA EMILIE	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCI VITAL BOUHOT 16-22 NEUILLY SUR SEINE	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SERVIPAR	Specialist Financing	FULL	75.94	79.82	100	100
	SG 29 HAUSSMANN	Financial Company	FULL	100	100	100	100
	SG ACTIONS EURO	Insurance	FULL	47.75	47.75	47.75	47.75
	SG ACTIONS EURO SELECTION	Financial Company	FULL	40.05	40.05	40.05	40.05
	SG ACTIONS FRANCE	Portfolio Management	FULL	38.14	38.14	38.14	38.14
	SG ACTIONS LUXE-C	Insurance	FULL	84.25	84.25	84.25	84.25
	SG ACTIONS MONDE	Insurance	FULL	67.59	67.59	67.59	67.59
	SG ACTIONS MONDE EMERGENT	Insurance	FULL	60.05	60.05	60.05	60.05
	SG ACTIONS US	Portfolio Management	FULL	65.06	65.06	65.06	65.06
(3)	SG ACTIONS US TECHNO	Insurance	FULL	0	85.08	0	85.08
(6)	SG AMUNDI MONETAIRE ISR	Portfolio Management	FULL	100	0	100	0
(6)	SG BLACKROCK ACTIONS US ISR	Portfolio Management	FULL	100	0	100	0
(6)	SG BLACKROCK FLEXIBLE ISR	Portfolio Management	FULL	100	0	100	0
	SG CAPITAL DEVELOPPEMENT	Portfolio Management	FULL	100	100	100	100
	SG FINANCIAL SERVICES HOLDING	Portfolio Management	FULL	100	100	100	100
	SG FLEXIBLE	Portfolio Management	FULL	92.48	92.48	92.48	92.48
	SG OBLIG ETAT EURO-R	Insurance	FULL	79.94	79.94	79.94	79.94
	SG OBLIGATIONS	Insurance	FULL	82.92	82.92	82.92	82.92
	SG OPCIMMO	Real Estate and Real Estate Financing	FULL	97.95	97.95	97.95	97.95
	SG OPTION EUROPE	Broker	FULL	100	100	100	100
	SG VALOR ALPHA ACTIONS FRANCE	Financial Company	FULL	72.77	72.77	72.77	72.77
(6)	SGA 48-56 DESMOULINS	Real Estate and Real Estate Financing	FULL	99	0	99	0
	SGA AXA IM US CORE HY LOW CARBON	Insurance	FULL	100	100	100	100
	SGA AXA IM US SD HY LOW CARBON	Insurance	FULL	100	100	100	100
	SGA INFRASTRUCTURES	Insurance	FULL	100	100	100	100
	SGB FINANCE S.A.	Specialist Financing	FULL	50.94	50.94	51	51

	SGEF SA	Specialist Financing	FULL	100	100	100	100
	SGI 10-16 VILLE L'EVEQUE	Insurance	FULL	100	100	100	100
	SGI 1-5 ASTORG	Insurance	FULL	100	100	100	100
	SGI HOLDING SIS	Group Real Estate Management Company	FULL	100	100	100	100
	SGI PACIFIC	Insurance	FULL	89.24	86.17	89.53	89.53
	SHINE	Financial Company	FULL	90.9	80.6	90.9	80.6
	SNC COEUR 8EME MONPLAISIR	Real Estate and Real Estate Financing	ESI	30	30	30	30
(2)	SNC COPRIM RESIDENCES	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SNC D'AMENAGEMENT FORUM SEINE ISSY LES MOULINEAUX	Real Estate and Real Estate Financing	EJV	33.33	33.33	33.33	33.33
	SNC NEUILLY ILE DE LA JATTE	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SNC PROMOSEINE	Real Estate and Real Estate Financing	EJV	33.33	33.33	33.33	33.33
	SOCIETE ANONYME DE CREDIT A L'INDUSTRIE FRANCAISE (CALIF)	Bank	FULL	100	100	100	100
	SOCIETE CIVILE IMMOBILIERE CAP THALASSA	Real Estate and Real Estate Financing	ESI	45	45	45	45
	SOCIETE CIVILE IMMOBILIERE CAP VEYRE	Real Estate and Real Estate Financing	ESI	50	50	50	50
	SOCIETE CIVILE IMMOBILIERE DE DIANE	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SOCIETE CIVILE IMMOBILIERE DE PIERLAS	Real Estate and Real Estate Financing	ESI	28	28	28	28
	SOCIETE CIVILE IMMOBILIERE DES COMBEAUX DE TIGERY	Real Estate and Real Estate Financing	FULL	100	99.99	100	100
	SOCIETE CIVILE IMMOBILIERE ESTEREL TANNERON	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SOCIETE CIVILE IMMOBILIERE FONTENAY - ESTIENNES D'ORVES	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SOCIETE CIVILE IMMOBILIERE GAMBETTA DEFENSE V	Real Estate and Real Estate Financing	ESI	20	20	20	20
	SOCIETE CIVILE IMMOBILIERE LE BOTERO	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SOCIETE CIVILE IMMOBILIERE LES HAUTS DE L'ESTAQUE	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SOCIETE CIVILE IMMOBILIERE LES HAUTS DE SEPTEMES	Real Estate and Real Estate Financing	ESI	25	25	25	25

	SOCIETE CIVILE IMMOBILIERE MIRECRAU	Real Estate and Real Estate Financing	ESI	35	35	35	35
(2)	SOCIETE CIVILE IMMOBILIERE NAXOU	Real Estate and Real Estate Financing	FULL	0	100	0	100
(2)	SOCIETE CIVILE IMMOBILIERE TOULDI	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SOCIETE CIVILE IMMOBILIERE VERT COTEAU	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SOCIETE DE BOURSE GILBERT DUPONT	Financial Company	FULL	100	100	100	100
	SOCIETE DE LA RUE EDOUARD VII	Portfolio Management	FULL	100	99.91	100	99.91
	SOCIETE DES TERRAINS ET IMMEUBLES PARISIENS (STIP)	Group Real Estate Management Company	FULL	100	99.98	100	100
	SOCIETE DU PARC D'ACTIVITE DE LA VALENTINE	Real Estate and Real Estate Financing	ESI	30	30	30	30
(5)	SOCIETE FINANCIERE D'ANALYSE ET DE GESTION	Financial Company	FULL	0	100	0	100
	SOCIETE GENERALE	Bank	FULL	100	100	100	100
	SOCIETE GENERALE CAPITAL FINANCE	Portfolio Management	FULL	100	100	100	100
	SOCIETE GENERALE CAPITAL PARTENAIRES	Portfolio Management	FULL	100	100	100	100
	SOCIETE GENERALE FACTORING	Specialist Financing	FULL	100	100	100	100
(5)	SOCIETE GENERALE PARTICIPATIONS INDUSTRIELLES	Portfolio Management	FULL	0	100	0	100
	SOCIETE GENERALE POUR LE DEVELOPPEMENT DES OPERATIONS DE CREDIT-BAIL IMMOBILIER "SOGEBAIL"	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOCIETE GENERALE REAL ESTATE	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOCIETE GENERALE SCF	Financial Company	FULL	100	100	100	100
	SOCIETE GENERALE SECURITIES SERVICES HOLDING	Portfolio Management	FULL	100	100	100	100
	SOCIETE GENERALE SFH	Specialist Financing	FULL	100	100	100	100
(6)	SOCIETE GENERALE VENTURES	Portfolio Management	FULL	100	0	100	0
	SOCIETE IMMOBILIERE DU 29 BOULEVARD HAUSSMANN	Group Real Estate Management Company	FULL	100	100	100	100
	SOCIETE MARSEILLAISE DE CREDIT	Bank	FULL	100	100	100	100
	SOFIDY CONVICTIONS IMMOBILIERES	Insurance	FULL	35.1	35.1	35.1	35.1
	SOGE BEAUJOIRE	Group Real Estate Management Company	FULL	100	99.99	100	100

	SOGE PERIVAL I	Group Real Estate Management Company	FULL	100	100	100	100
	SOGE PERIVAL II	Group Real Estate Management Company	FULL	100	100	100	100
	SOGE PERIVAL III	Group Real Estate Management Company	FULL	100	100	100	100
	SOGE PERIVAL IV	Group Real Estate Management Company	FULL	100	100	100	100
	SOGEACT.SELEC.M ON	Portfolio Management	FULL	99.78	99.78	99.78	99.78
(6)	SOGEAX	Real Estate and Real Estate Financing	FULL	60	0	60	0
	SOGECAMPUS	Group Real Estate Management Company	FULL	100	100	100	100
	SOGECAP	Insurance	FULL	100	100	100	100
	SOGECAP - DIVERSIFIED LOANS FUND	Specialist Financing	FULL	100	100	100	100
	SOGECAP DIVERSIFIE 1	Portfolio Management	FULL	100	100	100	100
	SOGECAP EQUITY OVERLAY (FEEDER)	Insurance	FULL	100	100	100	100
	SOGECAP LONG TERME N°1	Financial Company	FULL	100	100	100	100
	SOGECAPIMMO 2	Insurance	FULL	90.71	89.39	90.84	90.84
	SOGEFIM HOLDING	Portfolio Management	FULL	100	100	100	100
	SOGEFIMUR	Specialist Financing	FULL	100	100	100	100
	SOGEFINANCEMENT	Specialist Financing	FULL	100	100	100	100
	SOGEFINERG France	Specialist Financing	FULL	100	100	100	100
	SOGEFONTENAY	Group Real Estate Management Company	FULL	100	100	100	100
	SOGELEASE FRANCE	Specialist Financing	FULL	100	100	100	100
	SOGEMARCHE	Group Real Estate Management Company	FULL	100	100	100	100
	SOGEPARTICIPATIO NS	Portfolio Management	FULL	100	100	100	100
	SOGEPIERRE	Financial Company	FULL	100	100	100	100
	SOGEPROM	Real Estate and Real Estate Financing	FULL	100	100	100	100
(5)	SOGEPROM ALPES	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SOGEPROM ALPES HABITAT	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM CENTRE-VAL DE LOIRE	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM COTE D'AZUR	Real Estate and Real Estate Financing	FULL	100	100	100	100

(5)	SOGEPROM CVL SERVICES	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SOGEPROM ENTREPRISES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM LYON	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM PARTENAIRES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM REALISATIONS	Real Estate and Real Estate Financing	FULL	100	100	100	100
(5)	SOGEPROM RESIDENCES	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SOGEPROM SERVICES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM SUD REALISATIONS	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGESSUR	Insurance	FULL	100	100	100	100
	SOGEVIMMO	Group Real Estate Management Company	FULL	98.75	85.55	98.75	85.55
	ST BARNABE 13004	Real Estate and Real Estate Financing	EJV	50	50	50	50
	STAR LEASE	Specialist Financing	FULL	100	100	100	100
	TEMSYS	Specialist Financing	FULL	75.94	79.82	100	100
(6)	TRANSACTIS	Services	EJV	50	0	50	0
	TREEZOR SAS	Financial Company	FULL	95.12	100	95.12	100
	URBANISME ET COMMERCE PROMOTION	Real Estate and Real Estate Financing	FULL	100	100	100	100
(6)	VALMINCO	Portfolio Management	FULL	100	0	100	0
	VALMINVEST	Group Real Estate Management Company	FULL	100	100	100	100
	VG PROMOTION	Real Estate and Real Estate Financing	ESI	35	35	35	35
	VIENNE BON ACCUEIL	Real Estate and Real Estate Financing	EJV	50	50	50	50
	VILLA D'ARMONT	Real Estate and Real Estate Financing	ESI	40	40	40	40
Ghana							
	SOCIETE GENERAL GHANA PLC (EX-SOCIETE GENERALE GHANA LIMITED)	Bank	FULL	60.22	60.22	60.22	60.22
Gibraltar							
	HAMBROS (GIBRALTAR NOMINEES) LIMITED	Services	FULL	100	100	100	100

	SG KLEINWORT HAMBROS BANK (GIBRALTAR) LIMITED	Bank	FULL	100	100	100	100
	(1) (6) SG KLEINWORT HAMBROS BANK LIMITED GIBRALTAR BRANCH	Bank	FULL	100	0	100	0
Greece							
	ALD AUTOMOTIVE S.A. LEASE OF CARS	Specialist Financing	FULL	75.94	79.82	100	100
Guinea							
	SOCIETE GENERALE GUINEE	Bank	FULL	57.93	57.94	57.93	57.94
Equatorial Guinea							
	SOCIETE GENERALE DE BANQUES EN GUINEE EQUATORIALE	Bank	FULL	52.44	52.44	57.23	57.23
Hong Kong							
	SG ASSET FINANCE (HONG KONG) LIMITED	Broker	FULL	100	100	100	100
	SG CAPITAL FINANCE (ASIA PACIFIC) LIMITED	Financial Company	FULL	100	100	100	100
	SG CAPITAL FINANCE (HONG KONG) LIMITED	Financial Company	FULL	100	100	100	100
	SG CORPORATE FINANCE (ASIA PACIFIC) LIMITED	Financial Company	FULL	100	100	100	100
	SG CORPORATE FINANCE (HONG KONG) LIMITED	Financial Company	FULL	100	100	100	100
	SG FINANCE (ASIA PACIFIC) LIMITED	Financial Company	FULL	100	100	100	100
	SG FINANCE (HONG KONG) LIMITED	Financial Company	FULL	100	100	100	100
	(1) SG HONG KONG	Bank	FULL	100	100	100	100
	SG LEASING (HONG KONG) LIMITED	Financial Company	FULL	100	100	100	100
	SG SECURITIES (HK) LIMITED	Broker	FULL	100	100	100	100
	SG SECURITIES ASIA INTERNATIONAL HOLDINGS LIMITED	Broker	FULL	100	100	100	100
	(1) SGL ASIA HK	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOCIETE GENERALE ASIA LTD	Financial Company	FULL	100	100	100	100
	TH INVESTMENTS (HONG KONG) 1 LIMITED	Financial Company	FULL	100	100	100	100
	TH INVESTMENTS (HONG KONG) 5 LIMITED	Financial Company	FULL	100	100	100	100
Hungary							
	ALD AUTOMOTIVE MAGYARORSZAG AUTOPARK-KEZELO ES FINANSZIROZO KORLATOLT FELELOSSEGU TARSASAG	Specialist Financing	FULL	75.94	79.82	100	100
Jersey Island							
	ELMFORD LIMITED	Services	FULL	100	100	100	100
	HANOM I LIMITED	Financial Company	FULL	100	100	100	100
	HANOM II LIMITED	Financial Company	FULL	100	100	100	100
	HANOM III LIMITED	Financial Company	FULL	100	100	100	100

	J D CORPORATE SERVICES LIMITED	Services	FULL	100	100	100	100
	KLEINWORT BENSON CUSTODIAN SERVICES LIMITED	Bank	FULL	100	100	100	100
	SG HAMBROS NOMINEES (JERSEY) LIMITED	Financial Company	FULL	100	100	100	100
	SG HAUSSMANN FUND (EX-LYXOR MASTER FUND)	Financial Company	FULL	100	100	100	100
	SG KLEINWORT HAMBROS BANK (CI) LIMITED	Bank	FULL	100	100	100	100
(1) (6)	SG KLEINWORT HAMBROS BANK LIMITED JERSEY BRANCH	Bank	FULL	100	0	100	0
	SG KLEINWORT HAMBROS CORPORATE SERVICES (CI) LIMITED	Portfolio Management	FULL	100	100	100	100
	SG KLEINWORT HAMBROS TRUST COMPANY (CI) LIMITED	Financial Company	FULL	100	100	100	100
	SGKH TRUSTEES (CI) LIMITED	Services	FULL	100	100	100	100
Isle of Man							
	KBBIOM LIMITED	Bank	FULL	100	50	100	50
	KBTIOM LIMITED	Bank	FULL	100	100	100	100
Guernsey Island							
	CDS INTERNATIONAL LIMITED	Services	FULL	100	100	100	100
	HAMBROS (GUERNSEY NOMINEES) LTD	Services	FULL	100	100	100	100
	HTG LIMITED	Services	FULL	100	100	100	100
	KLEINWORT BENSON INTERNATIONAL TRUSTEES LIMITED	Bank	FULL	100	100	100	100
(1)	SG KLEINWORT HAMBROS BANK (CI) LIMITED, GUERNSEY BRANCH	Bank	FULL	100	100	100	100
(1) (6)	SG KLEINWORT HAMBROS BANK LIMITED GUERNSEY BRANCH	Bank	FULL	100	0	100	0
India							
	ALD AUTOMOTIVE PRIVATE LIMITED	Specialist Financing	FULL	75.94	79.82	100	100
(1)	SG MUMBAI	Bank	FULL	100	100	100	100
	SOCIETE GENERALE GLOBAL SOLUTION CENTRE INDIA	Services	FULL	100	100	100	100
	SOCIETE GENERALE SECURITIES INDIA PRIVATE LIMITED	Broker	FULL	100	100	100	100
Ireland							
	ALD RE DESIGNATED ACTIVITY COMPANY	Insurance	FULL	75.94	79.82	100	100
	IRIS SPV PLC SERIES MARK	Financial Company	FULL	100	100	100	100
	IRIS SPV PLC SERIES SOGECAP	Financial Company	FULL	100	100	100	100
	MERRION FLEET MANAGEMENT LIMITED	Specialist Financing	FULL	75.94	79.82	100	100

	NB SOG EMER EUR - I	Financial Company	FULL	100	100	100	100
(1)	SG DUBLIN	Bank	FULL	100	100	100	100
	SG KLEINWORT HAMBROS PRIVATE INVESTMENT OFFICE SERVICES LIMITED	Bank	FULL	100	100	100	100
	SGBT FINANCE IRELAND DESIGNATED ACTIVITY COMPANY	Specialist Financing	FULL	100	100	100	100
(2)	SOCIETE GENERALE HEDGING DESIGNATED ACTIVITY COMPANY	Financial Company	FULL	0	100	0	100
	SOCIETE GENERALE SECURITIES SERVICES, SGSS (IRELAND) LIMITED (EX-SOCIETE GENERALE SECURITIES SERVICES (IRELAND) LTD)	Financial Company	FULL	100	100	100	100
Italy							
	ALD AUTOMOTIVE ITALIA S.R.L	Specialist Financing	FULL	75.94	79.82	100	100
	FIDITALIA S.P.A	Specialist Financing	FULL	100	100	100	100
	FRAER LEASING SPA	Specialist Financing	FULL	74.99	75.02	74.99	75.02
(6)	MORIGI FINANCE S.R.L.	Specialist Financing	FULL	100	0	100	0
(6)	RED & BLACK AUTO ITALY S.R.L	Specialist Financing	FULL	100	0	100	0
	SG EQUIPMENT FINANCE ITALY S.P.A.	Specialist Financing	FULL	100	100	100	100
	SG FACTORING SPA	Specialist Financing	FULL	100	100	100	100
	SG LEASING SPA	Specialist Financing	FULL	100	100	100	100
(1)	SG LUXEMBOURG ITALIAN BRANCH	Specialist Financing	FULL	100	100	100	100
(1)	SG MILAN	Bank	FULL	100	100	100	100
(1)	SOCECAP SA RAPPRESENTANZA GENERALE PER L'ITALIA	Insurance	FULL	100	100	100	100
	SOCIETE GENERALE SECURITIES SERVICES S.P.A.	Bank	FULL	100	100	100	100
(1)	SOGESSUR SA	Insurance	FULL	100	100	100	100
Japan							
(1)	SG TOKYO	Bank	FULL	100	100	100	100
	SOCIETE GENERALE HAUSSMANN MANAGEMENT JAPAN LIMITED	Portfolio Management	FULL	100	100	100	100
	SOCIETE GENERALE SECURITIES JAPAN LIMITED	Broker	FULL	100	100	100	100
Latvia							
	ALD AUTOMOTIVE SIA	Specialist Financing	FULL	56.96	59.86	75	75
Lithuania							
	UAB ALD AUTOMOTIVE	Specialist Financing	FULL	56.96	59.86	75	75
Luxembourg							
	ALD INTERNATIONAL SERVICES S.A.	Specialist Financing	FULL	75.94	79.82	100	100
	AXUS LUXEMBOURG SA	Specialist Financing	FULL	75.94	79.82	100	100
	BARTON CAPITAL SA	Financial Company	FULL	100	100	100	100

	CODEIS COMPARTIMENT A0084	Insurance	FULL	100	100	100	100
	CODEIS COMPARTIMENT A0076	Financial Company	FULL	100	100	100	100
	CODEIS SECURITIES S.A.	Financial Company	FULL	100	100	100	100
	COVALBA	Financial Company	FULL	100	100	100	100
	GOLDMAN SACHS 2 G EM M DBP ID	Financial Company	FULL	100	100	100	100
	IVEFI S.A.	Financial Company	FULL	100	100	100	100
(2)	LYXOR EURO 6M - CLASS SI	Insurance	FULL	0	64.37	0	64.37
	MOOREA GLB BALANCED	Insurance	FULL	68.08	68.08	68.08	68.08
	PIONEER INVESTMENTS DIVERSIFIED LOANS FUND	Specialist Financing	FULL	100	100	100	100
(2)	RED & BLACK AUTO LEASE GERMANY 2 S.A.	Financial Company	FULL	0	79.82	0	100
	RED & BLACK AUTO LEASE GERMANY S.A.	Real Estate and Real Estate Financing	FULL	75.94	79.82	100	100
	SALINGER S.A	Bank	FULL	100	100	100	100
	SG ISSUER	Financial Company	FULL	100	100	100	100
	SGBT ASSET BASED FUNDING SA	Financial Company	FULL	100	100	100	100
	SGBTCI	Financial Company	FULL	100	100	100	100
	SGL ASIA	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SGL RE	Insurance	FULL	100	100	100	100
	SOCIETE GENERALE CAPITAL MARKET FINANCE	Bank	FULL	100	100	100	100
	SOCIETE GENERALE FINANCING AND DISTRIBUTION	Bank	FULL	100	100	100	100
	SOCIETE GENERALE LIFE INSURANCE BROKER SA	Insurance	FULL	100	100	100	100
	SOCIETE GENERALE LUXEMBOURG	Bank	FULL	100	100	100	100
	SOCIETE GENERALE LUXEMBOURG LEASING	Specialist Financing	FULL	100	100	100	100
	SOCIETE GENERALE PRIVATE WEALTH MANAGEMENT S.A.	Financial Company	FULL	100	100	100	100
	SOCIETE GENERALE RE SA	Insurance	FULL	100	100	100	100
	SOCIETE IMMOBILIERE DE L'ARSENAL	Group Real Estate Management Company	FULL	100	100	100	100
	SOGELIFE	Insurance	FULL	100	100	100	100
(6)	SOLYS	Financial Company	FULL	100	0	100	0
	SPIRE SA - COMPARTIMENT 2021-51	Insurance	FULL	100	100	100	100
	SURYA INVESTMENTS S.A.	Specialist Financing	FULL	100	100	100	100
(6)	ZEUS FINANCE LEASING S.A.	Specialist Financing	FULL	75.94	0	100	0
Madagascar							

	BFV - SOCIETE GENERALE (EX-BANKY FAMPANDROSOANA VAROTRA SG)	Bank	FULL	70	70	70	70
Malaysia							
(6)	ALD MHC MOBILITY SERVICES MALAYSIA SDN BHD	Specialist Financing	FULL	45.56	0	60	0
Malta							
(2)	LNG MALTA INVESTMENT 1 LIMITED	Financial Company	FULL	0	100	0	100
(2)	LNG MALTA INVESTMENT 2 LIMITED	Financial Company	FULL	0	100	0	100
Morocco							
	ALD AUTOMOTIVE SA MAROC	Specialist Financing	FULL	35.23	36.58	50	50
	ATHENA COURTAGE	Insurance	FULL	58.28	58.23	99.93	99.9
	FONCIMMO	Group Real Estate Management Company	FULL	57.67	57.65	100	100
	LA MAROCAINE VIE	Insurance	FULL	79.24	79.77	99.98	99.98
	SG MAROCAINE DE BANQUES	Bank	FULL	57.67	57.65	57.67	57.65
	SOCIETE D' EQUIPEMENT DOMESTIQUE ET MENAGER "EQDOM"	Specialist Financing	FULL	31.19	30.97	53.98	53.72
	SOCIETE GENERALE DE LEASING AU MAROC	Specialist Financing	FULL	57.67	57.65	100	100
	SOCIETE GENERALE OFFSHORE	Financial Company	FULL	57.64	57.62	99.94	99.94
	SOGECAPITAL GESTION	Financial Company	FULL	57.64	57.62	99.94	99.94
	SOGECAPITAL PLACEMENT	Portfolio Management	FULL	57.66	57.62	99.98	99.94
	SOGEFINANCEMENT MAROC	Specialist Financing	FULL	57.67	57.65	100	100
Mauritius							
	SG SECURITIES BROKING (M) LIMITED	Broker	FULL	100	100	100	100
Mauritania							
(6)	SOCIETE GENERALE MAURITANIE	Bank	FULL	95.5	0	95.5	0
Mexico							
	ALD AUTOMOTIVE S.A. DE C.V.	Specialist Financing	FULL	75.94	79.82	100	100
	ALD FLEET SA DE CV SOFOM ENR	Specialist Financing	FULL	75.94	79.82	100	100
	SGFP MEXICO, S.A. DE C.V.	Financial Company	FULL	100	100	100	100
Monaco							
	SOCIETE DE BANQUE MONACO	Bank	FULL	100	100	100	100
(1)	SOCIETE GENERALE (SUCCURSALE MONACO)	Bank	FULL	100	100	100	100
	SOCIETE GENERALE PRIVATE BANKING (MONACO)	Bank	FULL	100	100	100	100
Norway							
	ALD AUTOMOTIVE AS	Specialist Financing	FULL	75.94	79.82	100	100
	NF FLEET AS	Specialist Financing	FULL	60.75	63.85	80	80
New Caledonia							
	CREDICAL	Specialist Financing	FULL	88.34	87.07	98.05	96.64
	SOCIETE GENERALE CALEDONIENNE DE BANQUE	Bank	FULL	90.09	90.1	90.09	90.1
Netherlands							

	ALVARENGA INVESTMENTS B.V.	Specialist Financing	FULL	100	100	100	100
	ASTEROLD B.V.	Financial Company	FULL	100	100	100	100
	AXUS FINANCE NL B.V.	Specialist Financing	FULL	75.94	79.82	100	100
	AXUS NEDERLAND BV	Specialist Financing	FULL	75.94	79.82	100	100
	BRIGANTIA INVESTMENTS B.V.	Financial Company	FULL	100	100	100	100
	CAPEREA B.V.	Specialist Financing	FULL	100	100	100	100
(6)	FORD FLEET MANAGEMENT B.V.	Specialist Financing	FULL	38.05	0	50.1	0
	HERFSTTAFEL INVESTMENTS B.V.	Specialist Financing	FULL	100	100	100	100
	HORDLE FINANCE B.V.	Financial Company	FULL	100	100	100	100
	MONTALIS INVESTMENT BV	Specialist Financing	FULL	100	100	100	100
(1)	SG AMSTERDAM	Bank	FULL	100	100	100	100
	SG EQUIPMENT FINANCE BENELUX BV	Specialist Financing	FULL	100	100	100	100
	SOGLEASE B.V.	Specialist Financing	FULL	100	100	100	100
	SOGLEASE FILMS	Specialist Financing	FULL	100	100	100	100
	TYNEVOR B.V.	Financial Company	FULL	100	100	100	100
Peru							
	ALD AUTOMOTIVE PERU S.A.C.	Specialist Financing	FULL	75.94	79.82	100	100
Poland							
	ALD AUTOMOTIVE POLSKA SP Z O.O.	Specialist Financing	FULL	75.94	79.82	100	100
	SG EQUIPMENT LEASING POLSKA SP Z O.O.	Specialist Financing	FULL	100	100	100	100
(1)	SOCIETE GENERALE S.A. ODDZIAL W POLSCE	Bank	FULL	100	100	100	100
(1)	SOGECAP SPOLKA AKCYJNA ODDZIAL W POLSCE	Insurance	FULL	100	100	100	100
(1)	SOGESSUR SPOLKA AKCYJNA ODDZIAL W POLSCE	Insurance	FULL	100	100	100	100
French Polynesia							
	BANQUE DE POLYNESIE	Bank	FULL	72.1	72.1	72.1	72.1
	SOGLEASE BDP "SAS"	Specialist Financing	FULL	72.1	72.1	100	100
Portugal							
	SGALD AUTOMOTIVE SOCIEDADE GERAL DE COMERCIO E ALUGUER DE BENS SA	Specialist Financing	FULL	75.94	79.82	100	100
Czech Republic							
	ALD AUTOMOTIVE S.R.O.	Specialist Financing	FULL	75.94	79.82	100	100
	ESSOXS SRO	Specialist Financing	FULL	80	80	100	100
	FACTORING KB	Financial Company	FULL	60.73	60.73	100	100
	KB PENZIJNI SPOLECNOST, A.S.	Financial Company	FULL	60.73	60.73	100	100
	KB REAL ESTATE	Real Estate and Real Estate Financing	FULL	60.73	60.73	100	100
	KB SMARTSOLUTIONS, S.R.O.	Bank	FULL	60.73	60.73	100	100
	KOMERCNI BANKA A.S	Bank	FULL	60.73	60.73	60.73	60.73

	KOMERCNI POJISTOVNA A.S	Insurance	FULL	80.76	80.76	100	100
	MODRA PYRAMIDA STAVEBNI SPORITELNA AS	Financial Company	FULL	60.73	60.73	100	100
	PROTOS	Financial Company	FULL	60.73	60.73	100	100
	SG EQUIPMENT FINANCE CZECH REPUBLIC S.R.O.	Specialist Financing	FULL	80.33	80.33	100	100
	SOGEPROM CESKA REPUBLIKA S.R.O.	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM MICHLE S.R.O.	Real Estate and Real Estate Financing	FULL	100	100	100	100
	STD2, S.R.O.	Group Real Estate Management Company	FULL	60.73	60.73	100	100
	VN 42	Real Estate and Real Estate Financing	FULL	60.73	60.73	100	100
	WORLDLINE CZECH REPUBLIC S.R.O.	Services	ESI	0.06	0.61	40	40
Romania							
	ALD AUTOMOTIVE SRL	Specialist Financing	FULL	72.79	75.89	100	100
	BRD - GROUPE SOCIETE GENERALE SA	Bank	FULL	60.17	60.17	60.17	60.17
	BRD ASSET MANAGEMENT SAI SA	Portfolio Management	FULL	60.17	60.15	100	100
	BRD FINANCE IFN S.A.	Financial Company	FULL	80.48	80.48	100	100
	BRD SOGELEASE IFN S.A.	Specialist Financing	FULL	60.17	60.17	100	100
	S.C. ROGARIU IMOBILIARE S.R.L.	Real Estate and Real Estate Financing	FULL	75	75	75	75
	SOCIETE GENERALE GLOBAL SOLUTION CENTRE ROMANIA	Services	FULL	100	100	100	100
	SOGEPROM ROMANIA SRL	Real Estate and Real Estate Financing	FULL	100	100	100	100
	(1) SOGESSUR S.A PARIS - SUCURSALA BUCURESTI	Insurance	FULL	100	100	100	100
United Kingdom							
	ACR	Financial Company	FULL	100	100	100	100
	ALD AUTOMOTIVE GROUP LIMITED	Specialist Financing	FULL	75.94	79.82	100	100
	ALD AUTOMOTIVE LIMITED	Specialist Financing	FULL	75.94	79.82	100	100
	(1) BRIGANTIA INVESTMENTS B.V. (UK BRANCH)	Financial Company	FULL	100	100	100	100
	FENCHURCH NOMINEES LIMITED	Bank	FULL	100	100	100	100
	(6) FORD FLEET MANAGEMENT UK LIMITED	Specialist Financing	FULL	38.05	0	100	0
	FRANK NOMINEES LIMITED	Bank	FULL	100	100	100	100
	(1) HORDLE FINANCE B.V. (UK BRANCH)	Financial Company	FULL	100	100	100	100
	JWB LEASING LIMITED PARTNERSHIP	Specialist Financing	FULL	100	100	100	100

	KBIM STANDBY NOMINEES LIMITED	Bank	FULL	100	100	100	100
	KBPB NOMINEES LIMITED	Bank	FULL	100	100	100	100
	KH COMPANY SECRETARIES LIMITED	Bank	FULL	100	100	100	100
	KLEINWORT BENSON FARMLAND TRUST (MANAGERS) LIMITED	Bank	FULL	75	75	75	75
	LANGBOURN NOMINEES LIMITED	Bank	FULL	100	100	100	100
(6)	RED & BLACK AUTO LEASE UK 1 PLC	Specialist Financing	FULL	75.94	0	100	0
	ROBERT BENSON, LONSDALE & CO. (CANADA) LIMITED	Bank	FULL	100	100	100	100
	SG (MARITIME) LEASING LIMITED	Specialist Financing	FULL	100	100	100	100
	SG EQUIPMENT FINANCE (DECEMBER) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG FINANCIAL SERVICES LIMITED	Financial Company	FULL	100	100	100	100
	SG HAMBROS (LONDON) NOMINEES LIMITED	Financial Company	FULL	100	100	100	100
	SG HAMBROS TRUST COMPANY LIMITED	Financial Company	FULL	100	100	100	100
	SG HEALTHCARE BENEFITS TRUSTEE COMPANY LIMITED	Financial Company	FULL	100	100	100	100
	SG INVESTMENT LIMITED	Financial Company	FULL	100	100	100	100
	SG KLEINWORT HAMBROS BANK LIMITED	Bank	FULL	100	100	100	100
	SG KLEINWORT HAMBROS LIMITED	Bank	FULL	100	100	100	100
	SG KLEINWORT HAMBROS TRUST COMPANY (UK) LIMITED	Bank	FULL	100	100	100	100
	SG LEASING (ASSETS) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (CENTRAL 3) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (GEMS) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (JUNE) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (MARCH) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (USD) LIMITED	Specialist Financing	FULL	100	100	100	100
(2)	SG LEASING (UTILITIES) LIMITED	Specialist Financing	FULL	0	100	0	100
	SG LEASING IX	Specialist Financing	FULL	100	100	100	100
(1)	SG LONDRES	Bank	FULL	100	100	100	100
	SOCGEN NOMINEES (UK) LIMITED	Financial Company	FULL	100	100	100	100
	SOCIETE GENERALE EQUIPMENT FINANCE LIMITED	Specialist Financing	FULL	100	100	100	100
	SOCIETE GENERALE INTERNATIONAL LIMITED	Broker	FULL	100	100	100	100
	SOCIETE GENERALE INVESTMENTS (U.K.) LIMITED	Financial Company	FULL	100	100	100	100
	STRABUL NOMINEES LIMITED	Financial Company	FULL	100	100	100	100
(1)	TYNEVOR B.V. (UK BRANCH)	Financial Company	FULL	100	100	100	100

Russian Federation							
	ALD AUTOMOTIVE OOO	Specialist Financing	FULL	75.94	79.82	100	100
(4)	CJSC SG FINANCE (EX-CLOSED JOINT STOCK COMPANY SG FINANCE)	Specialist Financing	FULL	0	99.97	0	100
(4)	LLC RUSFINANCE	Bank	FULL	0	99.97	0	100
(4)	LLC TELSUCOM	Services	FULL	0	99.97	0	100
(4)	PJSC ROSBANK	Bank	FULL	0	99.97	0	99.97
(4)	RB CAPITAL ASSET MANAGEMENT LIMITED LIABILITY COMPANY	Real Estate and Real Estate Financing	FULL	0	99.97	0	100
(4)	RB FACTORING LLC	Specialist Financing	FULL	0	99.97	0	100
(4)	RB LEASING LLC	Specialist Financing	FULL	0	99.97	0	100
(4)	RB SERVICE LLC	Group Real Estate Management Company	FULL	0	99.97	0	100
(4)	RB SPECIALIZED DEPOSITARY LLC	Financial Company	FULL	0	99.97	0	100
(4)	RB TRADING LIMITED LIABILITY COMPANY	Specialist Financing	FULL	0	99.97	0	100
(4)	SOCIETE GENERALE STRAKHOVANIE LLC	Insurance	FULL	0	99.99	0	100
(4)	SOCIETE GENERALE STRAKHOVANIE ZHIZNI LLC	Insurance	FULL	0	99.99	0	100
Senegal							
	SOCIETE GENERALE SENEGAL	Bank	FULL	64.45	64.45	64.87	64.87
Serbia							
	ALD AUTOMOTIVE D.O.O BEOGRAD	Specialist Financing	FULL	75.94	79.82	100	100
Singapore							
	SG MARKETS (SEA) PTE. LTD.	Broker	FULL	100	100	100	100
	SG SECURITIES (SINGAPORE) PTE. LTD.	Broker	FULL	100	100	100	100
(1)	SG SINGAPOUR	Bank	FULL	100	100	100	100
	SG TRUST (ASIA) LTD	Financial Company	FULL	100	100	100	100
Slovakia							
	ALD AUTOMOTIVE SLOVAKIA S.R.O.	Specialist Financing	FULL	75.94	79.82	100	100
	ESSOX FINANCE S.R.O	Specialist Financing	FULL	80	80	100	100
(1)	KOMERCNI BANKA SLOVAKIA	Bank	FULL	60.73	60.73	100	100
(1)	SG EQUIPMENT FINANCE CZECH REPUBLIC S.R.O. ORGANIZACNA ZLOZKA (SLOVAK RUPUBLIC BRANCH)	Specialist Financing	FULL	80.33	80.33	100	100
Slovenia							
	ALD AUTOMOTIVE OPERATIONAL LEASING DOO	Specialist Financing	FULL	75.94	79.82	100	100
Sweden							
	ALD AUTOMOTIVE AB	Specialist Financing	FULL	75.94	79.82	100	100
	NF FLEET AB	Specialist Financing	FULL	60.75	63.85	80	80
(1)	SOCIETE GENERALE SA BANKFILIAL SVERIGE	Bank	FULL	100	100	100	100
Switzerland							
	ALD AUTOMOTIVE AG	Specialist Financing	FULL	75.94	79.82	100	100

	SG EQUIPMENT FINANCE SCHWEIZ AG	Specialist Financing	FULL	100	100	100	100
(1)	SG ZURICH	Bank	FULL	100	100	100	100
	SOCIETE GENERALE PRIVATE BANKING (SUISSE) S.A.	Bank	FULL	100	100	100	100
Taiwan							
(1)	SG SECURITIES (HONG KONG) LIMITED TAIPEI BRANCH	Broker	FULL	100	100	100	100
(1)	SG TAIPEI	Bank	FULL	100	100	100	100
Chad							
	SOCIETE GENERALE TCHAD	Bank	FULL	56.91	56.86	67.92	67.83
Thailand							
	SOCIETE GENERALE SECURITIES (THAILAND) LTD.	Broker	FULL	100	100	100	100
Togo							
(1)	SOCIETE GENERALE TOGO	Bank	FULL	93.43	93.43	100	100
Tunisia							
	UNION INTERNATIONALE DE BANQUES	Bank	FULL	55.1	55.1	52.34	52.34
Turkey							
	ALD AUTOMOTIVE TURIZM TICARET ANONIM SIRKETI	Specialist Financing	FULL	75.94	79.82	100	100
(1)	SG ISTANBUL	Bank	FULL	100	100	100	100
Ukraine							
	ALD AUTOMOTIVE UKRAINE LIMITED LIABILITY COMPANY	Specialist Financing	FULL	75.94	79.82	100	100

* FULL: Full consolidation - JO: Joint Operation - EJV: Equity (Joint Venture) - ESI: Equity (significant influence) - EFS: Equity For Simplification (Entities controlled by the Group that are consolidated using the equity method for simplification because are not significant).

(1) Branches.

(2) Entities wound up.

(3) Removal from the scope (loss of control or significant influence).

(4) Entities sold.

(5) Merged.

(6) Newly consolidated.

NOTE 8.6 - FEES PAID TO STATUTORY AUDITORS

The consolidated financial statements of Societe Generale group are certified jointly by Ernst & Young et Autres represented by Mr Micha Missakian and Mr Vincent Roty, on the one hand, and Deloitte et Associés represented by Mr Jean-Marc Mickeler and Mrs Maud Monin, on the other hand.

On the proposal of the Board of Directors and following the recommendation of the Audit and Internal Control Committee of Societe Generale (CACI), the Annual General Meeting held on 23 May 2018 renewed the mandates of Ernst & Young et Autres and of Deloitte et Associés, for six years.

In accordance with the European regulation on the audit reform, the CACI implements a specific approval policy of the non-audit services of statutory auditors ("SACC") and their network by to verify its compliance before to the launch of the mission.

A synthesis of the SACC (approved or refused) is presented to every session of the CACI.

The fees by type of mission (audit or non-audit) are submitted to an annual review by the CACI.

Lastly, the Finance Departments of the entities and business divisions annually appraise the quality of the audits performed by Deloitte et Associés and Ernst & Young et Autres. The conclusions of this survey are presented to the CACI.

The table below presents the auditors' fees invoiced by Ernst & Young et Autres, on the one hand, and Deloitte et Associés, on the other hand to Societe Generale S.A. and its subsidiaries. These amounts do not include the fees invoiced by their respective networks.

Table 8.6.A

		Ernst & Young et Autres		Deloitte et Associés		Total	
		2022	2021 *	2022	2021 *	2022	2021 *
<i>(In EUR m excluding VAT)</i>							
Statutory audit, certification, examination of parent company and consolidated accounts	Issuer	4	4	4	4	8	8
	Fully consolidated subsidiaries	4	3	7	6	11	9
Sub-total Audit		8	7	11	10	19	17
Non-audit services (SACC)	Issuer	-	1	-	1	-	2
	Fully consolidated subsidiaries	1	-	1	-	2	-
Total		9	8	12	11	21	19

* The amounts have been restated compared with the published financial statements for the year ended 31 December 2021 in order to present only the amounts of fees invoiced by Ernst & Young et Autres, on the one hand, and Deloitte et Associés, on the other hand, to Societe Generale S.A. and its subsidiaries, excluding the fees charged by their network.

Services other than the certification of accounts consist mainly of extended audit procedures (agreed-upon) and comfort letters. They also include services specifically and exclusively entrusted to the auditors for EUR 0.7 million.

NOTE 9 - INFORMATION ON RISKS AND LITIGATION

Every quarter, the Group reviews in detail the disputes presenting a significant risk. These disputes may lead to the recording of a provision if it becomes probable or certain that the Group will incur an outflow of resources for the benefit of a third party without receiving at least the equivalent value in exchange. These provisions for litigations are classified among the Other provisions included in the Provisions item in the liabilities of the balance-sheet.

No detailed information can be disclosed on either the recording or the amount of a specific provision given that such disclosure would likely seriously prejudice the outcome of the disputes in question.

- On 24 October 2012, the Court of Appeal of Paris confirmed the first judgment delivered on 5 October 2010, finding J. Kerviel guilty of breach of trust, fraudulent insertion of data into a computer system, forgery and use of forged documents. J. Kerviel was sentenced to serve a prison sentence of five years, two years of which are suspended, and was ordered to pay EUR 4.9 billion in damages to the bank. On 19 March 2014, the Supreme Court confirmed the criminal liability of J. Kerviel. This decision puts an end to the criminal proceedings. On the civil front, on 23 September 2016, the Versailles Court of Appeal rejected J. Kerviel's request for an expert determination of the damage suffered by Societe Generale, and therefore confirmed that the net accounting losses suffered by the Bank as a result of his criminal conduct amount to EUR 4.9 billion. It also declared J. Kerviel partially responsible for the damage caused to Societe Generale and sentenced him to pay to Societe Generale EUR 1 million. Societe Generale and J. Kerviel did not appeal before the Supreme Court. Societe Generale considers that this decision has no impact on its tax situation. However, as indicated by the Minister of the Economy and Finance in September 2016, the tax authorities have examined the tax consequences of this book loss and indicated that they intended to call into question the deductibility of the loss caused by the actions of J. Kerviel, amounting to EUR 4.9 billion. This proposed tax rectification has no immediate effect and will possibly have to be confirmed by an adjustment notice sent by the tax authorities when Societe Generale is in a position to deduct the tax loss carry forwards arising from the loss from its taxable income. Such a situation will not occur for several years according to the bank's forecasts. In view of the 2011 opinion of the French Supreme Administrative Court (*Conseil d'Etat*) and its established case law which was recently confirmed again in this regard, Societe Generale considers that there is no need to provision the corresponding deferred tax assets. In the event that the authorities decide, in due course, to confirm their current position, Societe Generale group will not fail to assert its rights before the competent courts. By a decision handed down on 20 September 2018, the Investigation Committee of the reviewing and reassessment Criminal Court has furthermore declared inadmissible the request filed in May 2015 by J. Kerviel against his criminal sentence, confirming the absence of any new element or fact that could justify the reopening of the criminal file.
- Between 2003 and 2008, Societe Generale set up gold consignment lines with the Turkish group Goldas. In February 2008, Societe Generale was alerted to a risk of fraud and embezzlement of gold stocks held by Goldas. These suspicions were rapidly confirmed following the failure by Goldas to pay or refund gold worth EUR 466.4 million. Societe Generale brought civil proceedings against its insurers and various Goldas Group entities. Goldas launched various proceedings in Turkey and in the UK against Societe Generale. In the action brought by Societe Generale against Goldas in the UK, Goldas applied to have the action of Societe Generale struck-out and applied to the UK court for damages. On 3 April 2017, the UK court granted both applications and will, after an inquiry into damages, rule on the amount due to Goldas, if any. On 15 May 2018, the Court of Appeal discharged entirely the inquiry into damages granted by the High Court to Goldas but rejected Societe Generale's arguments relating to service of the claims issued against Goldas, which are therefore time-barred. On 18 December 2018, the Supreme Court refused permission to appeal to both Societe Generale and Goldas. On 16 February 2017, the Paris Commercial Court dismissed Societe Generale's claims against its insurers. Societe Generale filed an appeal against the Paris Commercial Court's decision.

- In the early 2000s, the French banking industry decided to transition to a new digital system in order to streamline cheque clearing. To support this reform (known as EIC - *Echange d'Images Chèques*), which has contributed to the improvement of cheque payments security and to the fight against fraud, the banks established several interbank fees (including the CEIC which was abolished in 2007). These fees were implemented under the aegis of the banking sector supervisory authorities, and to the knowledge of the public authorities.

On 20 September 2010, the French competition authority ruled that the joint implementation and the setting of the amount of the CEIC and of two additional fees for related services were in breach of competition law. The authority fined all the participants to the agreement (including the Banque de France) a total of approximately EUR 385 million. On 2 December 2021, after several years of proceedings and two decisions of the Supreme Court, the Paris Court of Appeal overturned the decision of the French competition authority and ruled that (i) it was not proven that the establishment of the CEIC and the fees for related services on AOCT (cancellation of wrongly cleared transactions) as well as their collection had infringed the provisions of Article L. 420-1 of the French Commercial Code and of Article 101 of the Treaty on the Functioning of the European Union and, (ii) that its decision was giving rise to a right of restitution of the sums paid in execution of the overturned decision, namely approximately EUR 53.5 million for Societe Generale and approximately EUR 7 million for Crédit du Nord, together with interests at the legal rate. On 31 December 2021, the French competition authority filed an appeal before the Supreme court against this decision. The new proceeding before the Supreme Court is still pending.

- In August 2009, Societe Generale Private Banking (Switzerland) (“SGPBS”), along with several other financial institutions, was named as a defendant in a putative class action that was ultimately transferred to the US District Court for the Northern District of Texas. The plaintiffs sought to represent a class of individuals who were customers of Stanford International Bank Ltd. (SIBL), an Antiguan bank, with money on deposit at SIBL and/or holding Certificates of Deposit issued by SIBL as of 16 February 2009. The plaintiffs alleged that they suffered losses as a result of fraudulent activity at SIBL and the Stanford Financial Group or related entities, and that the defendants were responsible for those alleged losses. The plaintiffs further sought to recoup payments made through or to the defendants on behalf of SIBL or related entities on the basis that they were alleged to have been fraudulent transfers. The Official Stanford Investors Committee (OSIC) was permitted to intervene and filed a complaint against SGPBS and the other defendants seeking similar relief. Following motions to dismiss, the Court ultimately in April 2015 permitted the substantial majority of the claims to proceed.

On 7 November 2017, the District Court denied the plaintiffs’ motion for class certification. On 3 May 2019, several hundred individual plaintiffs filed motions to intervene in the pending OSIC action seeking recovery in their individual capacities for losses on their Stanford investments. By order of 18 September 2019 the court denied the motions to intervene. One group of plaintiffs appealed the denial, which was rejected by the court of appeal on 3 February 2021, and the remaining group of plaintiffs initiated a separate action in Texas state court in Houston in November 2019, now pending in the Southern District of Texas.

On 12 February 2021, all parties in the litigation filed motions for summary judgment. SGPBS seeks dismissal of all pending claims, and OSIC, renewing a prior unsuccessful motion for summary judgement seeks return of a USD 95 million transfer to SGPBS in 2008. Discovery has been completed.

On 19 January 2022, the US District Court for the Northern District of Texas asked the Judicial Panel for Multidistrict Litigation to remand the case to US District Court for the Southern District of Texas in Houston, where it was originally filed, for further proceedings, including trial. The following day, on 20 January 2022, the US District Court for the Northern District of Texas ruled on the pending motions for summary judgment denying SGPBS’s and OSIC’s motions. The case was formally remanded to the Southern District of Texas in Houston by order of 28 January 2022, and the trial as to all defendants is to commence on 27 February 2023. On 3 January 2023, SGPBS entered into an agreement settling the litigation brought by OSIC as well as the pending intervenor claims brought by certain individual plaintiffs also pending in the Southern District of Texas, in an amount covered by reserves. This settlement is subject to review and approval by the US District Court for the Northern District of Texas, which oversees the wind-up of the Stanford estate.

In the same matter, a pre-contentious claim (“*requête en conciliation*”) was initiated in Geneva in November 2022 by the Joint Liquidators of SIBL, appointed by the courts in Antigua, representing the same investors as those represented by the US plaintiffs. SGPBS is defending that claim.

- Notwithstanding the agreements reached in 2018 with the US authorities regarding certain London Interbank Offered Rates and the Euro Interbank Offered Rate (“the IBOR matter”) the dismissal on 30 November 2021 of the legal proceedings brought by the DOJ in this matter, the Bank continues to defend civil proceedings in the United States (as described below) and has responded to information requests received from other authorities, including the Attorneys General of various States of the United States and the New York Department of Financial Services.

In the United States, Societe Generale, along with other financial institutions, has been named as a defendant in putative class actions involving the setting of US Dollar Libor, Japanese Yen Libor, and Euribor rates and trading in instruments indexed to those rates. Societe Generale has also been named in several individual (non-class) actions concerning the US Dollar Libor rate. All of these actions are pending in the US District Court in Manhattan (the “District Court”).

As to US Dollar Libor, all claims against Societe Generale were dismissed by the District Court or voluntarily dismissed by the plaintiffs, except in two putative class actions and one individual action that were effectively stayed. The class plaintiffs and a number of individual plaintiffs appealed the dismissal of their antitrust claims to the United States Court of Appeals for the Second Circuit (“Second Circuit”). On 30 December 2021, the Second Circuit reversed the dismissal and reinstated the antitrust claims. These reinstated claims which have been returned to the District Court include those asserted by a proposed class of over-the-counter (OTC) plaintiffs and by OTC plaintiffs that have filed individual actions. On 21 June 2022, the U.S. Supreme Court denied a petition filed by Societe Generale and other defendants that sought review of the Second Circuit’s ruling. Discovery is ongoing. On 19 August 2022, one of the stayed putative class actions was voluntarily dismissed by plaintiffs. On 9 January 2023, the claims against Societe Generale by one of the individual plaintiffs, National Credit Union Administration (as Liquidating Agent for certain credit unions), were voluntarily dismissed with prejudice.

As to Japanese Yen Libor, the District Court dismissed the complaint brought by purchasers of Euroyen over-the-counter derivative products. On 1 April 2020, the Second Circuit reversed the dismissal and reinstated the claims. On 30 September 2021, the District Court dismissed certain plaintiffs and all Racketeer Influenced and Corrupt Organizations Act claims but upheld certain antitrust and state law claims against Societe Generale. Discovery in that action is ongoing in the other action, brought by purchasers or sellers of Euroyen derivative contracts on the Chicago Mercantile Exchange on 27 September 2019, plaintiff filed a motion for class certification. On 25 September 2020, the District Court granted defendants’ motion for judgment on the pleadings and dismissed plaintiff’s remaining claims. Plaintiff has appealed to the Second Circuit. On 18 October 2022, as amended on 8 December 2022, the Second Circuit affirmed the District Court’s dismissal of plaintiff’s claims.

As to Euribor, the District Court dismissed all claims against Societe Generale in the putative class action and denied the plaintiffs’ motion to file a proposed amended complaint. Plaintiffs have appealed those rulings to the Second Circuit. Societe Generale reached a settlement of this action in an amount covered by reserves. Shortly thereafter, on 21 November 2022, the Second Circuit stayed plaintiffs’ appeal as to Societe Generale and remanded that portion of the case to the District Court for consideration of the proposed settlement.

In Argentina, Societe Generale, along with other financial institutions, has been named as a defendant in litigation brought by a consumer association on behalf of Argentine consumers who held government bonds or other specified instruments that paid interest tied to US Dollar Libor. The allegations concern violations of Argentine consumer protection law in connection with alleged manipulation of the US Dollar Libor rate. Societe Generale has not yet been served with the complaint in this matter.

- Beginning on 15 January 2019, Societe Generale and SG Americas Securities, LLC, along with other financial institutions, were named in three putative antitrust class actions in the US District Court in Manhattan, which were consolidated. Plaintiffs alleged that the USD ICE Libor panel banks conspired to make artificially low submissions to that benchmark in order to profit on their trading in derivatives tied to USD ICE Libor. Plaintiffs were seeking to certify a class comprised of US residents (individuals and entities) that transacted with a defendant in floating rate debt instruments or interest rate swaps tied to USD ICE Libor and received a payment at any time between 1 February 2014 to the present, regardless of when the instrument was purchased. By order dated 26 March 2020, the District Court dismissed the action. Plaintiffs appealed that ruling. On 6 April 2021, the Second Circuit permitted a new proposed class representative to intervene as a plaintiff in the appeal. The original proposed class representatives withdrew

from the action. On 14 February 2022, the Second Circuit dismissed the remaining plaintiff's appeal for lack of standing leaving undisturbed the District Court's dismissal. This litigation is now concluded.

- Societe Generale, along with several other financial institutions, was named as a defendant in a putative class action alleging violations of US antitrust laws and the CEA in connection with foreign exchange spot and derivatives trading. The action was brought by persons or entities that transacted in certain over-the-counter and exchange-traded foreign exchange instruments. Societe Generale reached a settlement of USD 18 million, which was approved by the Court on 6 August 2018. On 7 November 2018, a group of individual entities that elected to opt out of the settlement filed a lawsuit against Societe Generale, SG Americas Securities, LLC and several other financial institutions. SG Americas Securities, LLC was dismissed by order dated 28 May 2020. Discovery is proceeding as to Societe Generale and the other remaining defendants. On 11 November 2020, Societe Generale was named, along with several other banks, in a UK action alleging collusion in the market for FX instruments. The action has been transferred to the Competition Appeal Tribunal. Societe Generale is defending both actions.
- On 10 December 2012, the French Supreme Administrative Court (*Conseil d'Etat*) rendered two decisions confirming that the "*précompte* tax" which used to be levied on corporations in France does not comply with EU law and defined a methodology for the reimbursement of the amounts levied by the tax authorities. However, such methodology considerably reduces the amount to be reimbursed. Societe Generale purchased in 2005 the "*précompte* tax" claims of two companies (Rhodia and Suez, now ENGIE) with a limited recourse on the selling companies. One of the above decisions of the French Supreme Administrative Court relates to Rhodia. Societe Generale has brought proceedings before the French administrative courts.

Several French companies applied to the European Commission, who considered that the decisions handed down by the French Supreme Administrative Court on 10 December 2012, which was supposed to implement the decision rendered by the Court of Justice of the European Union C-310/09 on 15 September 2011, infringed a number of principles of European law. The European Commission subsequently brought infringement proceedings against the French Republic in November 2014, and since then confirmed its position by publishing a reasoned opinion on 28 April 2016 and by referring the matter to the Court of Justice of the European Union on 8 December 2016. The Court of Justice of European Union rendered its judgement on 4 October 2018 and sentenced France for failure by the French Supreme Administrative Court to disregard the tax on EU sub-subsidiaries in order to secure the withholding tax paid in error as well as on the absence of any preliminary question. With regard to the practical implementation of the decision, Societe Generale has continued to assert its rights with the competent courts and the tax authorities, which it expects to be treated diligently and in accordance with the law. On 23 June 2020, the Administrative Court of Appeal of Versailles issued a ruling in favour of Societe Generale on our 2002 and 2003 Suez claims, followed by an enforcement in our favour. The judgment of Versailles held that the advance payment was not compatible with the Parent-Subsidiary Directive: the French Supreme Administrative Court, which had also received a request for a priority question of constitutionality, also pointed out that the advance payment was incompatible with Article 4 of the Parent-Subsidiary Directive but that a question should be referred to the ECJ for a preliminary ruling in order to ascertain this. The Court of Luxembourg has confirmed on 12 May 2022 that the "*précompte*" was incompatible with the Parent-Subsidiary Directive.

- Societe Generale, along with other financial institutions, was named as a defendant in a putative class action alleging violations of US antitrust laws and the CEA in connection with its involvement in the London Gold Market Fixing. The action is brought on behalf of persons or entities that sold physical gold, sold gold futures contracts traded on the CME, sold shares in gold ETFs, sold gold call options traded on CME, bought gold put options traded on CME, sold over-the-counter gold spot or forward contracts or gold call options, or bought over-the-counter gold put options. Societe Generale, along with three other defendants, has reached a settlement to resolve this action for USD 50 million. By order dated 13 January 2022, the Court granted preliminary approval of the settlement. The final fairness hearing was held on 5 August 2022, and the settlement received final approval by order dated August 8, 2022. This matter is now concluded. Although Societe Generale's share of the settlement is not public, it was not material from a financial perspective. Societe Generale, along with other financial institutions, is also named as a defendant in two

putative class actions in Canada (in the Ontario Superior Court in Toronto and Quebec Superior Court in Quebec City) involving similar claims. Societe Generale is defending the claims.

- Since August 2015, various former and current employees of the Societe Generale group have been under investigation by German criminal prosecution and tax authorities for their alleged participation in the so called “CumEx” patterns in connection with withholding tax on dividends on German shares. These investigations relate inter alia to a fund administered by SGSS GmbH proprietary trading activities and transactions carried out on behalf of clients. The Group entities respond to the requests of the German authorities.

Societe Generale Group entities may also be exposed to claims by third parties, including German tax offices, and become party to legal disputes initiated by clients involved in proceedings against the German tax administration.

- In May 2019, SGAS was named, along with other financial institutions, as a defendant in a putative class action in the US alleging anticompetitive behaviour in the pricing of “agency bonds” issued by US Government Sponsored Enterprises (GSEs), including Federal Home Loan Bank (FHLB), Federal Home Loan Mortgage Corporation (Freddie Mac), and Federal National Mortgage Association (Fannie Mae). On 16 June 2020, SGAS and twelve other bank defendants reached a final settlement with plaintiffs. Although SGAS's share of the settlement is not public, the amount was not material from a financial statement perspective. SGAS was also named in four separate individual opt-out litigations by the following plaintiffs: the State of Louisiana (filed September 2019), the City of Baton Rouge/East Baton Rouge Parish and related entities (October 2019), Louisiana Asset Management Pool (April 2020), and the City of New Orleans and related entities (September 2020). These suits also asserted antitrust claims (and in some cases other related claims) against SGAS and multiple other bank defendants based on these plaintiffs' purchases of GSE bonds. As to the opt-out litigations, a settlement was reached involving all defendants in June 2021, of which SGAS's share was immaterial, and these actions have been dismissed. SGAS also received a subpoena from the US Department of Justice (DOJ) in connection with its US agency bond business. SGAS responded to these requests and is cooperating with the DOJ investigation.
- Societe Generale and certain of its subsidiaries are defendants in an action pending in the US Bankruptcy Court in Manhattan brought by the Trustee appointed for the liquidation of Bernard L. Madoff Investment Securities LLC (BLMIS). The action is similar to those brought by the BLMIS Trustee against numerous institutions and seeks recovery of amounts allegedly received by the Societe Generale entities indirectly from BLMIS through so-called “feeder funds” that were invested in BLMIS and from which the Societe Generale entities received redemptions. The suit alleges that the amounts that the Societe Generale entities received are avoidable and recoverable under the US Bankruptcy Code and New York state law. The BLMIS Trustee seeks to recover, in the aggregate, approximately USD 150 million from the Societe Generale entities. The Societe Generale entities are defending the action. In decisions dated 22 November 2016 and 3 October 2018, the Court rejected most of the claims brought by the BLMIS Trustee. The Trustee appealed to the US Court of Appeals for the Second Circuit. By order dated 25 February 2019, the Second Circuit vacated the judgements and remanded for further proceedings. On 1 June 2020, the United States Supreme Court denied Defendant-Appellees' petition for a writ of certiorari. The case is now before the Bankruptcy Court for further proceedings. The Societe Generale defendants filed a motion to dismiss on 29 April 2022. The motion was denied by order dated 7 October 2022.
- On 10 July 2019, Societe Generale was named as a defendant in a litigation filed in the US District Court in Miami by plaintiffs seeking compensation under the Cuban Liberty and Democratic Solidarity (Libertad) Act of 1996 (known as the Helms-Burton Act) stemming from the expropriation by the Cuban government in 1960 of Banco Nunez in which they are alleged to have held an interest. Plaintiff claims damages from Societe Generale under the terms of this statute. Plaintiff filed an amended complaint on 24 September 2019 adding three other banks as defendants and adding several new factual allegations as to Societe Generale. Societe Generale filed a motion to dismiss, which was fully briefed as of 10 January 2020. While the motion to dismiss was pending, plaintiffs filed an unopposed motion on 29 January 2020, to transfer the case to federal court in Manhattan, which the court granted on 30 January 2020. Plaintiffs filed a second amended

complaint on 11 September 2020, in which it dropped the three other banks as defendants, added a different bank as an additional defendant, and added as additional plaintiffs who purport to be heirs of the founders of Banco Nunez. The court granted Societe Generale's motion to dismiss on 22 December 2021 but permitted plaintiffs to replead their claims. On 25 February 2022, plaintiffs filed an amended complaint, and on 11 April 2022, Societe Generale filed its motion to dismiss.

- On 9 November 2020, Societe Generale was named as a defendant, together with another bank, in a similar Helms-Burton litigation filed in the US District Court in Manhattan (Pujol I) by the purported heirs of former owners, and personal representatives of estates of heirs or former owners, of Banco Pujol, a Cuban bank alleged to have been confiscated by the Cuban government in 1960. On 27 January 2021, Societe Generale filed a motion to dismiss. In response, as permitted by the judge's rules, plaintiffs chose to file an amended complaint and did so on 26 February 2021. Societe Generale filed a motion to dismiss the amended complaint on 19 March 2021, which was granted by the court on 24 November 2021. The court permitted plaintiffs to replead their claims. On 4 February 2022, plaintiffs filed an amended complaint, and on 14 March 2022, Societe Generale filed its motion to dismiss, which was granted by the court on 23 January 2023.
- On 1 June 2021, a shareholder of Societe Generale initiated an action designated by him as a "derivative action" (*'action ut singuli'*) before the Commercial Court of Paris against the CEO of the company (*'Directeur Général'*), Mr Frédéric Oudéa. Plaintiff is seeking an order that Mr Oudéa pay to Societe Generale an amount equal to fines paid to the U.S. and French treasuries under the convention judiciaire d'intérêt public of 24 May 2018 between Societe Generale and the Financial Public Prosecutor (the "CJIP") and the Deferred Prosecution Agreement of 5 June 2018 between Societe Generale and the United States Department of Justice (the "DPA").

Societe Generale voluntarily joined these proceedings at the first procedural hearing in order to seek the dismissal of the claims made by the plaintiff. Thereafter, the plaintiff filed a brief asking the court to dismiss the case with prejudice, and the parties asked the court to put an end to these proceedings. By order dated 15 February 2022, the Commercial Court of Paris therefore took note of the termination of the proceedings. This matter is therefore definitively over.

- In the context of the sale of its Polish subsidiary Euro Bank to Bank Millennium on 31 May 2019 and of the indemnity granted to the latter against certain risks, Societe Generale continues to monitor the evolution of court cases related to CHF-denominated or CHF-indexed loans issued by Euro Bank.
- Like other operators in the Paris marketplace, Societe Generale is subject to a tax review of its equity market transactions. Discussions with the administration are continuing.
- On 19 August 2022, a Russian fertiliser company, EuroChem North West-2 ("EuroChem"), a wholly owned subsidiary of EuroChem AG, filed a claim against Societe Generale SA and its Milan branch ("Societe Generale") before English courts. This claim relates to five on-demand bonds that Societe Generale issued to EuroChem in connection with a construction project in Kingisepp, Russia. On 4 August 2022, EuroChem made demands under the guarantees. Societe Generale explained it was unable to honour the claims due to international sanctions directly impacting the transactions, an assessment which EuroChem disputes. Societe Generale filed its defence submissions on 1 November 2022, to which EuroChem replied on 13 December 2022. A case management conference ("CMC") is expected to take place in the course of the first quarter of 2023.

- SG Americas Securities, LLC (“SGAS”) has received requests for information from the US Securities and Exchange Commission (“SEC”) focused on compliance with record-keeping requirements in connection with business-related communications on messaging platforms that were not approved by the firm. The inquiry follows a number of regulatory settlements in 2022 with other firms covering similar matters. SGAS is cooperating with the investigation.

NOTE 10 - RISK MANAGEMENT LINKED WITH FINANCIAL INSTRUMENTS

This note presents the risks associated with financial instruments and the way in which the Group manages them.

NOTE 10.1 - RISK MANAGEMENT

Implementing a high-performance and efficient risk management structure is a critical undertaking for the group Societe Generale in all businesses, markets and regions in which it operates, as is maintaining a balance between strong awareness of risks and promoting innovation. The Group's risk management, supervised at the highest level, is compliant with the regulations in force, in particular the Order of 3 November 2014 revised by the order of 25 February 2021 relating to the internal control of companies in the banking sector, payment services and investment services subject to the control of the French Prudential Supervisory and Resolution Authority (*Autorité de Contrôle Prudentiel et de Résolution – ACPR*) and the final version of European Basel 3 Regulations (Capital Requirements Regulation/Capital Requirements Directive).

1. GOVERNANCE OF RISK MANAGEMENT

Two main high-level bodies govern Group risk management: the Board of Directors and General Management.

General Management presents the main aspects of, and notable changes to, the Group's risk management strategy to the Board of Directors at least once a year (more often if circumstances require so).

As part of the Board of Directors, the Risk Committee advises the Board of Directors on overall strategy and appetite regarding all kinds of risks, both current and future, and assists the Board when the latter verifies the strategy is being rolled out.

The Board of Directors' Audit and Internal Control Committee ensures that the risk control systems operate effectively.

Chaired by General Management, the specialised Committees responsible for central oversight of internal control and risk management are as follows:

- the **Risk Committee** (CORISQ), chaired by the Chief Executive Officer, which met 18 times during the 2022 financial year, aims to:
 - validate the main risk management mechanisms (taxonomy, risk identification, stress testing and RAF);
 - for credit, counterparties, market, operational, model and environmental risks:
 - validate the Group risk appetite before the Board proposal;
 - then define the Group's main risk policy guidelines in the context of the risk appetite previously approved by the Board of Directors,
 - respect the Group's risk appetite as defined and declined.

Along with the Risks Committee, the Major Risks Committee (*Comité Grands Risques*) is an *ad hoc* Committee, responsible for approving the sales and marketing strategy and risk-taking with regard to major client groups (Corporates, Insurance Companies and Asset Managers).

- the **Finance Committee** (COFI), chaired by the Chief Executive Officer, is responsible for setting out the Group's financial strategy and for ensuring the management of scarce resources (capital, liquidity, balance sheet, tax capacity) and the management of structural risks. COFI oversees all aspects of the management of the structural risks of the Group and its main entities, including the management of liquidity and financing risks, as well as the management of banking book market

risks: interest rate, credit spread, exchange and shares, financial management of scarce resources (liquidity and capital), the dividend policy, monitoring the rating assigned to Societe Generale by credit rating agencies, the recovery and resolution plans, monitoring of the Group's tax capacity, financial management of Corporate Centre and intra-Group re-invoicing.

- **the Compliance Committee (COMCO)**, chaired by the Chief Executive Officer, reviews the risks of non-compliance, the main issues and defines the Group's compliance principles. It ensures, on an annual basis, the monitoring of the quality of the Embargoes & Sanctions risk management framework. The Committee also reviews the main compliance incidents of the period and the main information related to Supervisor relationships. It reviews and challenges compliance indicators on each area of non-compliance risk. Finally, it validates the compliance risk appetite criteria, the annual roadmap for mandatory Group trainings, the new modules for all employees, and on an *ad hoc* basis certain Group compliance topics. In addition, twice a year, a session dedicated to the review of the regulatory system is organised. Its objective is to ensure the consistency and effectiveness of the compliance system with banking and financial regulations.
- **the Digital Transformation Committee (DTCO)**, is Chaired by the Deputy General Manager. The purpose of this Committee, in line with the decisions of the Group Strategic Committee, is to initiate and monitor the transformations of the information system and the associated operating model which require, by their transversal nature or by the extent of the transformation envisaged, a decision of the General Management.
- **the Group Internal Control Coordination Committee (GICCC)**, is chaired by the Chief Executive Officer or, in his absence, by a Deputy Chief Executive Officer or by the Deputy Chief Executive Officer in charge of supervising the area under review. The purpose of the GICCC is to ensure the consistency and effectiveness of the Group's internal control, in response in particular to the obligation laid down in Art. 16 of the modified French Order of 3rd November 2014. The Committee meets approximately 20 times a year to deal with cross-cutting topics as well as the annual review of each Business Unit/Service Unit;
- **the Non Financial Risks Steering Committee**, chaired by the Head of DGLE/PIC assisted as co-sponsors by the Chief Risk Officer (CRO) and Chief Compliance Officer (CCO), aims to develop and instruct the orientations taken by the Group Internal Control Coordination Committee (GICCC) and resulting from the Audit and Internal Control Committee (CACI), to ensure the consistency, efficiency and effectiveness of the transformations of non-financial risk control (NFR) frameworks, to set targets with regard to roadmaps, to validate, coordinate and manage the evolution of NFR frameworks throughout the Group, to highlight risks and alerts related to NFR frameworks, to provide resources, prioritise and decide on their allocation, by making any necessary arbitrations ;
- **the Responsible Commitments Committee (CORESP)**, chaired by the Deputy Chief Executive Officer in charge of overseeing the ESG policy (Environmental Social Governance), deals with all matters falling within the Group's responsibility in Environmental and Social matters, or those having an impact on the Group's responsibility or reputation and not already covered by an existing Executive Management Committee. The Committee is decision-making and has authority over the entire Group. Its objective is to (i) arbitrate complex transaction/client cases presenting a high reputational risk or non-alignment with the Group's standards in terms of CSR, culture and conduct, ethics or reputation; (ii) examine subjects with very high CSR, ethical or reputational risks; (iii) make new Group commitments or change the Group's E&S standards (including sectoral policies); (iv) monitor the implementation of the Group's E&S commitments; (v) examine opportunities for the development of sustainable and positive impact financing or investments, requiring the opinion or validation of the General Management ;
- **the Group Provisions Committee (COPRO)**, chaired by the Chief Executive Officer, meets quarterly and is tasked with presenting and validating the Group's net risk expense (provisions for the credit risk) that will be accounted for the quarter in question.

2. DIVISIONS INVOLVED IN RISK MANAGEMENT AND INTERNAL CONTROL

The Group's Corporate Divisions, which are independent from the core businesses, contribute to the management and internal control of risks.

The Corporate Divisions provide the Group's General Management with all the information needed to assume its role of managing Group strategy under the authority of the Chief Executive Officer. The Corporate Divisions report directly to General Management.

The main role of the **Risk Division** (RISQ) is to support the development of the Group's activities and profitability by elaborating the Group's risk appetite (allocated between the Group's different business lines) in collaboration with the Finance Department and the Business Units/Service Units and establishing a risk management and monitoring system as a second line of defence. In performing its work, the Risk Division reconciles independence from the businesses with a close working relationship with the Business Units, which are responsible in the first instance for the transactions they initiate.

Accordingly, the Risk Division:

- provides hierarchical and functional supervision for the Group's Risk Management Function;
- is responsible, with the Finance Division, for setting the Group's risk appetite as submitted to General Management;
- identifies all Group risks;
- implements a governance and monitoring framework for these risks, including cross-business risks, and regularly reports on the nature and extent thereof to General Management, the Board of Directors and the banking supervisory authorities;
- contributes to the definition of risk policies, taking into account the aims of the core businesses and the relevant risk issues;
- defines or validates methods and procedures for the analysis, assessment, approval and monitoring of risk;
- implements second-level control to ensure the correct application of these methods and procedures;
- assesses and approves transactions and limits proposed by core business managers;
- defines or validates the architecture of the central risk information system and ensures its suitability to business requirements.

The Finance Service Unit coordinates the Finance Management Function and is responsible for the Group's financial management, oversight and production through several complementary tasks:

- fuelling General Management's discussions on strategic and financial aspects. To this end, DFIN takes care to provide a consistent overview of performance indicators and financial information;
- managing, at consolidated level for Societe Generale SA and for certain subsidiaries, the establishment and analysis of financial, tax and regulatory statements (regulatory indicators regarding scarce resources, regulatory reports, ICAAP (*Internal Capital Adequacy Assessment*) and ILAAP (*Internal Liquidity Adequacy Assessment Process*) documentation) in compliance with applicable standards and obligations;
- monitoring and overseeing P&L performance, profitability and scarce resources (capital, liquidity, balance sheet) in line with strategic objectives and in accordance with regulatory obligations;
- supporting the Business Units and Service Units with financial and strategic oversight;
- managing liquidity, in particular through the implementation of financing and resilience plans, in accordance with the objectives set by the Group and in compliance with the Group's risk appetite;
- maintaining financial crisis management plans tailored to the Group's configuration;
- ensuring the management and first-level monitoring of structural interest rate, foreign exchange and liquidity risks. RISQ assuming the role of second line of defence;
- performing regulatory watch with respect to scarce resources, accounting and finance, and participating in institutional relations and advocacy with its main peers and with banking federations;
- acting as enterprise architect for all activities performed by the Group's finance divisions.

The Group Compliance Division is responsible for the definition and consistency of the non-compliance risk prevention and control framework, related to banking and financial regulation and for coordinating the framework aimed at preventing, identifying, assessing and controlling non-compliance risk across the entire Group. It ensures that roles and responsibilities are identified with the appropriate level of expertise so that the regulatory watch framework and related normative documentation,

including its deployment, are operational. In particular, it takes care to harmonise procedures and optimise (in conjunction with the BU/SUs) international resources in order to ensure the framework's effectiveness and compliance with its rules. Within this framework, it has hierarchical and functional authority over the compliance teams of Group entities.

The Group Compliance Service Unit is organised around three broad categories of non-compliance risks:

- financial security: know your customer (KYC); compliance with the rules and regulations on international sanctions and embargoes; countering money laundering and terrorist financing (AML/CTF), including reporting suspicious transactions to the appropriate financial intelligence authority when necessary,
- regulatory risks: customers protection; integrity of the financial markets; countering bribery and corruption, ethics and good conduct; compliance with regulations related to tax transparency (based on knowledge of clients' tax profile); compliance with regulations on social and environmental responsibility and the Group's commitments,
- protection of data, including personal data and in particular those of customers;

The Corporate Secretary within its fields of expertise, is assigned with the mission of protecting the bank in order to further its development. Together with the SUs, BUs and other Societe Generale group entities, it ensures the administrative, legal and tax compliance of the Group's activities, both in France and abroad. It is in charge of managing legal and tax risks. It also oversees global Group security (together with the Resources and Digital Transformation Service Unit in respect of IT systems security), designs and implements the risk insurance policy for the entire Group and its staff, and provides assistance in developing insurance products for the Group's clients. It devises and oversees the development of corporate social responsibility and public affairs and institutional relations/advocacy initiatives within the Societe Generale group. Lastly, it handles the Group's central administration and offers support to the Secretary of the Board of Directors as necessary

The Human Resources is tasked with defining and implementing the general and individual policies designed to enable the Group to develop the skills and talent needed for its strategy to succeed. The Division's role as partner to the businesses is key to the Group's adaptation to its environment ;

The Corporate Resources and Innovation Department accompanies the digital transformation and promotes operational efficiency for the Group. It supervises the Resource Management Functions (Information Systems, Sourcing and Property) ;

The Group Internal Audit and General Inspection Department, under the authority of the General Inspector, is in charge of internal audit.

Finally, the **Sustainable Development Division**, attached to the general Management, the Group Sustainable Development Division (DGLE/RSE) assists the Deputy Chief Executive Officer in charge of the whole ESG policies (RSE – Corporate Social Responsibility-) and their actual translation in the business lines and functions trajectories. It supports the Group ESG transformation to make it a major competitive advantage, in the business development as well as in the ESG (Environmental & Social) risks management. It provides an advising mission to the General Management through three main tasks :

- the definition and strategic management of the Group's ESG ambition;
- the support of the BUs and SUs ESG transformation;
- the contribution to promoting the Group's ESG reach.

3. INTEREST RATE BENCHMARK REFORM

Presentation of the reform

The interest rate benchmark reform (IBOR: InterBank Offered Rates), initiated by the Financial Stability Board in 2014, aims at replacing these benchmark rates with alternative rates, in particular the Risk-Free Rates (RFR). This reform accelerated on 5 March 2021, when the British Financial Conduct Authority (FCA), the supervisor of LIBOR, announced the official dates for the cessation and loss of representativeness of these benchmarks:

- EUR LIBOR and CHF LIBOR (all terms); GBP LIBOR and JPY LIBOR (terms: overnight, one week, two months and twelve months); USD LIBOR (terms: one week and two months): the publication of these benchmark settings has permanently ceased as of 1 January 2022;
- GBP LIBOR and JPY LIBOR (terms: one, three and six months): these settings have not been contributed by banks since 1 January 2022 and have been published in a synthetic form; their use is thus restricted to the run-off management of legacy positions. Nonetheless, the FCA has announced the cessation of these synthetic benchmarks as follows:
 - JPY LIBOR (terms: one, three and six months): end December 2022;
 - GBP LIBOR (terms: one and six months): end March 2023;
 - GBP LIBOR (term: three months): end March 2024.
- USD LIBOR (terms: overnight, one, three, six and twelve months): the cessation of the publication of these benchmark settings contributed by a panel of banks is scheduled for end June 2023.

In parallel, other indices based on USD LIBOR will be phased out at end June 2023: USD LIBOR ICE SWAP RATE, MIFOR (India), PHIREF (Philippines), SOR (Singapore) and THBFIX (Thailand).

Furthermore, the announced cessation date for the publication of the MosPrime (Russia) is 30 June 2023.

Regarding the major interest rate benchmark indices of the euro area:

- EURIBOR: EMMI (European Money Markets Institute), the administrator of the index, does not plan to cease its publication. The EURIBOR will thus be maintained in the coming years;
- EONIA: its publication definitively ceased on 3 January 2022. The successor benchmark rate recommended by the European Central Bank working group on the euro area interest rates is the €STR on which the EONIA had been based since end 2019.

Impact of the reform for the Societe Generale group

The Societe Generale group supports these reforms and takes an active part in the working groups set up by the central banks of the currencies concerned. The Group is actively preparing for these changes, through a specific transition program set up in the Summer of 2018 and supervised by the Finance division.

For this purpose, the Group has undertaken active awareness and communication campaigns for its customers, supplemented by a monthly newsletter and a Frequently Asked Questions (FAQ) page on the IBOR transition publicly available on the Societe Generale website.

To prepare for the announced cessation dates of LIBOR and other transitioning benchmarks, the public authorities and the working groups set up by the central banks issued recommendations to the banking industry. These recommendations aim at stopping the production of new contracts referencing these indices as well as at migrating the existing contracts referencing said indices to alternative benchmark rates.

To ensure a consistent approach throughout the Societe Generale group, an internal Committee has been formed. Its role is to issue periodical orientations reflecting the market developments and the recommendations from regulators and their working groups. Several internal guidelines have been issued covering four main themes:

- strengthening of the new contracts through the inclusion of fallback clauses and risk warnings;
- cessation of the production of new transactions referencing ceasing benchmarks (with some exceptions provided for by regulators) and use of alternative solutions;
- fair and homogenous treatment of customers through the involvement of the compliance teams in the renegotiations of contracts;
- reporting obligation, and restrictions related to the use of certain interest rates as alternatives to LIBOR.

At this stage, all directives are being applied and widely circulated among the Group's staff.

In order to build the capacity to deal on products referencing RFRs or some term RFRs and thus ensure the continuity of its business after the phasing out of IBOR, the Societe Generale group updated its tools and processes in line with the major calculation methods recommended by the relevant working groups or professional associations. Nevertheless, the Group continues monitoring developments in the use of RFRs and other alternative rates in order to implement any new convention and meet its customers' needs.

GBP LIBOR, CHF LIBOR, EUR LIBOR, JPY LIBOR and EONIA migration

Until the end of 2021, the Group primarily centred its work on renegotiating transactions with its clients and transitioning all the contracts indexed on the benchmarks terminated or not representative anymore at the end of 2021.

Since Q2 2022, the Societe Generale group has finalised the transition of all the contracts indexed on the above-mentioned benchmarks.

USD LIBOR and USD LIBOR ICE SWAP RATE migration

The Societe Generale group has initiated the migration of its stock of operations indexed on USD LIBOR and USD LIBOR ICE SWAP RATE aiming to finalise it by June 2023.

To do this, the Group employs interactions with its customers to offer a proactive transition to alternative solutions.

The Group's customers most concerned by the transition of their contracts are, primarily, customers of the investment banking and financing and advisory activities and, to a lesser extent, some of the customers of the Group's French and International retail networks.

The identification of the contracts concerned and the strategy for transitioning the transactions indexed on USD LIBOR have been finalised for all products:

- loans and credit lines are migrated mostly through a bilateral negotiation, and so are the related hedging instruments, in order to maintain their effectiveness.
- the migration of interest rate derivatives is scheduled to be implemented in large part in the first half of 2023, in line with the key milestones set by the clearing houses or by the activation of fallback clauses (ISDA Protocol to which Societe Generale has been adhering since 2020, in particular for USD LIBOR). However, some derivatives contracts are renegotiated bilaterally; lastly
- current accounts and other similar cash products are migrated through an update of their general conditions.

The operational migration of the contracts referencing the USD LIBOR makes use of the processes and tools already developed for the migration of the contracts referencing IBOR interest rates ending at end 2021, as well as of the experience gained. The clearing houses' transition plan is known in advance and based on the experience gained from previous migrations.

Other benchmark rates migration (MIFOR, PHIREF, SOR, THBFIX and MosPrime),

For these rates, the identification of the customers and transactions has been completed. The impact is much smaller than for USD LIBOR. At the level of the Societe Generale group, these benchmark transitions impact only investment banking products.

The migration strategies are nevertheless similar to those applicable to the USD LIBOR as described above.

The Societe Generale group keeps monitoring the announcements from regulators and administrators in other jurisdictions in order to react proactively and adapt its migration strategy accordingly.

The table below presents an estimate of the exposures, as at 30 September 2022, related to the contracts impacted by the benchmark reform and whose term is scheduled beyond the official cessation dates. This table has been produced based on the project monitoring data and on the legal status of the contracts migration.

(In EUR bn)

2022

Current interest rate benchmarks ⁽⁵⁾	New risk-free rates liable to replace the current interest rate benchmarks	Cotation end date	Outstanding principal		Notional ⁽¹⁾
			Financial assets (excl. derivatives) impacted by the reform ⁽²⁾	Financial liabilities (excl. derivatives) impacted by the reform ⁽³⁾	Derivatives impacted by the reform ⁽⁴⁾
EONIA - Euro OverNight Index Average	Euro Short-Term Rate (€STR)	31/12/2021			
LIBOR - London Interbank Offered Rate – GBP	Reformed Sterling Overnight Index Average (SONIA)	31/12/2021			
LIBOR - London Interbank Offered Rate - CHF	Swiss Average Rate Overnight (SARON)	31/12/2021			
LIBOR - London Interbank Offered Rate – JPY	Tokyo OverNight Average (TONA)	31/12/2021			
LIBOR - London Interbank Offered Rate – EUR	Euro Short-Term Rate (€STR)	31/12/2021			
LIBOR - London Interbank Offered Rate - USD	Secured Overnight Financing Rate (SOFR)	30/06/2023	35	3	2030
USD LIBOR Ice Swap rate (CMS)	USD SOFR Ice Swap rate (CMS)	30/06/2023		13	250
SOR - Singapore Dollar Swap Offer Rate	Singapore Overnight Rate Average (SORA)	30/06/2023			4
MIFOR (INR)	Modified MIFOR	30/06/2023			3
PHIREF (PHP)	No alternative rate defined by regulators	30/06/2023			
THBFIX (THB)	THOR	30/06/2023			
MOSPRIME (RUB)	RUONIA	30/06/2023			8

(1) Notional used in combination with an interest rate benchmark in order to calculate derivative cash flows.

(2) Including accounts receivable, loans, securities received under repurchase agreements, debt securities bearing interest at variable rates.

(3) Including deposits, borrowings, transactions on securities delivered under repurchase agreements, debt issued in the form of securities bearing interest at variable rates.

(4) Including firm instruments (swaps and futures) and conditional instruments.

(5) Only the major interest rate benchmarks impacted by the IBOR reform are presented in this table.

Risks associated with the benchmark rate reform

The risks related to the IBOR reform are now mainly limited to USD LIBOR for the period running until June 2023. They are managed and monitored within the governance framework dedicated to the IBOR transition. They have been identified as follows:

- program governance and execution risk, liable to cause delays and loss of opportunities, is monitored as part of the work of regular committees and arbitration bodies;
- legal documentation risk, liable to lead to post-transition litigations, is managed through fallback clauses inserted in the contracts depending on the availability of market standards;
- market risk, with the creation of a basis risk between the rate curves associated with the different indexes, is closely monitored and supervised;

- operational risks in the execution of the migration of transactions depend in particular on the willingness and preparedness of our counterparties, the volume of transactions to be migrated and their spread over time;
- regulatory risk is managed according to the Group guidelines in line with the recommendations of the regulators and working groups on the LIBOR transition;
- conduct risk, related to the end of LIBOR, is notably managed through:
 - specific guidelines on the appropriate conduct detailed by business line,
 - training of the teams;
 - communications to customers (conferences, events, bilateral discussions in particular with the less informed customers) are organised on the transition-related risks, the alternative solutions that may be implemented, and on how they might be affected.

NOTE 10.2 - CAPITAL MANAGEMENT AND ADEQUACY

1. THE REGULATORY FRAMEWORK

Since January 2014, Societe Generale has been applying the Basel 3 regulations implemented in the European Union through a regulation and a directive (CRR and CRD4 respectively).

The general framework defined by Basel 3 is structured around three pillars:

- Pillar 1 sets the minimum solvency, leverage and liquidity requirements and defines the rules that banks must use to measure risks and calculate the related capital requirements, according to standard or more advanced methods;
- Pillar 2 concerns the discretionary supervision implemented by the competent authority, which allows them – based on a constant dialogue with supervised credit institutions – to assess the adequacy of capital requirements as calculated under Pillar 1, and to calibrate additional capital requirements taking into account all the risks to which these institutions are exposed;
- Pillar 3 encourages market discipline by developing a set of qualitative or quantitative disclosure requirements which will allow market participants to better assess a given institution's capital, risk exposure, risk assessment processes and, accordingly, capital adequacy.

Several amendments to European regulatory standards were adopted in May 2019 (CRR2/CRD5). The majority of the provisions came into force in June 2021.

The amendments include:

- NSFR ⁽⁶⁾: The text introduces the regulatory requirements for the NSFR ratio. A ratio of 100% must now be respected from June 2021;
- Leverage ratio: the minimum requirement of 3% to which will be added, from 2023, 50% of the buffer required as a systemic institution;
- Derivatives counterparty risk (SA-CCR ⁽⁷⁾): the "SA-CCR" method is the Basel method replacing the "CEM ⁽⁸⁾ " method for determining prudential exposure to derivatives in a standard approach;
- Large Risks: the main change is the calculation of the regulatory limit (25%) on Tier 1 (instead of total own funds), as well as the introduction of a specific cross-limit on systemic institutions (15%);
- TLAC: The ratio requirement for G-SIBs is introduced in CRR. In accordance with the Basel text, G-SIBs must respect an amount of own funds and eligible debt equal to the highest between 16%+weighted risk capital buffers and 6% of leverage exposure in 2019, with the ratio increasing to 18%+risk-weighted buffers and 6.75% leverage in 2022. Since January 2014, Societe Generale has applied the Basel III regulations implemented in the European Union through a regulation and a directive (CRR and CRD4 respectively).

With regard to the implementation of the market risk reform (FRTB), after the publication of the first revised standard in January 2016 and of the consultation in March 2018 on this subject, the Basel Committee published in January 2019 its final text: BCBS457. In March 2020, the Basel Committee announced a one-year delay in the implementation of FRTB (1 January 2023 instead of 1 January 2022 as originally planned in the January 2019 text).

(6) *Net Stable Funding Ratio*

(7) *Standardised Approach to Counterparty Credit Risk*

(8) *Current Exposure Method*

The European FRTB calendar would be as follows:

- Regarding reporting requirements:
 - the Standardised Approach (SA) has been effective since Q3 2021;
 - for the Internal Model Approach (IMA), for the approved banks, reporting should start three years after the publication in the Official Journal of the European Union (OJEU) of three technical standards (RTS) of the EBA, which entered in force on the 15th of November 2022.
- FRTB capital requirements: Expected by 1 January 2025 at this stage, which would make the IMA reporting obsolete; a 2-year delay (*i.e.* 1 January 2027) could be applied in the event of unlevel playing field with other major jurisdictions.

In December 2017, the Group of Central Bank Governors and Heads of Supervision (GHOS), the Basel Committee's oversight body, endorsed the regulatory reforms aiming to complete Basel 3.

A first version of the transposition text was published by the European Commission on 27 October 2021 ("CRR3 – CRD6") and will serve as support for the European Trialogue where this version will be combined with the Council text published in November 2022 and the Parliament text. The trialogue is expected to be finalised in the summer of 2023. It will then have to be voted by Parliament to become applicable.

These new rules, which were to take effect from 2022, have been postponed to January 2025 with an overall output floor: the risk-weighted assets (RWA) will be floored to a percentage of the standard method (credit, market and operational). The output floor level will increase gradually, from 50% in 2025 to 72.5% in 2030.

2. CAPITAL MANAGEMENT

As part of its capital management, the Group (under the management of the Finance Division and the supervision of Risk Division) ensures that its solvency level is always compatible with the following objectives:

- maintaining its financial solidity and respecting the Risk Appetite;
- preserving its financial flexibility to finance organic growth and growth through acquisitions;
- allocating adequate capital to the various businesses, according to the Group's strategic objectives;
- maintaining the Group's resilience in the event of stress scenarios;
- meeting the expectations of its various stakeholders: supervisors, debt and equity investors, rating agencies, and shareholders.

The Group determines its internal solvency targets in accordance with these objectives and regulatory thresholds.

The Group has an internal process for assessing the adequacy of its capital that measures and explains the evolution of the Group's capital ratios over time, taking into account any future regulatory constraints and changes in the scope.

NOTE 10.3 - CREDIT AND COUNTERPARTY CREDIT RISK *

DEFINITIONS

Credit risk corresponds to the risk of losses arising from the inability of the Group's customers, issuers or other counterparties to meet their financial commitments. This risk may be further amplified by individual, country and sector concentration risk. It includes:

- the risk linked to securitisation activities;
- the underwriting risk which is the risk of loss arising from debt syndication activities where the bank fails to meet its final take target due to market conditions, inaccurate reading of investor demand, miscalculated credit profile of the borrower or credit deterioration of the borrower during the syndication phase of the loan/the bond.

Counterparty credit risk (CCR) is driven by market transactions. Counterparty credit risk is therefore a multidimensional risk, combining credit and market risks, in the sense that the future value of the exposure to a counterparty and its credit quality are uncertain and variable in time (credit component), whilst also being impacted by changes in market parameters (market component). It can be broken down into the following categories:

- **Default risk:** it corresponds to the replacement risk to which the Societe Generale group is exposed in the event of a counterparty's failure to comply with its payment obligations. In this case, following the counterparty's default SG must replace this transaction with a new transaction. Potentially, this must be done under stressed market conditions, with reduced liquidity and sometimes even facing a Wrong Way Risk (WWR).
- **Credit Valuation Adjustment (CVA) risk:** it corresponds to the variability of the value adjustment due to counterparty credit risk, which is the market value of the Counterparty Credit Risk (CCR) for derivatives and repos, that is an adjustment to the transaction price factoring in the credit quality of the counterparty. It is measured as the difference between the price of a contract with a risk-free counterparty and the price of the same contract factoring in the counterparty's default risk.
- **Risk on CCPs (central clearing counterparty):** it is related to the default of another clearing member of the central clearing house, which could result in losses for the Group on its contribution to the default fund.

Transactions involving counterparty credit risk include delivered pensions, securities lending and borrowing, and derivative contracts, whether they are dealt with principal activity or on behalf of third parties (agency activities or client clearing) in the context of market activities.

1. GENERAL PRINCIPLES GOVERNING RISK-TAKING

The risk approval process is based on the following main principles:

- the analysis and the validation of the files fall respectively and independently to the sector of commercial follow-up of the client and to the dedicated risk units within the risk management function. In order to guarantee a consistent approach to Group risk-taking, this commercial monitoring sector and this risk unit examine all authorisation requests relating to a given client or category of clients. This commercial monitoring sector and this risk unit must be independent of each other;
- the internal rating of counterparties is a key criterion in the granting policy. These ratings are proposed by the commercial monitoring sector and validated by the dedicated risk unit;
- a system of delegation of competence, largely based on the internal ratings of the counterparties, confers decision-making capacities to the risk units on the one hand and to the commercial monitoring sectors on the other.

* *Additional elements in Chapter « ESG risks » Chapter to be published in March 2023.*

The business line assumes the burden of provisions and losses related to its credit decisions as the first line of defense. The Risk Department submits recommendations to CORISQ on the evolution of the granting policy, with limits on credit portfolios, for the countries, geographic areas, sectors, products or types of customers presenting high concentration risks.

Specificities of individual and professional portfolios (Retail)

Individual and professional portfolio (retail portfolio) have specific features in terms of risk management. This management is based on a statistical approach and on the use of tools and methods in the industrialisation of processes.

STATISTICAL APPROACH

The retail portfolio is made up of a sum of exposures of low unit amounts, validated in a partially automated manner, which together constitute significant outstanding at Group level and therefore a high level of risk.

Given the high number and standardisation of retail clients commitments, aggregate monitoring is necessary at all levels of the Risk function in charge of credit risk. This mass monitoring of retail customer exposure is based on the use of a statistical risk approach and monitoring by homogeneous risk class.

In these circumstances, the risk monitoring system for the Retail portfolio cannot rely on the same procedures or the same tools as for corporates.

For instance, any change in marketing policy (cut to probationary period for loyalty, delegation of lending decisions to brokers, increase in margins, etc.) can have a rapid and massive impact and must therefore be tracked by a system that allows all actors (i) to identify as quickly as possible where any deterioration in exposures is coming from and (ii) to take remedial action.

Even if the IFRS 9 standard authorises a collective approach and if the Group has a statistical approach on retail customers for the evaluation of the expected loss, the increase in risk for the purposes of the classification into stages is identified on an individual basis for this clientele. The available parameters (operating accounts and late payments) allow the assessment of the significant increase in credit risk at the level of individual exposures. The collective approach is currently only used in a very small number of instances within the Group.

IMPORTANCE OF TOOLS AND METHODS IN THE INDUSTRIALISATION OF PROCESSES

The Risk management function must support Business Units and subsidiary managers in managing their risks with an eye to:

- the effectiveness of lending policies;
- the quality of the portfolio and its development over the lifetime of exposures (from grant to recovery).

Risk Department structures its supervision around the following four processes:

- **granting:** this decision-making process can be more or less automated depending on the nature and complexity of the transactions, and hence the associated risk;
- **monitoring:** different entities use different systems for granting and managing retail risks systems (scoring, expert systems, rules, etc.) and an appropriate monitoring system must be in place for each to assess the appropriateness of the grant rules applied (notably via monitoring);
- **recovery:** recovery is an essential stage in the life cycle of Retail portfolio credits and makes a decisive contribution to our control of cost of risk. Whatever the organisation adopted (outsourcing, in-house collection, etc.), the establishment of an effective collection process is an essential element of good risk management. It makes a decisive contribution to controlling the cost of risk and limiting the level of our non-performing loans. If recovery is outsourced, it must conform to the Group's regulations governing outsourcing.
- **provisioning:** provisions against the Retail portfolio are decided at local level. They are calculated using the methodologies and governance methods defined and approved by the Risk Department.

2. CREDIT RISK HEDGING

2.1 GUARANTEES AND COLLATERAL

The Group uses credit risk mitigation techniques for both market and commercial banking activities. These techniques provide partial or full protection against the risk of debtor insolvency.

There are two main categories:

- personal guarantees are commitments made by a third party to replace the primary debtor in the event of the latter's default. These guarantees encompass the protection commitments and mechanisms provided by banks and similar credit institutions, specialised institutions such as mortgage guarantors (e.g. *Crédit Logement* in France), monoline or multiline insurers, export credit agencies, states in the context of the health crisis linked to Covid-19 and consequences of Ukraine conflict, etc. By extension, credit insurance and credit derivatives (purchase of protection) also belong to this category;
- collateral can consist of physical assets in the form of personal or real property, commodities or precious metals, as well as financial instruments such as cash, high-quality investments and securities, and also insurance policies.

Appropriate haircuts are applied to the value of collateral, reflecting its quality and liquidity.

In order to reduce its risk-taking, the Group is pursuing active management of its securities, in particular by diversifying them: physical collateral, personal guarantees and others (including Credit Default Swaps).

For information, the mortgage loans of retail customers in France benefit overwhelmingly from a guarantee provided by the financing company *Crédit Logement*, ensuring the payment of the mortgage to the bank in the event of default by the borrower (under conditions of compliance with the terms of collateral call defined by *Crédit Logement*).

During the credit approval process, an assessment is performed on the value of guarantees and collateral, their legal enforceability and the guarantor's ability to meet its obligations. This process also ensures that the collateral or guarantee successfully meets the criteria set forth in the Capital Requirements Directive (CRD) and in the Capital Requirements Regulation (CRR).

The guarantors are subject to an internal rating updated at least annually. Regarding collateral, regular revaluations are made on the basis of an estimated disposal value composed of the market value of the asset and a discount. The market value corresponds to the value at which the good should be exchanged on the date of the valuation under conditions of normal competition. It is preferably obtained on the basis of comparable assets, failing this by any other method deemed relevant (example: value in use). This value is subject to haircuts depending on the quality of the collateral and the liquidity conditions.

Regarding collateral used for credit risk mitigation and eligible for the RWA calculation, it should be noted that 95% of guarantors are investment grade. These guarantees are mainly provided by *Crédit Logement*, export credit agencies, the French State (within the "*Prêts Garantis par l'Etat*" framework of the loans guaranteed by the French State) and insurance companies.

In accordance with the requirements of European Regulation No. 575/2013 (CRR), the Group applies minimum collateralisation frequencies for all collateral held in the context of commitments granted (financial collateral, commercial real estate, residential real estate, other security interests, leasing guarantees).

Closer valuations must be carried out in the event of a significant change in the market concerned, the default or litigation of the counterparty or at the request of the risk management function.

In addition, the effectiveness of credit risk hedging policies is monitored as part of the LGD.

It is the responsibility of the risk management function to validate the operational procedures put in place by the business lines for the periodic valuation of collateral (guarantees and collateral), whether automatic valuations or on an expert opinion and whether during the credit decision for a new competition or during the annual renewal of the credit file.

The amount of guarantees and collateral is capped at the amount of outstanding loans less provisions, i.e. EUR 388.5 billion as at 31 December 2022 (compared with EUR 373 billion as at 31 December 2021), of which EUR 159.5 billion for retail customers and EUR 229.1 billion for other

types of counterparties (compared with EUR 175 billion and EUR 198 billion as at 31 December 2021, respectively).

The outstanding loans covered by these guarantees and collateral correspond mainly to loans and receivables at amortised cost, which amounted to EUR 304.8 billion as at 31 December 2022, and to off-balance sheet commitments, which amounted to EUR 75.2 billion (compared with EUR 294 billion and EUR 68 billion as at 31 December 2021 respectively).

The amounts of guarantees and collateral received for performing outstanding loans (Stage 1) and under-performing loans (Stage 2) with payments past due amounted to EUR 2.3 billion as at 31 December 2022 (EUR 2.4 billion as at 31 December 2021), including EUR 0.89 billion on retail customers and EUR 1.4 billion on other types of counterparties (versus EUR 1.5 billion and EUR 0.9 billion as at 31 December 2021 respectively).

The amount of guarantees and collateral received for non-performing outstanding loans as at 31 December 2022 amounted to EUR 5.2 billion (compared with EUR 5.2 billion as at 31 December 2021), of which EUR 1.4 billion on retail customers and EUR 3.8 billion on other types of counterparties (compared with EUR 1.8 billion and EUR 3.4 billion respectively as at 31 December 2021). These amounts are capped at the amount of outstanding.

2.2 USE OF CREDIT DERIVATIVES TO MANAGE CORPORATE CONCENTRATION RISK

The Group may use credit derivatives, in the management of its Corporate credit portfolio, primarily to reduce individual, sector and geographic concentrations and to implement a proactive risk and capital management approach.

Housed in Corporate and Investment Banking, the Performance & Scarce Resources management (PSR) team works in close conjunction with the Risk Division and the businesses to reduce excessive portfolio concentrations, react quickly to any deterioration in the creditworthiness of a particular counterparty and recommend actions to improve the capital allocation. PSR is part of the department responsible for defining and effectively deploying the strategy, for monitoring performance and managing the scarce resources in the credit and loan portfolio.

Total outstanding purchases of protection through Corporate credit derivatives is slightly down at EUR 2.3 billion in nominal terms and a corresponding fair value of EUR +3.6 million at the end of December 2022 (compared to EUR 2.5 billion nominal value and a corresponding fair value of EUR -10.3 million at the end of December 2021). New operations have mainly been performed to approve capital allocation (EUR 1.7 billion) and to a lower extent reduce concentration risk (EUR 0.6 billion).

Over 2022, the credit default swaps (CDS) spreads of European investment grade issues (Itraxx index) experienced a significant change around an annual average of 94 bps (compared to 50 bps in 2021). The overall sensitivity of the portfolio (Price Value of a Basis Point) is falling due to the reduction in the average maturity of the protections.

The protection purchases (99 % of outstanding as 31 December 2022) are mostly made against European clearing houses, and all against counterparties with "Investment Grade" ratings (rating at least equal to BBB-).

Moreover, the amounts recognised as assets (EUR 1.8 billion as at 31 December 2022 versus EUR 0.9 billion as at 31 December 2021) and liabilities (EUR 1.4 billion as at 31 December 2022 versus EUR 1.2 billion as at 31 December 2021) correspond to the fair value of credit derivatives mainly held under a transaction activity.

2.3 CREDIT INSURANCE

The Group has been developing relationships with private insurers for several years in order to hedge some of its loans against commercial and political non-payment risks.

This activity is performed within a risk framework and monitoring system approved by the Group's General Management. The system is based on an overall limit for the activity, along with sub-limits by maturity, and individual limits for each insurance counterparty, the latter being furthermore required to meet strict eligibility criteria. There is also a limit for insured transactions in Non-Investment Grade countries.

3. RISK MEASUREMENT AND INTERNAL RATINGS

3.1 GENERAL FRAMEWORK OF THE INTERNAL APPROACH

To calculate its capital requirements under the IRB (Internal Rating Based) method, Societe Generale estimates the Risk-Weighted Assets (RWA) and the Expected Loss (EL) that may be incurred in light of the nature of the transaction, the quality of the counterparty (via internal rating) and all measures taken to mitigate risk.

The calculation of RWA is based on the Basel parameters, which are estimated using the internal risk measurement system:

- the Exposure at Default (EAD) value is defined as the Group's exposure in the event that the counterparty should default. The EAD includes exposures recorded on the balance sheet (such as loans, receivables, accrued income, etc.), and a proportion of off-balance sheet exposures calculated using internal or regulatory Credit Conversion Factors (CCF);
- the Probability of Default (PD): the probability that a counterparty will default within one year;
- the Loss Given Default (LGD): the ratio between the loss on an exposure in the event a counterparty defaults and the amount of the exposure at the time of the default.

The estimation of these parameters is based on a quantitative evaluation system which is sometimes supplemented by expert or business judgment.

In addition, a set of procedures sets out the rules relating to ratings (scope, frequency of review, grade approval procedure, etc.) as well as those for supervision, backtesting and the validation of models. These procedures allow, among other things, to facilitate critical human judgment, an essential complement to the models for non-retail portfolios.

The Group also takes into account:

- the impact of guarantees and credit derivatives, by substituting the PD, the LGD and the risk-weighting calculation of the guarantor for that of the obligor (the exposure is considered to be a direct exposure to the guarantor) in the event that the guarantor's risk weighting is more favourable than that of the obligor;
- collateral used as guarantees (physical or financial). This impact is taken into account via the LGD level.

3.2 CLIMATE RISK - MEASURING SENSITIVITY TO TRANSITION RISK

Transition risk's impact on Societe Generale Corporate clients' credit risk has been identified as the main climate change-related risk for the Group.

In order to measure this impact, the Group is gradually implementing a Corporate Climate Vulnerability Indicator (CCVI) which aims to reinforce the credit analysis on the most exposed counterparties.

4. COUNTERPARTY CREDIT RISK

4.1 LIMITS SETTING AND MONITORING FRAMEWORK

MAIN PRINCIPLES

Counterparty credit risk is framed through a set of limits that reflect the Group's appetite for risk.

Counterparty credit risk management mainly relies on dedicated first and second lines of defence as described below:

- the first lines of defence (LOD1) notably include the business lines that are subject to counterparty credit risk, the Primary Client Responsibility Unit that is in charge of handling the overall relationship with the client and the group to which it belongs, dedicated teams within Global Banking & Advisory Business Unit (GLBA) and Global Markets Business Unit (MARK) responsible for monitoring and managing the risks within their respective scope of activities.

- The Risk Department acts as a second line of defence (LOD2) through the setup of a counterparty credit risk control system, which is based on standardised risk measures, to ensure the permanent and independent monitoring of counterparty credit risks.

The fundamental principles of limit granting policy are:

- Dedicated LOD1 and LOD2 must be independent of each other;
- The Risk Department has a division dedicated to counterparty credit risk management in order to monitor and analyse the overall risks of counterparties whilst taking into account the specificities of counterparties;
- A system of delegated authorities, mainly based on the internal rating of counterparties, confers decision-making powers to LOD1 and LOD2;
- The limits and internal ratings defined for each counterparty are proposed by LOD1 and validated by the dedicated LOD2 ⁽⁹⁾. The limits may be set individually, at the counterparty level, or globally through framing a (sub)set of counterparties (for example: supervision of stress test exposures).

These limits are subject to annual or *ad hoc* reviews in the light of needs and changes in market conditions.

A dedicated team within the Risk Department is in charge of production, reporting and controls on risk metrics, namely:

- ensuring the completeness and reliability of the risk calculation by taking into account all the transactions transmitted by the transaction processing department;
- producing daily certification and risk indicator analysis reports;
- controlling compliance with defined limits, at the frequency of metrics calculation, most often on a daily basis: breaches of limits are pointed out to Front Office and Credit Officer for remediation actions.

In addition, a specific monitoring and approval process is implemented for the most sensitive counterparties or the most complex categories of financial instruments.

COMITOLOGY

While not a substitute for CORISQ or for the Risk Committee of the Board of Directors (see the section on Risk management governance), the Counterparty Credit Risk Committee (CCRC) closely monitors counterparty credit risk through:

- a global overview on exposure and counterparty credit risk metrics such as the global stress tests, the Potential Future Exposure PFE, etc., as well as focuses on specific activities such as collateralised financing, or agency business;
- dedicated analysis on one or more risks or customer categories or frameworks or in case of identification of emerging risk areas.

This Committee, chaired by the Risk Department on a monthly basis, brings together representatives from the Market Activities and the Global Banking and Advisory Business Units, but also departments that, within the risk management function, are in charge of monitoring counterparty credit risks on market transactions and credit risk. The CCRC also provides an opinion on the changes to the risk frameworks within its authority. The CRCC also identifies key CCR topics that need to be escalated to the management.

REPLACEMENT RISK

The Group frames the replacement risks by limits that are defined by credit analysts and validated by LOD2 based on the Group's risk appetite.

(9) For Hedge Funds and PTG counterparties, the rating proposal is delegated to LOD2.

The limits are defined at the level of each counterparty and then aggregated at the level of each client group, each category of counterparties and finally consolidated at the entire Societe Generale group portfolio level.

The limits used for managing counterparty credit risk are:

- consolidated across all products types authorised with the counterparty;
- established by maturity buckets to control future exposure using the Potential Future Exposure (PFE) measure also known as CVaR within Societe Generale;
- calibrated according to the credit quality and the nature of the counterparty, the nature/maturity of the financial instruments contemplated (FX transactions, repos transactions, security lending transactions, derivatives, etc.), and the economic understanding, the contractual legal framework agreed and any other risk mitigants.

The Group also considers other measures to monitor replacement risk:

- a multifactor stress test on all counterparties, which allows to holistically quantify the potential loss on market activities following market movements which could trigger a wave of defaults on these counterparties;
- a set of single-factor stress tests to monitor the general wrong-way risk.

CVA (CREDIT VALUATION ADJUSTMENT) RISK

In addition to the replacement risk, the CVA (Credit Valuation Adjustment) measures the adjustment of the value of the Group's derivatives and repos portfolio in order to take into account the credit quality of the counterparties facing the Group (see section 4.6.3.2 "Credit Valuation Adjustment").

Positions taken to hedge the volatility of the CVA (credit, interest rate or equity instruments) are monitored through:

- sensitivity limits;
- stress test limits.

Scenarios representative of the market risks impacting the CVA (credit spreads, interest rates, exchange rates and equity) are applied to carry out the stress test on CVA.

The different indicators and the stress tests are monitored on the net amount (the sum of the CVA exposure and of their hedges).

RISK ON CENTRAL COUNTERPARTIES

Clearing of transactions is a common market practice for Societe Generale, notably in compliance with the EMIR (European Market Infrastructure Regulation) regulations in Europe and the DFA (Dodd-Frank Act) in the United States, which require that the most standardised over-the-counter transactions be compensated via clearing houses approved by the authorities and subject to prudential regulation.

As a member of the clearing houses with which it operates, the Group contributes to their risk management framework through deposits into the default funds, in addition to margin calls.

The counterparty credit risk stemming from the clearing of derivatives and repos with central counterparties (CCP) is subject to a specific framework on:

- initial margins, both for house and client activities (client clearing);
- the Group's contributions to the CCP default funds (guarantee deposits);
- a stress test defined to capture the impact of a scenario where a major CCP member should default.

4.2 MITIGATION OF COUNTERPARTY CREDIT RISK LINKED TO MARKET TRANSACTIONS

The Group uses various techniques to reduce this risk:

- the signing, in the most extensive way possible, of close-out netting agreements for over-the-counter (OTC) transactions and Securities Financing Transactions (SFT);
- the collateralisation of market operations, either through clearing houses for eligible products (listed products and certain of the more standardised OTC products), or through a bilateral margin call exchange mechanism which covers both current exposure (variation margins) but also future exposure (initial margins).

CLOSE-OUT NETTING AGREEMENTS

Societe Generale's standard policy is to conclude master agreements including provisions for close-out netting.

These provisions allow on the one hand the immediate termination (close out) of all transactions governed by these agreements when one of the parties' defaults, and on the other hand the settlement of a net amount corresponding to the total value of the portfolio, after netting of mutual debts and claims. This balance may be the subject of a guarantee or collateralisation. It results in a single net claim owed by or to the counterparty.

In order to reduce the legal risk associated with documentation and to comply with key international standards, the Group documents these agreements under the main international standards as published by national or international professional associations such as International Swaps and Derivatives Association (ISDA), International Capital Market Association (ICMA), International Securities Lending Association (ISLA), French Banking Federation (FBF), etc.

These contracts establish a set of contractual terms generally recognised as standard and give way to the modification or addition of more specific provisions between the parties in the final contract, for example regarding the triggering events. This standardisation reduces implementation times and secures operations. The clauses negotiated by clients outside the bank's standards are approved by the decision-making bodies in charge of the master agreements standards – Normative Committee and/or Arbitration Committee – made up of representatives of the Risk Division, the Business Units, the Legal Division and other decision-making departments of the bank. In accordance with regulatory requirements, the clauses authorising global close-out netting and collateralisation are analysed by the bank's legal departments to ensure that they are enforceable under the legal provisions applicable to clients.

COLLATERALISATION

Most of over-the-counter transactions are collateralised. There are two types of collateral exchanges:

- initial margin (IM) or Independent Amount (IA ⁽¹⁰⁾): an initial amount of collateral aiming at covering potential future exposure, *i.e.* the unfavourable change in the Mark-to-Market of positions in the time period between the last collection of margins and the liquidation of positions following the counterparty default;
- variation margin (VM): collateral collected to cover current exposure arising from Mark-to-Market changes, used as an approximation of the actual loss resulting from the default of one of the counterparties.

All aspects of the margining regime are defined in collateral arrangements, such as credit support annexes (CSA ⁽¹¹⁾). The main features defined are:

- the scope covered (*i.e.* the nature of transactions allowed);
- the eligible collateral and the applicable haircut: main types of collateral exchanged are cash or high-quality and liquid assets according to the Group's policy, and are subject to a haircut, which is the valuation percentage applicable to each type of collateral, based on liquidity and price volatility of the underlying during both normal and stressed market conditions;

(10) IA (Independent Amount) is the same concept as initial margin but applies to different perimeters (OTC swaps not cleared for IA).

(11) The Credit Support Annex (CSA) is a legal document under ISDA contract that regulates the management of collateral between two counterparties.

- the timing and frequency of the calculation of the margin call and exchanges, usually daily;
- the margin call thresholds if not under regulatory obligation;
- the Minimum Transfer Amount (MTA).

In addition, specific parameters or optional features can be defined depending on the type of counterparty/transaction, such as an additional guarantee amount (flat-rate increase of the exposure allowing the party making a margin call to be “over-collateralised”), or rating-dependent clauses, typically mutual in nature, where additional collateral is requested in case of a party’s rating downgrade.

The Group monitors given and received collateral exchanges. In case of discrepancies between the parties with respect to margin call amounts, dedicated teams from the operations and the risk departments are in charge of analysing the impacted transactions to ensure they are correctly valued and of addressing the issue.

Bilateral collateral exchange

The initial margin, historically very rare except with hedge funds, was generalised by EMIR and DFA regulations which introduced the mandatory use of master agreements and related CSA, prior to or when entering into an uncleared OTC derivative transactions. It is now mandatory for the Group to exchange IM and VM for non-cleared OTC derivatives transactions with a large number of its counterparties (its financial counterparties and some non-financial counterparties above certain thresholds defined by the regulation, with compliance dates depending on the volume of transactions).

The Regulatory Technical Standards (RTS) on Initial Margin Model Validation (IMMV) under EMIR allows counterparties subject to mandatory bilateral collateral exchange requirements to waive these rules in certain circumstances. The Group has incorporated a waiver application process for intra-group entities into its risk management policies. The eligibility criteria for this waiver are framed and monitored as required by the Delegated Regulation.

Clearing houses

EMIR and DFA regulations have also required that the most standard over-the-counter derivatives transactions be compensated through clearing houses. The Group thus compensates its own operations (principal activity), but also client clearing activities (agency-type activity), which are subject to systematic margin calls to mitigate counterparty credit risk (customers posting daily variation margins and initial margins to Societe Generale, in order to cover current exposure and future exposure

4.3 COUNTERPARTY CREDIT RISK MEASUREMENT

Replacement risk

The measure of replacement risk is based on an internal model that determines the Group’s exposure profiles. As the value of the exposure to a counterparty is uncertain and variable over time, we estimate the potential future replacement costs over the lifetime of the transactions

REGULATORY INDICATOR

With respect to the calculation of capital requirements for counterparty credit risk, the ECB, following the Targeted Review of Internal Models, has renewed the approval for using the internal model described above to determine the Effective Expected Positive Exposure (EEPE) indicator.

For products not covered by the internal model as well as for entities in the Societe Generale group that have not been authorised by the supervisor to use the internal model, the Group uses the market-price valuation method for derivatives and the general financial security-based method for securities financing transactions (SFT ⁽¹²⁾):

The effects of compensation agreements and collateralisation are taken into account either by their simulation in the internal model when such credit risk mitigant or guarantees meet regulatory criteria, or by applying the rules as defined in the market-price valuation method or the financial security-based method, by subtracting the value of the collateral.

(12) Securities Financing Transactions.

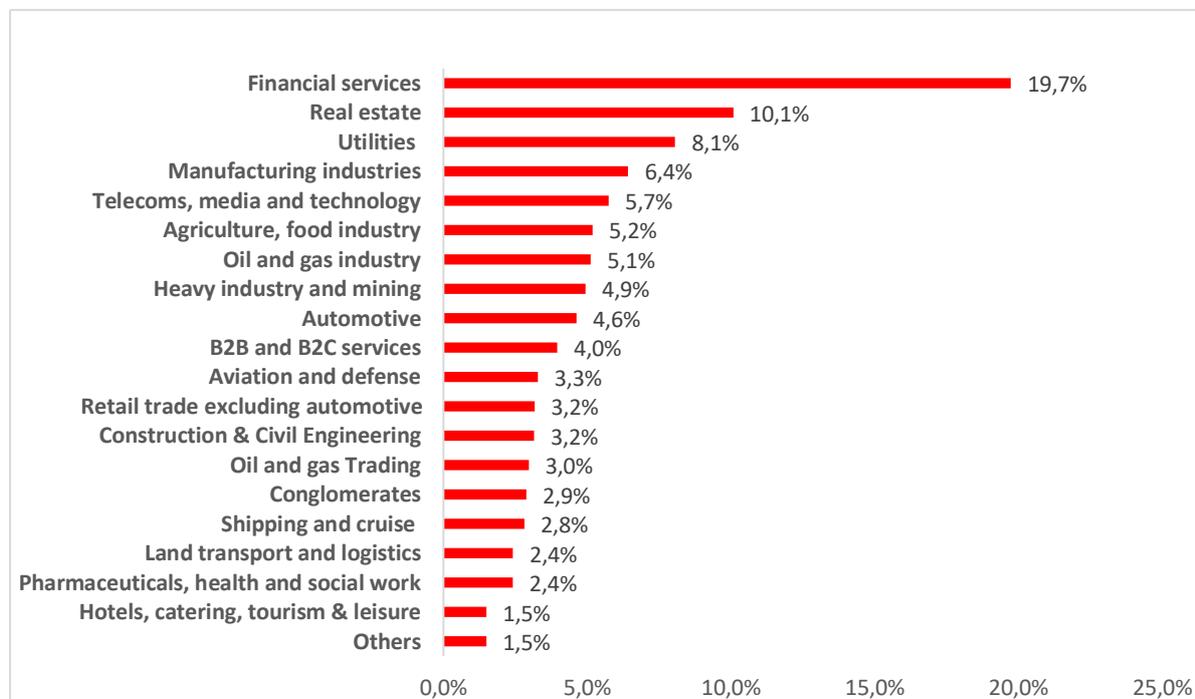
These exposures are then weighted by rates resulting from the credit quality of the counterparty to compute the Risk Weighted Assets (RWA). These rates can be determined by the standard approach or the advanced approach (IRBA).

As a general rule, when EAD is modelled in EEPE and weighted according to IRB approach, there is no adjustment of the LGD according to the collateral received as it is already taken into account in the EEPE calculation.

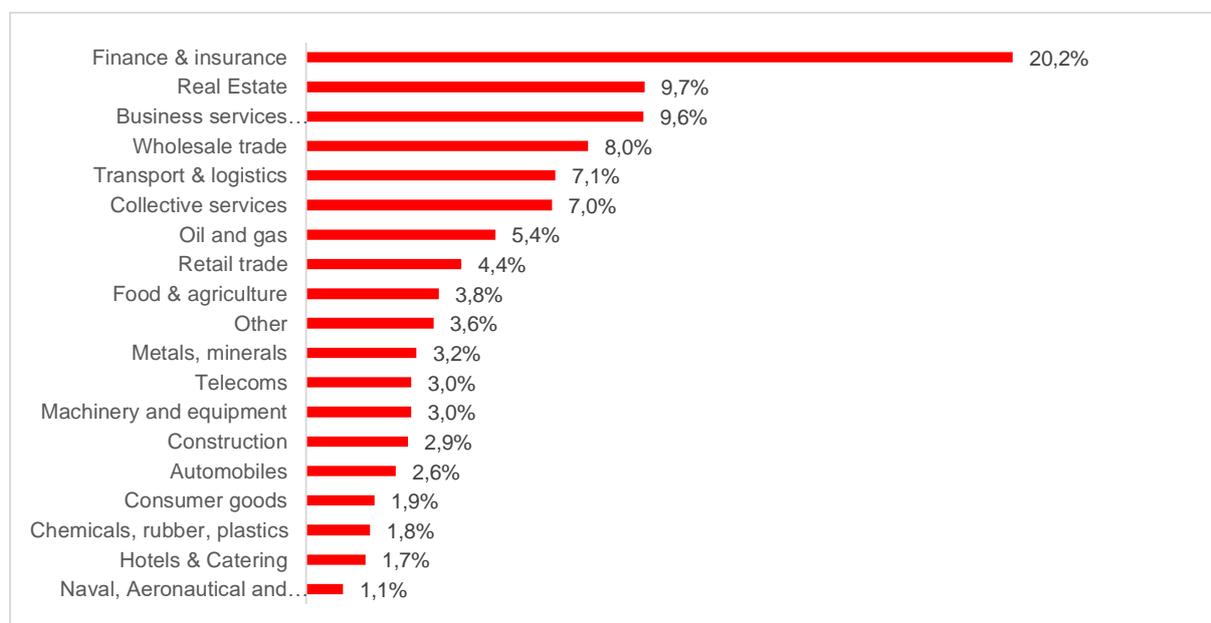
5. ANALYSIS OF THE CREDIT PORTFOLIO

In this section, the measurement used for credit exposures is the EAD – Exposure at Default (on- and off-balance sheet). Under the Standardised Approach, EAD is calculated net of collateral and provisions.

SECTOR BREAKDOWN OF GROUP CORPORATE EXPOSURE AS AT 31 DECEMBER 2022 (BASEL PORTFOLIO)



SECTOR BREAKDOWN OF GROUP CORPORATE EXPOSURE AS AT 31 DECEMBER 2021 (BASEL PORTFOLIO)



EAD of the Corporate portfolio is presented in accordance with the Basel rules (large corporates, including insurance companies, funds and hedge funds, SMEs, specialised financing, factoring businesses), based on the obligor's characteristics, before taking into account the substitution effect (credit risk scope: debtor, issuer and replacement risk).

As at 31 December 2022, the "Corporate" portfolio amounted to EUR 390 billion out of a total of EUR 1,119 billion for the group (on- and off-balance sheet outstanding measured in EAD). The Group's commitments on its top ten "Corporate" counterparties represent 5% of this portfolio.

6. RESTRUCTURED DEBT

For the Societe Generale group, "restructured" debt refers to loans with amounts, terms or financial conditions contractually modified due to the borrower's financial difficulties (whether these financial difficulties have already occurred or will definitely occur unless the debt is restructured). Societe Generale aligns its definition of restructured loans with the EBA one.

Restructured debt does not include commercial renegotiations involving customers for whom the Bank has agreed to renegotiate the debt in order to maintain or develop a business relationship, in accordance with credit approval rules and without any financial difficulties.

Any situation leading to a credit restructuring and involving a loss of value greater than 1% of the original debt or in which the customer's ability to repay the debt according to the new schedule appears compromised must result in the classification of the customer concerned in default. Basel and the classification of outstanding as impaired, in accordance with the EBA directives on the application of the definition of default according to Article 178 of European Regulation No. 575/2013. In this case, customers are kept in default as long as the Bank is uncertain about their ability to honor their future commitments and at least for one year from the date of the restructuring. In other cases, an analysis of the customer's situation makes it possible to estimate his ability to repay according to the new schedule. If this ability is proved, the client can be remained in performing loans. Otherwise, the customer is also transferred to Basel default.

The total balance sheet amount of restructured debt as at 31 December 2022 mainly corresponds to loans and receivables at amortised cost for an amount of EUR 6.9 billion.

NOTE 10.4 - MARKET RISK

DEFINITION

Market risk is the risk of loss of value on financial instruments arising from changes in market parameters, the volatility of these parameters, and the correlations between them. These parameters include, but are not limited to, exchange rates, interest rates, the price of securities (equities or bonds), commodities, derivatives and other assets.

1. ORGANISATION OF THE MARKET RISK MANAGEMENT

Although primary responsibility for managing risk exposure relies on the front office managers, the supervision system comes under the Market Risk Department of the Risk Division, which is independent from the businesses.

Within this framework, the main tasks of this department are:

- the definition and proposal of the Group's market risk appetite;
- the proposal of appropriate market risk limits by Group activity to the Group Risk Committee;
- the assessment of the limit requests submitted by the different businesses within the framework of the overall limits authorised by the Board of Directors and General Management, and based on the use of these limits;
- the permanent verification of the existence of an effective market risk monitoring framework based on suitable limits;
- the definition of the indicators used to monitor market risk;
- the daily calculation and certification of the market risk indicators, of the P&L resulting from market activities, based on formal and secure procedures, and then of the reporting and the analysis of these indicators;
- the daily monitoring of the limits set for each activity.

In order to perform its tasks, the department also defines the architecture and the functionalities of the information system used to produce the risk and P&L indicators for market transactions, and ensures it meets the needs of the different businesses and of the Market Risk Department.

2. MARKET RISK MONITORING PROCESS

The business development strategy of the Group for market activities is primarily focused on meeting client needs, with a full range of products and solutions. The risk resulting from these market activities is strictly managed through a set of limits for several indicators:

- the Value at Risk (VaR) and Stressed Value at Risk (SVaR): these global indicators are used for market risk calculations for RWA and for the day-to-day monitoring of the market risks incurred by the Group within the scope of its trading activities;
- stress test measurements, based on decennial shock-type indicators, which make it possible to restrict the Group's exposure to systemic risk and exceptional market shocks. These measurements can be global, multi-risk factor (based on historical or hypothetical scenarios), by activity or risk factor in order to take into account extreme risks on a specific market, or event-driven, to temporarily monitor a particular situation;
- sensitivity and nominal indicators used to manage the size of positions:
 - sensitivities are used to monitor the risk incurred locally on a given type of position (e.g. sensitivity of an option to changes in the underlying asset),
 - while nominal indicators are used for significant positions in terms of risk;
- additional indicators such as concentration risk or holding period, maximum maturity, etc.

3. MARKET RISK MAIN MEASURES

STRESS TEST ASSESSMENT

Societe Generale monitors its exposure using stress test simulations to take into account exceptional market disruptions.

A stress test estimates the loss resulting from an extreme change in market parameters over a period corresponding to the time required to unwind or hedge the positions affected.

Two major metrics are defined and used:

- the Global Stress Test on market activities, which estimates the losses linked to market risk, market/counterparty cross-risk, and dislocation and carry risk on exotic activities, that could arise simultaneously in the event of a severe but plausible systemic crisis. This stress test is modelled on five scenarios;
- the Market Stress Test, which focuses solely on market risk, applying the same scenarios as the Global Stress Test and additional scenarios corresponding to different market conditions.

The various scenarios for those stress tests are reviewed by the Risk Division on a regular basis. These reviews are presented during dedicated biannual Committees, chaired by the Market Risk Department and attended by economists and representatives of Societe Generale's trading activities. These Committees cover the following topics: changes in scenarios (introduction, removal, shock review), appropriate coverage of the risk factors by the scenarios, review of the approximations made in terms of calculation, correct documentation of the whole process. The delegation level needed to validate the changes in stress test methodology depends on the impact of the change in question.

Global Stress Test limits on market activities and Market Stress Test limits play a pivotal role in defining and calibrating the Group's market risk appetite: these indicators cover all activities and the main market risk factors and related risks associated with a severe market crisis, in order both to limit the overall amount of risk and to take into account any diversification effects.

This framework is complemented by stress-testing frameworks on four risk factors on which the Group has significant exposures, in order to reduce the overall risk appetite: equities, interest rates, credit spread and emerging markets.

THE GLOBAL STRESS TEST ON MARKET ACTIVITIES

The Global Stress Test on market activities is the main risk indicator used on this scope. It covers all the risks on market activities that would occur simultaneously in case of a severe, but plausible, market crisis. The impact is measured over a short period of time with an expected occurrence of once per decade. The Global Stress Test uses five market scenarios and has three components, each of which are considered in each of the five scenarios in order to ensure consistency within the same scenario:

- market risk;
- dislocation and carry risks on exotic activities related to concentration effects and crowded trades;
- market/counterparty cross-risks arising in transactions with weak counterparties (hedge funds and proprietary trading groups).

The Global Stress Test corresponds to the least favourable results arising from the five scenarios and their respective components.

The market risk component

It corresponds to:

- the results of the Market Stress Test ⁽¹³⁾ restricted to scenarios that could cause dislocation effects on market positions and default by weak counterparties. These scenarios all simulate a sharp fall in the equity markets and a widening in credit spreads which could trigger dislocation effects. For the calculation of the stress test, five scenarios are used: three theoretical scenarios (generalised (i.e. financial crisis scenario), eurozone crisis, general decline in risk assets) and two historical scenarios focusing respectively on the period of early October 2008 and early March 2020;
- the impact of the stress test scenario on CVA (Credit Value Adjustment) and FVA (Funding Value Adjustment) reserves, as their variations affect trading results

The dislocation and carry risk component

Additional market risks to those assessed in the Market Stress Test can occur in market situations in which one or more participants – generally structured products sellers – have concentrated or crowded trades. Dynamic risk hedging strategies can cause larger market dislocations than those calibrated in the Market Stress Test, and these dislocations can extend beyond the shock timeline used due to an imbalance between supply and demand.

Equity, credit, fixed income, currency and commodity trading activities are regularly reviewed to identify these areas of risk and to define a scenario that takes into account the specific features of each activity and position. Each scenario associated with an identified area of risk is added to the market risk component if – and only if – it is compatible with the market scenario in question.

Market/counterparty cross-risk component on weak counterparties

Some counterparties may be significantly affected by a major crisis on the financial markets and their probability of default may increase. The third component of the Global Stress Test therefore aims to take into account this increased risk on certain types of weak counterparties (hedge funds and proprietary trading groups).

Fourth measurements are used:

- the **collateralised financing stress test**: this stress test focuses on collateralised financing activities and more specifically on weak counterparties. It applies a dislocation shock to several asset classes with the assumption of extremely tight liquidity conditions. Collateral and counterparty default rates are stressed concomitantly, taking into account any consanguinity with the collateral posted;
- the **adverse stress test on hedge funds and proprietary trading groups (PTG)**: this stress test applies three pairs of stress scenarios to all market transactions generating replacement regarding this type of counterparty. Each set of scenarios consists of a short-term scenario (scenario derived from the Market Stress Test) applied to positions with margin calls, and a long-term scenario (whose shocks are generally more severe) for positions without margin calls. Stressed current exposures are weighted by the probability of default of each counterparty and by the loss given default (LGD), then aggregated.
- the **adverse stress test on products whose underlying is a hedge fund**: this type of underlying poses a risk of illiquidity in the event of a crisis. The purpose of this stress test is to estimate the corresponding potential loss on transactions with this type of underlying and presenting a risk of a "gap risk".
- The **stress test on a member of the clearing houses (CCP)**: it allows to estimate the potential loss in case of default of a member of a CCP of which Societe Generale is a member.

(13) Measurement of the impact on the Net Banking Income in case of shocks on all risk factors (refer to below description).

THE MARKET STRESS TEST

This metric focuses on market risk and estimates the loss resulting from shocks on the set of risk factors. This stress test is based on 11 scenarios ⁽¹⁴⁾ (4 historical and 7 hypothetical). The main principles are as follows:

- the scenario considered in the market stress test is the worst of the different scenarios defined;
- the shocks applied are calibrated on time horizons specific to each risk factor (the time horizon can range from five days for the most liquid risk factors to three months for the least liquid);
- risks are calculated every day for each of the Bank's market activities (all products together), using each of the historical and hypothetical scenarios.

Historical scenarios

This method consists of an analysis of the major economic crises that have affected the financial markets: changes in the prices of financial assets (equities, interest rates, exchange rates, credit spreads, etc.) during each of these crises have been analysed in order to define scenarios for potential variations in these main risk factors which, when applied to the Bank's trading positions, could generate significant losses. Accordingly, this approach makes it possible to determine the historical scenarios used for the calculation of the stress test. This set of scenarios is also the subject of regular reviews. In 2020, 2 new historical scenarios related to the Covid-19 crisis were integrated: a crisis scenario (marked by a decline in equity indices and an increase in credit spreads) as well as a rebound scenario (marked by an increase in equity indices and a decrease in credit spreads). Societe Generale is currently using 4 historical scenarios in the calculation of the stress test, which cover the periods from October to December 2008 and March 2020

Hypothetical scenarios

The hypothetical scenarios are defined with the Group's economists and are designed to identify possible sequences of events that could lead to a major crisis in the financial markets (e.g. European crisis, a drop in assets, etc.). The Group's aim is to select extreme but plausible events which would have major repercussions on all international markets. Accordingly, Societe Generale has defined 7 hypothetical scenarios.

VALUE AT RISK 99% (VAR)

Methodology

The internal VaR model was introduced at the end of 1996 and has been approved by the French supervisor within the scope of the regulatory capital requirements. This approval was renewed in 2020 at the Target Review of Internal Models (TRIM).

The Value at Risk (VaR) assesses the potential losses on positions over a defined time horizon and for a given confidence interval (99% for Societe Generale). The method used is the "historical simulation" method, which implicitly takes into account the correlation between the various markets, as well as general and specific risk. It is based on the following principles:

- storage in a database of the risk factors that are representative of Societe Generale's positions (i.e. interest rates, share prices, exchange rates, commodity prices, volatility, credit spreads, etc.). Controls are regularly performed in order to check that all major risk factors for the trading portfolio of the Group are taken into account by the internal VaR model;
- definition of 260 scenarios corresponding to one-day variations in these market parameters over a rolling one-year period; these scenarios are updated daily with the inclusion of a new scenario and the removal of the oldest scenario. There are three coexisting methods for modelling scenarios (relative shocks, absolute shocks and hybrid shocks), the choice between these methods for a given risk factor being determined by its nature and its historical trend;
- the application of these 260 scenarios to the market parameters of the day;
- revaluation of daily positions, on the basis of the 260 sets of adjusted market parameters: in most cases, this calculation involves a full re-pricing. Nonetheless, for certain risk factors, a sensitivity-based approach may be used.

(14) Including Global stress test scenarios on market activities.

Market risk factors	Description
Interest rates	Risk resulting from changes in interest rates and their volatility on the value of a financial instrument sensitive to interest rates, such as bonds, interest rate swaps, etc.
Share prices	Risk resulting from variations in prices and volatility of shares and equity indices, in the level of dividends, etc.
Exchange rates	Risk resulting from the variation of exchange rates between currencies and of their volatility
Commodity prices	Risk resulting from changes in prices and volatility of commodities and commodity indices
Credit Spreads	Risk resulting from an improvement or a deterioration in the credit quality of an issuer on the value of a financial instrument sensitive to this risk factor such as bonds, credit derivatives (credit default swaps for example)

Within the framework described above, the one-day 99% VaR, calculated according to the 260 scenarios, corresponds to the weighted average ⁽¹⁵⁾ of the second and third largest losses computed, without applying any weighting to the other scenarios.

The day-to-day follow-up of market risk is performed via the one-day VaR, which is calculated on a daily basis at various granularity levels. Regulatory capital requirements, however, oblige us to take into account a ten-day horizon, thus we also calculate a ten-day VaR, which is obtained by multiplying the one-day VaR aggregated at Group level by the square root of 10. This methodology complies with regulatory requirements and has been reviewed and validated by the supervisor.

The VaR assessment is based on a model and a certain number of conventional assumptions, the main limits of which are as follows:

- by definition, the use of a 99% confidence interval does not take into account losses arising beyond this point; VaR is therefore an indicator of the risk of loss under normal market conditions and does not take into account exceptionally significant fluctuations;
- VaR is computed using closing prices, meaning that intra-day fluctuations are not taken into account;
- the use of a historical model is based on the assumption that past events are representative of future events and may not capture all potential events.

The Market Risk Department monitors the limitations of the VaR model by measuring the impacts of integrating a risk factor absent from the model (RNIME ⁽¹⁶⁾ process). Depending on the materiality of these missing factors, they may be capitalised. Other complementary measures also allow to control the limitations of the model.

The same model is used for the VaR computation for almost all of Global Banking & Investor Solution's activities (including those related to the most complex products) and the main market activities of Retail Banking and Private Banking.

The few activities not covered by the VaR method, either for technical reasons or because the stakes are too low, are monitored using stress tests, and capital charges are calculated using the standard method or through alternative in-house methods. For example, the currency risk of positions in the banking book is not calculated with an internal model because this risk is not subject to a daily revaluation and therefore cannot be taken into account in a VaR calculation.

(15) 39% of the second highest risk and 61% of the third highest risk.

(16) Risk Not in Model Engine.

Backtesting

The relevance of the model is checked through continuous backtesting in order to verify whether the number of days for which the negative result exceeds the VaR complies with the 99% confidence interval. The results of the backtesting are audited by the Risk Department in charge of the validation of internal models, which, as a second line of defense, also assesses the theoretical robustness (from a design and development standpoint), the correctness of the implementation and the adequacy of the model use. The independent review process ends with (i) review and approval committees and (ii) an audit report detailing the scope of the review, the tests performed and their outcomes, the recommendations and the conclusion of the review. The model control mechanism gives rise to reporting to the appropriate authorities.

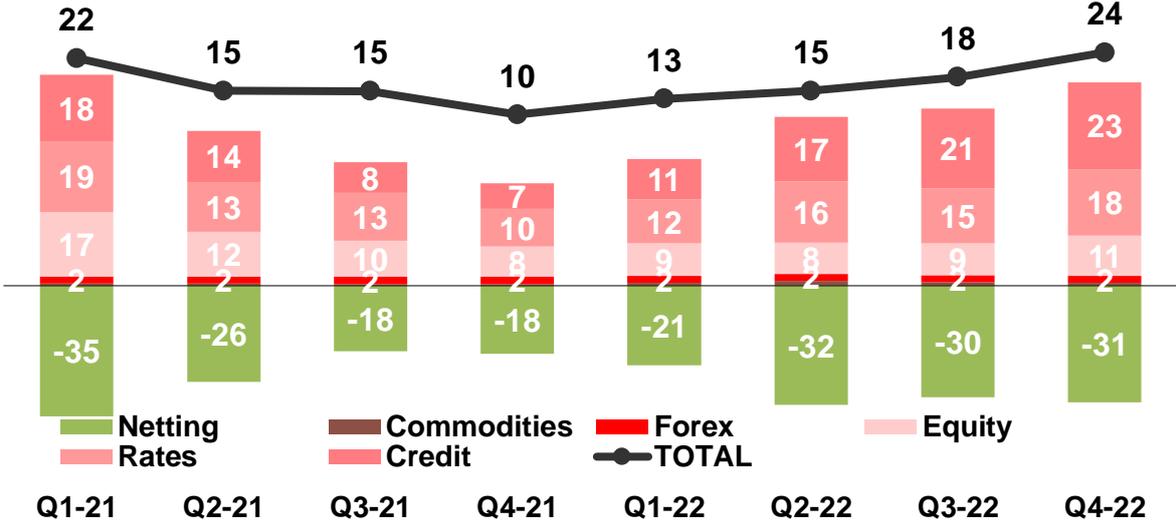
In compliance with regulations, the backtesting compares the VaR to the (i) actual and (ii) hypothetical change in the portfolio's value:

- in the first case (backtesting against "actual P&L"), the daily P&L ⁽¹⁷⁾ includes the change in book value, the impact of new transactions and of transactions modified during the day (including their sales margins), refinancing costs, various related commissions (brokerage fees, custody fees, etc.), as well as provisions and values adjustments made for market risk;
- in the second case (backtesting against "hypothetical P&L"), the daily P&L ⁽¹⁸⁾ includes only the change in book value related to changes in market parameters and excludes all other factors.

(17) "Actual P&L" by agreement hereinafter.

(18) "Hypothetical P&L" by agreement hereinafter.

BREAKDOWN BY RISK FACTOR OF TRADING VAR (1-DAY, 99%) – CHANGES IN QUARTERLY AVERAGE OVER THE 2021-2022 PERIOD (IN EUR M)



The VaR was riskier in 2022 (EUR 18 million versus EUR 15 million in 2021 on average), mainly due to the entry of new and more volatile scenarios following the deterioration of market conditions related to the war in Ukraine. The increase in risk is particularly evident in the Rates and Credit activities.

STRESSED VAR (SVAR)

The Internal Stressed VaR model (SVaR) was introduced at the end of 2011 and has been approved by the Regulator within the scope of the regulatory capital requirements on the same scope as the VaR. As with the VaR model, this approval was renewed in 2020 at the Target Review of Internal Models (TRIM).

The calculation method used for the 99% one-day SVaR is the same as as the one for the VaR. It consists in carrying out a historical simulation with one-day shocks and a 99% confidence interval. Contrary to VaR, which uses 260 scenarios for one-day fluctuations over a rolling one-year period, SVaR uses a fixed one-year historical window corresponding to a period of significant financial tension. Following a validation of the ECB obtained at the end of 2021, a new method for determining the fixed historical stress window is used. It consists in calculating an approximate SVaR for various risk factors selected as representative of the Societe Generale portfolio (related to equity, fixed income, foreign exchange, credit and commodity risks): these historical shocks are weighted according to the portfolio’s sensitivity to each of these risk factors and aggregated to determine the period of highest stress for the entire portfolio ⁽¹⁹⁾. The historical window used is reviewed annually. In 2022, this window was “September 2008-September 2009”.

The ten-day SVaR used for the computation of the regulatory capital is obtained, as for VaR, by multiplying the one-day SVaR by the square root of ten.

As for the VaR, the Market Risk Department controls the limitations of the SVaR model by measuring the impact of integrating a risk factor absent from the model (RNIME process). Depending on the materiality of these missing factors, they may be capitalised. Other complementary measures also control the limitations of the model.

(19)At the request of the ECB, a posteriori check is carried out to verify the relevance of this historical window by making calculations for full revaluation.

The continuous backtesting performed on the VaR model cannot be replicated to the SVaR model as, by definition, it is not sensitive to the current market conditions. However, as the VaR and the SVaR models rely on the same approach, they have the same advantages and limits.

The relevance of the SVaR is regularly monitored and reviewed by the Risk Department in charge of the validation of internal models, as a second line of defense. The independent review process ends with (i) review and approval committees and (ii) an audit report detailing the scope of the review, the tests performed and their outcomes, the recommendations and the conclusion of the review. The model control mechanism gives rise to recurrent reporting to the appropriate authorities.

SVaR decreased slightly on average in 2022 (EUR 32 million versus EUR 37 million in 2021 on average). Without any particular trend over the year, the SVaR has evolved at levels similar to those of 2021 and with comparable variability. The level of the SVaR remains explained by the indexing and financing action activities, and by the interest rate scopes, while the exotic scopes partially offset the risk.

NOTE 10.5 - STRUCTURAL INTEREST RATE AND EXCHANGE RATE RISKS

DEFINITION

Structural exposure to interest rate and exchange rate risks results from commercial transactions, their associated hedging transactions and corporate centre transactions.

The interest rate and exchange rate risks linked to Trading Book activities are excluded from the structural risk measurement scope as they belong to the category of market risks. Structural and market exposures constitute the Group's total interest rate and exchange rate exposure.

The general principle for managing structural interest rate and exchange rate risks within consolidated entities is to ensure that adverse movements in interest rates do not significantly threaten the Group's financial base or its future earnings. Within the entities, commercial and corporate centre operations must therefore be matched in terms of interest rates and exchange rates as much as possible. At the consolidated level, a structural foreign exchange position is maintained in order to minimise the sensitivity of the Group's Common Equity Tier 1 (CET1) ratio to exchange rates fluctuations.

1. ORGANISATION OF THE MANAGEMENT OF STRUCTURAL INTEREST RATE AND EXCHANGE RATE RISKS

The principles and standards for managing these risks are defined at the Group level. The entities are first and foremost responsible for managing these risks. The ALM (Asset and Liability Management) Department within the Group's Finance Division leads the control framework of the first line of defense. The ALM department of the Risk Department assumes the role of second line of defense supervision.

1.1 THE GROUP FINANCE COMMITTEE, A GENERAL MANAGEMENT BODY

The purpose of the Group Finance Committee is to:

- validate and ensure the adequacy of the system for monitoring, managing and supervising structural risks;
- review changes in the Group's structural risks through consolidated reporting;
- review and validate the measures and the adjustments proposed by the Group's Finance Department.

The Finance Committee gives delegation to the Global Rate Forex Committee chaired by the Finance Department and the Risk Division for the validation of frameworks not exceeding defined amounts.

1.2 THE ALM DEPARTMENT WITHIN THE GROUP FINANCE DIVISION

The ALM (Asset and Liability Management) Department is responsible for:

- defining the structural risk policies for the Group and formalising risk appetite to structural risks;
- analysing the Group's structural risk exposure and defining hedging strategies;
- monitoring the regulatory environment concerning structural risk;
- defining the ALM principles for the Group;
- defining the modelling principles applied by the Group's entities regarding structural risks;
- identifying, consolidating and reporting on Group structural risks;
- monitoring compliance with structural risk limits.

1.3 THE ALM RISK CONTROL DEPARTMENT WITHIN THE RISK DIVISION

Within the Risk Division, the ALM Risk Department oversees structural risks and assesses the management system for these risks. As such, this department is in charge of:

- defining the steering indicators and overall stress test scenarios of the different types of structural risks and setting the main limits for the business divisions and the entities and Business Units (BU)/Service Units (SU);
- defining the normative environment of the structural risk metrics, modelling and framing methods.

In addition, by delegation of MRM, this department ensures the validation of ALM models for which it organises and chairs the Validation Committee of Models

Finally, he chairs the Model Validation Committee and the ALM Standards Validation Committee and thus ensures that the regulatory framework is correctly read and properly adapted to Societe Generale environment

1.4 THE ENTITIES AND BU/SU ARE RESPONSIBLE FOR ALM RISK MANAGEMENT

Each entity, each BU/SU, manages its structural risks and is responsible for regularly assessing risks incurred, producing the risk report and developing and implementing hedging options. Each entity, each BU/SU is required to comply with Group standards and to adhere to the limits assigned to it.

As such, the entities and the BUs/SUs apply the standards defined at Group level and develop the models, with the support of the central modelling teams of the Finance Department.

An ALM manager reporting to the Finance Department in each entity is responsible for monitoring these risks (first-level control). This manager is responsible for reporting ALM risks to the Group Finance Department. All entities have an ALM Committee responsible for implementing validated models, managing exposure to interest rate and exchange rate risks and implementing hedging programs in accordance with the principles set out by the Group and the limits validated by the Finance Committee and the BU/SU ALM Committees.

2. STRUCTURAL INTEREST RATE RISK

Structural interest rate risk is generated by commercial transactions and their hedging, as well as the management operations specific to each of the consolidated entities.

2.1 THE GROUP'S OBJECTIVE

The objective of managing structural interest rate risk is to manage exposure of each Group entity.

To this end, the Board of Directors, the Finance Committee and the ALM Committee set sensitivity limits (in terms of value and income) for the Group, the BUs/SUs and the entities respectively.

2.2 MEASUREMENT AND MONITORING OF STRUCTURAL INTEREST RATE RISK

Societe Generale uses several indicators to measure the Group's overall interest rate risk.

The three most important indicators are:

- the sensitivity of the net present value (NPV) to the risk of interest rate mismatch. It is measured as the sensitivity of the net present value of the static balance sheet to a change in interest rates. This measure is calculated for all currencies to which the Group is exposed;
- the sensitivity of the interest margin to changes in interest rates in various interest rate scenarios. It takes into account the sensitivity generated by future commercial production;
- the sensitivity of NPV to basis risk (risk associated with decorrelation between different variable rate indices).

Limits on these indicators are applicable to the Group, the BUs/SUs and the various entities. Limits are set for shocks at +0.1% and for stressed shocks ($\pm 1\%$ for value sensitivity and $\pm 2\%$ for income sensitivity) without floor application. Only the sensitivity of income over the first two years is framed. The measurements are computed monthly 10 months a year (with the exception of the months of January and July for which no Group-level closing is achieved). An additional synthetic measurement of value sensitivity – all currencies – is framed for the Group. To comply with these frameworks, the entities combine several possible approaches:

- orientation of the commercial policy so as to offset interest rate positions taken on the asset and liability side;
- implementation of a swap operation or – failing this in the absence of such a market – use of a loan/borrowing operation;
- purchase/sale of options on the market to cover optional positions taken vis-à-vis our clients.

Assets and liabilities are analysed without a prior allocation of resources to uses. Maturities of outstanding amounts are determined by taking into account the contractual characteristics of the transactions, adjusted for the results of customer behavior modelling (in particular for demand deposits, savings and early loan repayments), possibly differentiated according to the rate scenario considered, as well as a certain number of disposal agreements, in particular on equity items.

As at 31 December 2022, the main models applicable for the calculation of interest rate risk measurements are models – sometimes dependent rates– on part of the deposits without a maturity date leading to an average duration of less than 5 years– the schedule may in some cases to reach the maximum maturity of 20 years.

The automatic balance sheet options are taken into account:

- either via the Bachelier formula or possibly from *Monte-Carlo* type calculations for value sensitivity calculations;
- or by taking into account the pay-offs depending on the scenario considered in the income sensitivity calculations.

Changes in OCI or P&L of instruments recognised at fair value are not included in the controlled income sensitivity measures.

Hedging transactions are mainly documented from an accounting viewpoint: this can be carried out either as micro-hedging (individual hedging of commercial transactions) or as macro-hedging under the IAS 39 “carve-out” arrangement (global backing of portfolios of similar commercial transactions within a Treasury Department; macro-hedging concerns essentially French retail network entities).

Macro-hedging derivatives are essentially interest rate swaps in order to maintain networks’ net asset value and result sensitivity within limit frameworks, considering hypotheses applied. For macro-hedging documentation, the hedged item is an identified portion of a portfolio of commercial client or interbank operations. Conditions to respect in order to document hedging relationships are reminded in Note 3.2 to the consolidated financial statements.

Macro-hedging derivatives are allocated to separate portfolios according to whether they are used to hedge fixed-rate assets or liabilities in the accounting books. The hedging instrument portfolios allocated to liability elements are net fixed-rate receiver/variable-rate payer whereas the hedging instrument portfolios allocated to asset elements are net fixed-rate payer/variable-rate receiver.

In the context of the macro-hedging, the controls carried out and documented enable to verify that intra-group transactions are returned to the market, to verify the non-over hedging and the non-disappearance of the items hedged and the effectiveness of the hedges (MTM change in hedging instruments/MTM change in hedged items in the 80-125% range)

VARIATION IN THE ECONOMIC VALUE OF OWN FUNDS AT THE 6 REGULATORY SHOCKS

(In EURm)	Supervisory shock scenarios	a	b	c	d
		Changes of the economic value of equity		Changes of the net interest income	
		31.12.2022	31.12.2021	31.12.2022	31.12.2021
1	Parallel up	(2,900)	(6,784)	375	240
2	Parallel down	1011	(2,683)	(1,102)	(219)
3	Steepener	1,875	463		
4	Flattener	(2,547)	(4,033)		
5	Short rates up	(2,747)	(3,643)		
6	Short rates down	2,862	79		

Regulatory metrics are calculated in accordance with the provisions imposed by the regulator (EBA GL 2018/02).

3. STRUCTURAL EXCHANGE RATE RISK

Structural exchange rate risk, understood as resulting from all transactions that do not belong to the Trading Book, results from:

- exposures related to net investments abroad in foreign currencies, *i.e.* in subsidiaries and branches. FX positions generated by an imperfect hedge are valued through other comprehensive income;
- exposures related to activities made by entities in currencies that are not their reporting currency.

The Group's policy is to make the CET1 ratio insensitive to fluctuations in exchange rates against the euro.

As such :

- Group entities are asked to individually hedge the results related to activities in currencies other than their reporting currency;
- the foreign exchange position generated by investments in foreign holdings and branches, as well as by the conversion of their results into euros, is partially covered centrally: at the level of the Group Finance Division. Societe Generale retains a target exposure multiplied by the RWA generated in this currency in each RWA constituent currency equivalent to the level of the CET1 Target Group ratio and covers the balance by borrowings or forward foreign exchange transactions denominated in the currency of investments and recognised as investment hedging instruments (cf. Note 3.2).

For each currency, the difference between actual and target exposure is governed by limits validated by the Finance Committee and the Board of Directors.

Similarly, the sensitivities of the CET1 ratio to shocks of $\pm 10\%$ per currency are framed.

NOTE 10.6 - LIQUIDITY RISK

DEFINITION

Liquidity risk is defined as the risk that the bank does not have the necessary funds to meet its commitments. Funding risk is defined as the risk that the Group will no longer be able to finance its activities with appropriate column of assets and at a reasonable cost.

1. OBJECTIVES AND GUIDING PRINCIPLES

The liquidity and funding management set up at Societe Generale aims at ensuring that the Group can (i) fulfil its payment obligations at any moment in time, during normal course of business or under lasting financial stress conditions (management of liquidity risks); (ii) raise funding resources in a sustainable manner, at a competitive cost compared to peers (management of funding risks). Doing so, the liquidity and funding management ensures compliance with risk appetite and regulatory requirements

To achieve these objectives, Societe Generale has adopted the following guiding principles:

- liquidity risk management is centralised at Group level, ensuring pooling of resources, optimisation of costs and consistent risk management. Businesses must comply with static liquidity deadlocks in normal situations, within the limits of their supervision and the operation of their activities, by carrying out operations with the “own management” entity, where appropriate, according to an internal refinancing schedule. Assets and liabilities with no contractual maturity are assigned maturities according to agreements or quantitative models proposed by the Finance Department and by the business lines and validated by the Risk Division;
- funding resources are based on business development needs and the risk appetite defined by the Board of Directors (see section 2);
- financing resources are diversified by currencies, investor pools, maturities and formats (vanilla issues, structured, secured notes, etc.). Most of the debt is issued by the parent company. However, Societe Generale also relies on certain subsidiaries to raise resources in foreign currencies and from pools of investors complementary to those of the parent company;
- liquid reserves are built up and maintained in such a way as to respect the stress survival horizon defined by the Board of Directors. Liquid reserves are available in the form of cash held in central banks and securities that can be liquidated quickly and housed either in the banking book, under direct or indirect management of the Group Treasury. in the trading book within the market activities under the supervision of the Group Treasury;
- the Group has options that can be activated at any time under stress, through an Emergency Financing Plan (EFP) at Group level (except for insurance activities, which have a separate contingency plan), defining leading indicators for monitoring the evolution of the liquidity situation, operating procedures and remedial actions that can be activated in a crisis situation.

2. THE GROUP'S PRINCIPLES AND APPROACH TO LIQUIDITY RISK MANAGEMENT

The key operational steps of liquidity and funding management are as follows:

- risk identification is a process which is set out and documented by the Risk Division, in charge of establishing a mapping of liquidity risks. This process is conducted yearly with each Business Unit and within the Group Treasury Department, aimed at screening all material risks and checking their proper measurement and capturing the control framework. In addition, a Reverse Stress Testing process exists, which aims at identifying and quantifying the risk drivers which may weigh most on the liquidity profile under assumptions even more severe than used in the regular stress test metrics;
- definition, implementation and periodic review of liquidity models and conventions used to assess the duration of assets and liabilities and to assess the liquidity profile under stress. Liquidity models are managed along the overall Model Risk Management governance, also applicable to other risk factors (market, credit, operational), controlled by the Group Risk division;

- yearly definition of the risk appetite for liquidity and funding risks, whereby the Board of Directors approves targets for key metrics, and related alert thresholds that have been proposed by General Management. Such risk appetite targets are then cascaded down per Business Units. The risk appetite is framed along the following metrics:
 - key regulatory indicators (LCR, with a specific focus on the LCR in US dollar, and NSFR),
 - the footprint of the Group in Short-Term Wholesale funding markets,
 - the survival horizon under an adverse stress scenario, combining a severe market and systemic shock and an idiosyncratic shock. In addition to the main adverse scenario, Societe Generale also checks its survival horizon under an extreme stress scenario. For both scenarios, the idiosyncratic shock is characterised by one of its main consequences, which would be an immediate 3-notch downgrade of Societe Generale's long-term rating. In such adverse or extreme scenarios, the liquidity position of the Group is assessed over time, taking into account the negative impacts of the scenarios, such as deposit outflows, drawing by clients of the committed facilities provided by Societe Generale, increase in margin calls related to derivatives portfolios, etc. The survival horizon is the moment in time when the net liquidity position under such assumptions becomes negative,
 - the overall transformation position of the Group (static liquidity deadlock in normal situation matured up to a maturity of 5 years),
 - the amount of free collaterals providing an immediate access to central bank funding, in case of an emergency (only collaterals which do not contribute to the numerator of the LCR are considered, *i.e.* non-HQLA collaterals);
- the financial trajectories under baseline and stressed scenarios are determined within the framework of the funding plan to respect the risk appetite. The budget's baseline scenario reflects the central assumptions for the macro-economic environment and the business strategy of the Group, while the stressed scenario is factoring both an adverse macro-economic environment and idiosyncratic issues;
- the funding plan comprises both the long-term funding programme, which frames the issuance of plain vanilla bonds and structured notes, and the plan to raise short-term funding resources in money markets;
- the Funds Transfer Pricing (FTP) mechanism, drawn up and maintained within the Group Treasury, provides internal refinancing schedules that enable businesses to recover their excess liquidity and finance their needs through transactions carried out with its own management
- production and broadcasting of periodic liquidity reports, at various frequencies (daily indicators, weekly indicators, monthly indicators), leveraging in most part on the central data repository, operated by a dedicated central production team. The net liquidity position under the combined (idiosyncratic and market/systemic) stress scenario is reassessed on a monthly basis and can be analysed along multiple axes (per product, Business Unit, currency, legal entity). Each key metric (LCR, NSFR, transformation positions, net liquidity position under combined stress) is reviewed formally on a monthly basis by the Group Finance and Risk divisions. Forecasts are made and revised weekly by the Strategic and Financial Steering Department and reviewed during a Weekly Liquidity Committee chaired by the Head of Group Treasury. This Weekly Liquidity Committee gives tactical instructions to Business Units, with the objective to adjust in permanence the liquidity and funding risk profile, within the limits and taking into account business requirements and market conditions;
- preparation of a Contingency Funding Plan, which is applicable Group-wide, and provides for: (i) a set of early warning indicators (*e.g.* market parameters or internal indicators); (ii) the operating model and governance to be adopted in case of an activation of a crisis management mode (and the interplay with other regimes, in particular Recovery management); (iii) the main remediation actions to be considered as part of the crisis management.

These various operational steps are part of the ILAAP (Internal Liquidity Adequacy Assessment Process) framework of Societe Generale.

Every year, Societe Generale produces for its supervisor, the ECB, a self-assessment of the liquidity risk framework in which key liquidity and funding risks are identified, quantified and analysed with both a backward and a multi-year forward-looking perspective. The adequacy self-assessment also

describes qualitatively the risk management set up (methods, processes, resources...), supplemented by an assessment of the adequacy of the Group's liquidity.

3. GOVERNANCE

The main liquidity risk governance bodies are as follows:

- the Board of Directors, which:
 - sets yearly the level of liquidity risk tolerance as part of the Group's risk appetite, based on a set of key metrics, which includes both internal and regulatory metrics, in particular the period of time during which the Group can operate under stressed conditions ("survival horizon"),
 - approves budget targets, including targets related to scarce resources such as liquidity usage and funding (definition of the funding plan),
 - reviews at least quarterly the Group's liquidity and funding situation: key liquidity metrics, including stressed liquidity gap metrics as evaluated through Societe Generale group models, the regulatory metrics LCR and NSFR, the pace of execution of the funding plan and the related cost of funds;
- General Management, which:
 - allocates liquidity and funding targets to the various Business Units and the Group Treasury entity, upon proposal from the Group Finance division,
 - defines and implements the liquidity and funding risk strategy, based on inputs from the Finance and Risk Divisions and the Business Units. In particular, the General Management chairs the Finance Committee, held every 6 weeks and attended by representatives from the Finance and Risk Divisions and Business Units, which is responsible for monitoring structural risks and managing scarce resources:
 - validation and monitoring of the set of limits for structural risks, including liquidity risk,
 - monitoring of budget targets and decisions in case of a deviation from the budget,
 - definition of principles and methods related to liquidity risk management (e.g. definition of stress scenarios),
 - assessment of any regulatory changes and their impacts;
- the Group Finance Division, which is responsible for the liquidity and funding risks as First Line of Defense, interacting closely with Business Units. Within the Group Finance Division, there are three main departments involved respectively in the preparation and implementation of decisions taken by the abovementioned bodies:
 - the Strategic and Financial Steering Department is responsible for framing and overseeing management of the Group's scarce resources, including liquidity, within the Group's risk appetite and budget targets,
 - the Group Treasury Department is in charge of all aspects of the operational management of liquidity and funding across the Group, including managing the liquidity position, executing the funding plan, supervising and coordinating treasury functions, providing operational expertise in target setting, managing the liquidity reserves and the collateral used in funding transactions, managing the corporate centre,
 - the Asset and Liability Management Department is in charge of the definition of modelling and monitoring structural risks, including liquidity risk alongside interest rate and foreign exchange risks in the Banking Book.
 - also sitting with the Group Finance Division, the Metrics Production Department runs the management information system regarding liquidity and funding risks across the Group. For liquidity metrics, the Group relies on a centralised system architecture, with all Business Units feeding a central data repository from which all metrics are produced, either regulatory metrics (e.g. the LCR or the NSFR) or metrics used for internal steering (e.g. stress test indicators);
 - the ALM Risk Department, which perform as the second line of defense functions, ensure the supervision of liquidity risks and evaluates the management system for these risks. As such, it is in charge of:
 - the definition of liquidity indicators and the setting of the main existing limits within the Group;

- the definition of the normative framework for measuring, modelling methods and monitoring these risks.

In addition, by delegation of MRM, this department ensures the validation of ALM models for which it organises and chairs the Validation Committee of Models.

- Finally, it ensures the correct interpretation of the regulatory framework as well as an adequate implementation in the Societe Generale environment.