

## CREDIT OPINION

22 February 2024

Update

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### RATINGS

#### Societe Generale

Domicile	Paris, France
Long Term CRR	A1
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	A1
Type	Senior Unsecured - Fgn Curr
Outlook	Stable
Long Term Deposit	A1
Type	LT Bank Deposits - Fgn Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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## Societe Generale

### Update to credit analysis

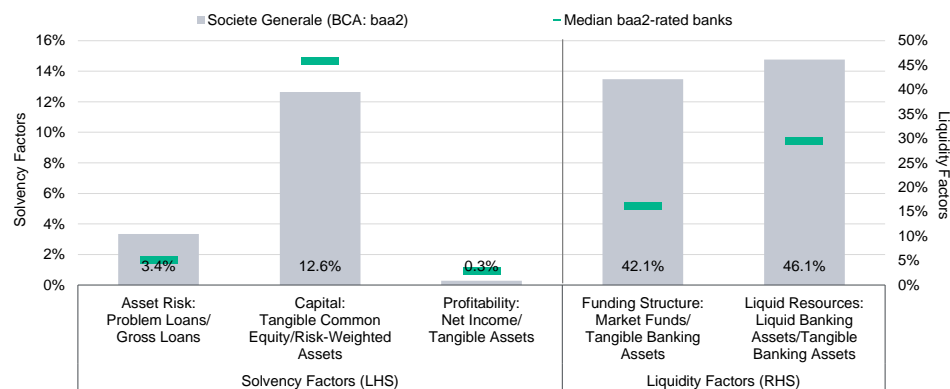
#### Summary

[Societe Generale](#) (SG) is a global systemically important bank based in [France](#) (Aa2 stable) with sizeable cross-border and international operations. SG's baa2 Baseline Credit Assessment (BCA) reflects the bank's strong franchise and well-diversified universal banking business model; sound asset quality despite the high share of corporate exposures in the loan portfolio and exposures to regions with weaker credit profiles such as Africa; good capitalisation; and high amount of liquid assets, mitigating the large stock of confidence-sensitive wholesale funding. The BCA is, however, constrained by the risks stemming from SG's sizeable capital market activities and its relatively low profitability.

SG's A1 long-term deposit and senior unsecured debt ratings include a three-notch uplift resulting from our Advanced Loss Given Failure (LGF) analysis, reflecting our view that the bank's junior depositors and senior unsecured creditors face an extremely low loss given failure. In addition, our moderate assessment of government support given SG's status of Global Systemically Important Financial Institution translates into an additional one-notch uplift for deposit and senior unsecured ratings.<sup>1</sup>

Exhibit 1

#### Rating Scorecard - Key financial ratios



These figures represent our methodology scorecard ratios, where asset risk and profitability reflect the weaker of either the latest reported or the average of the last three year-end and latest reported ratios. Capital is the reported figure as of the end of Q2 2023. The funding structure and liquid resources ratios reflect the latest year-end figures.

Source: Moody's Financial Metrics

## Credit strengths

- » Universal banking business model providing rather stable earnings
- » Sound asset quality despite the high share of corporate loans and exposures to regions with weaker credit profiles such as Africa
- » Good regulatory capitalisation, albeit lower than the French banking system's average
- » High amount of liquid assets

## Credit challenges

- » Sizeable capital market activities, which entail tail risks
- » Large stock of confidence-sensitive wholesale funding, mitigated by well-diversified funding sources, proven access to wholesale funding markets and high amount of liquid assets

## Outlook

The rating outlook is stable because we expect no significant changes in SG's credit fundamentals over the next 12-18 months. The current ratings reflect the challenges stemming from the weak economic environment as well as the likely efficiency gains and business opportunities that will progressively be arising from the restructuring of the bank's retail networks, the integration of its leasing activities and the reshaping of its Global Market activities.

## Factors that could lead to an upgrade

Although unlikely over the outlook horizon, the BCA could be upgraded in case of:

- » significant and sustainable improvement in the bank's profitability metrics
- » structural improvement in the bank's funding profile
- » materially higher capitalisation

A higher BCA would likely lead to rating upgrades.

## Factors that could lead to a downgrade

The BCA could be downgraded in case of:

- » a deterioration in the operating conditions in SG's main markets, with a sustained negative impact on the bank's financial performance
- » lower diversification in the bank's business portfolio
- » Weaker funding and liquidity
- » Common Equity Tier 1 (CET1) capital ratio falling significantly below 12% without a prompt recovery

A lower BCA would likely result in a downgrade of all of SG's ratings.

SG's ratings could also be downgraded if (i) management were to deviate from its committed funding plan that would result in a reduction in expected debt issuance or (ii) there were a more rapid increase in assets than we currently expect, increasing the loss given failure for its junior depositors and senior unsecured investors.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### Societe Generale (Consolidated Financials) [1]

	06-23 <sup>2</sup>	12-22 <sup>2</sup>	12-21 <sup>2</sup>	12-20 <sup>2</sup>	12-19 <sup>2</sup>	CAGR/Avg. <sup>3</sup>
Total Assets (EUR Million)	1,485,523.0	1,392,715.0	1,365,991.0	1,314,636.0	1,223,398.0	5.7 <sup>4</sup>
Total Assets (USD Million)	1,620,706.1	1,486,371.3	1,547,812.5	1,608,530.6	1,373,262.1	4.8 <sup>4</sup>
Tangible Common Equity (EUR Million)	48,654.0	50,870.0	51,711.0	47,649.0	47,785.0	0.5 <sup>4</sup>
Tangible Common Equity (USD Million)	53,081.5	54,290.9	58,594.0	58,301.2	53,638.6	(0.3) <sup>4</sup>
Problem Loans / Gross Loans (%)	3.3	3.1	3.3	3.7	3.8	3.4 <sup>5</sup>
Tangible Common Equity / Risk Weighted Assets (%)	12.6	14.1	14.2	13.5	13.9	13.7 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	27.8	25.5	25.9	28.4	28.7	27.3 <sup>5</sup>
Net Interest Margin (%)	0.9	0.8	0.8	0.8	0.9	0.8 <sup>5</sup>
PPI / Average RWA (%)	1.8	2.4	2.1	1.4	1.7	1.9 <sup>6</sup>
Net Income / Tangible Assets (%)	0.3	0.3	0.4	0.1	0.3	0.3 <sup>5</sup>
Cost / Income Ratio (%)	74.1	67.9	69.9	77.8	74.3	72.8 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	45.3	42.1	43.0	48.1	46.8	45.1 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	50.2	46.1	43.8	47.6	43.8	46.3 <sup>5</sup>
Gross Loans / Due to Customers (%)	89.5	95.7	98.4	99.1	105.8	97.7 <sup>5</sup>

[1] Further to the publication of our revised methodology in July 2021, only ratios from annual 2020 onwards included in this report reflect the change in analytical treatment of the "high-trigger" Additional Tier 1 instruments. [2] All figures and ratios are adjusted using Moody's standard adjustments. [3] Basel III - fully loaded or transitional phase-in; IFRS. [4] May include rounding differences because of the scale of reported amounts. [5] Compound annual growth rate (%) based on the periods for the latest accounting regime. [6] Simple average of periods for the latest accounting regime. [7] Simple average of Basel III periods.

Sources: Moody's Investors Service and company filings

## Profile

Societe Generale (SG) is a large universal bank domiciled in France, with total consolidated assets of €1,599 billion as of the end of September 2023. SG is included on the list of global systemically important banks. Its operations are organised across three main business lines.

**The French Retail division**, referred to as RPBI, accounts for 14% of the group's net result in the first nine months of 2023<sup>2</sup>. This division includes the group's domestic retail and small and medium-sized enterprise (SME) banking franchise as well as its private banking activities<sup>3</sup> and insurance operations<sup>4</sup>. SG ranks fourth in domestic retail banking: it operates through a branch network (the networks of Societe Generale and Credit du Nord were legally merged in January 2022) and BoursoBank (previously named Boursorama), the leading fully digital bank in France. SG is currently in the process of completing the operational merger of Credit du Nord's and Societe Generale's networks as part of RPBI's transformation, of which full benefit is expected in 2025. The bank's strategy is also aimed at increasing its customer base to 8 million by 2026 from 5.4 million at end-September 2023.

Insurance operations, which capitalise on the group's bancassurance model and strong synergies with its retail banking, private banking and financial services. SG is also developing external partnerships. The group offers life insurance savings, retirement savings and personal protection to individual and corporate clients through its insurance captive entities, mainly SOGECAP and SOGESSUR.

**The International Retail, Mobility and Leasing Services** (IRMLS, 36% of the group's net result in the first nine months of 2023) division focuses on businesses with strong growth potential and comprises the following:

- » International retail banking activities, which are spread across a number of countries in Central and Eastern Europe<sup>5</sup> and Africa<sup>6</sup> where SG benefits from well-established franchises. Amid the escalation of the Russia-Ukraine military conflict, SG swiftly completed the sale of Rosbank, its subsidiary in Russia, to Interros Capital in May 2022, which resulted in a one-off loss of €3.3 billion.

- » Mobility and Leasing Services, which comprise operational vehicle leasing and fleet management operated by Ayvens (previously ALD), a 53%-owned subsidiary, as well as vendor and equipment finance operated by Societe Generale Equipment Finance (SGEF), benefiting from a strong franchise in many European countries. Mobility and Leasing Services also include consumer finance distributed through both the group's local retail networks and specialised subsidiaries. ALD closed the acquisition of [LeasePlan Corporation N.V.](#) on 22 May 2023, and became Ayvens, the largest fleet management company in the world<sup>7</sup> with a presence in 44 countries.

**The Global Banking and Investor Solutions** (GBIS, 50% of the group's net result in the first nine months of 2023) division houses the group's corporate and investment banking activities.<sup>8</sup> Although SG has strong expertise in specific areas such as structured products with a global leadership in equity derivatives and despite its large geographical presence,<sup>9</sup> we consider SG a tier-two global investment bank because of its lack of scale and the less diversified nature of its capital market activities compared with its global investment bank peers.

SG announced in 2022 the creation of a London-based joint venture with AllianceBernstein, which combines their cash equities and equity research businesses. This operation is aimed at creating a global leading equity house and will support the diversification of SG's business model towards fee-based and recurring activities. In September 2023, the group also announced that it will launch a large private debt fund through a partnership with Brookfield, which is expected to scale up SG's origination and distribution capacities.

The new management of the bank indicated in September 2023 that it had initiated a review process of the bank's business portfolio with the aim of improving its consistency as a group and ultimately enhance its profitability. This process will likely result in some reshuffling in the portfolio over the coming quarters.

Considering the new management's strategy to strengthen the group's capital buffer, SG is devising a plan to limit the organic expansion of its risk-weighted assets (RWAs) to less than 1% per year until 2026. Excluding BoursoBank and Ayvens, which are earmarked as growth sectors and will therefore continue to be allocated additional capital, SG foresees a halt in organic RWA growth for the rest of its business divisions. This strategy signals a restrained revenue growth over the 2024-2026 period.

## Detailed credit considerations

### Asset quality remains sound despite the sheer size of its corporate loan book and exposures to regions with weak credit profiles

SG's asset performance over the past five years has been slightly weaker than that of the French banking system. The average cost of risk between 2018 and 2022 was 31 basis points (bps) at SG versus 28 bps for the five largest French banks. Although the group's cost of risk decreased in the first nine months of 2023, at just 15 bps, we nonetheless believe that the group's asset risk is somewhat higher than that of its domestic peers, and notably the mutual banking groups, because of its larger exposure to corporates and exposures to regions with weaker credit profiles such as Africa. Our baa1 assigned Asset Risk score also takes account of the risks associated with the group's sizeable market activities.

As of the end of September 2023, exposures to the corporate sector (including large non-financial corporates, financial corporates other than banks and SMEs) accounted for around half of the group's total on-balance-sheet credit exposures of €620 billion<sup>10</sup> versus only 33% to households (Exhibit 3). SG's exposures to corporates is significantly geared towards large corporates,<sup>11</sup> which are generally more resilient in economic downturns than SMEs but involve higher single name concentrations. At the same time, the 10 largest corporate counterparties (in terms of exposure-at-default or EAD) accounted for 48% of the group's CET1 capital at end-June 2023, which remains broadly in line with that of other large French banks.

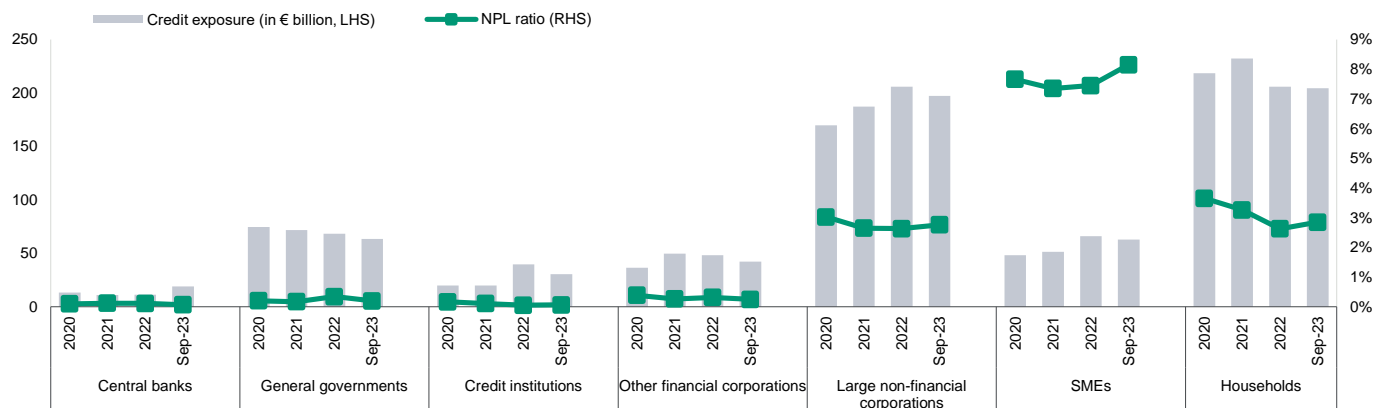
Despite good sector diversification, exposures to highly cyclical sectors are relatively high. Although down from €20 billion at year-end 2022, the exposure to the oil and gas sector amounted to €16 billion at end-September 2023 (1.4% of group EAD<sup>12</sup>). The exposure to the commercial real estate (CRE) sector amounted to €23 billion (2.0% of group EAD<sup>13</sup>). The average current LTV of the CRE portfolio remains at a reasonable 50% and the exposure to US CRE is limited to around 13% of the portfolio. At end-September 2023, SG indicated a NPL ratio of around 2% on the entire CRE portfolio and of less than 6.8% on the US CRE portfolio. Positively, SG's direct exposure to leveraged buyouts (LBOs) remains contained at around €5 billion, that is, 0.5% of group EAD at end-September 2023. SG

had an additional €8 billion indirect exposures to LBOs as of the same date through collateralised financing provided to funds. These facilities have so far performed well.

Exhibit 3

### The corporate sector accounts for 49% of total exposures versus only 33% for households

Breakdown of credit exposures<sup>(1)</sup> by type of counterparty (in € billion) and corresponding problem loan ratios



(1) Credit exposures based on loans and advances, and debt securities. These exclude cash at central banks and off-balance-sheet exposures.

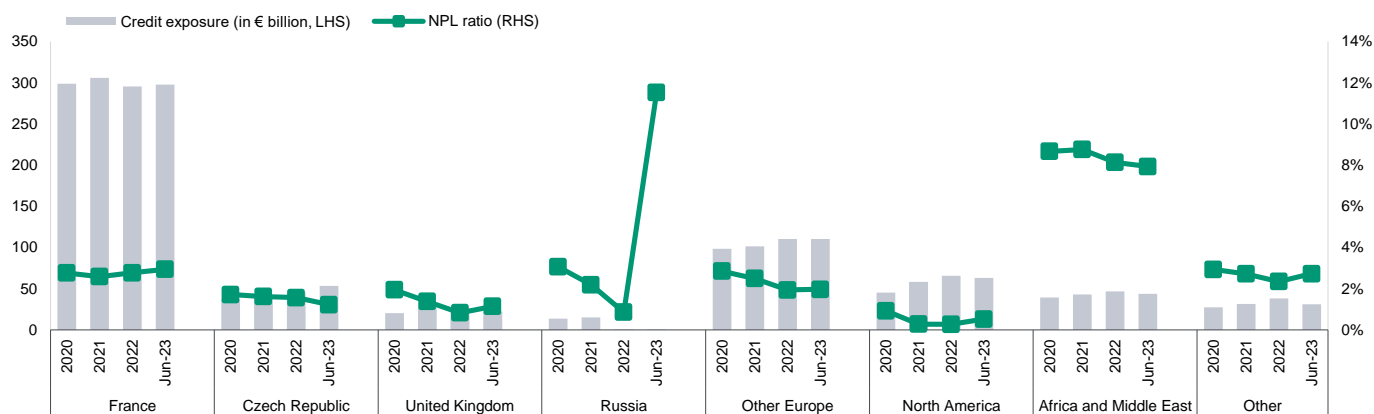
Source: Company data

In terms of geographical exposure, the domestic market represents around 50% of the group's total on-balance-sheet credit exposures (Exhibit 4). Excluding France, Europe represents around 30%, which, in addition to the Czech Republic and Romania where the group operates through large local subsidiaries, includes, the UK, Germany, Italy and Luxembourg. The bank's exposure to Russia fell to €1.0 billion as of the end of September 2023 from €18 billion as of year-end 2021 following the completion of the disposal of Rosbank in May 2022. The residual exposure to Russia essentially consists of offshore exposures that were 20% covered by loan loss provisions as of the end of September 2023.

Exposures to North America and Asia primarily stem from the GBIS business, and consist of exposures to corporate, sovereign and institutional counterparties.

Despite SG's announcement of the disposal of some of its stakes in some of its African subsidiaries in June 2023,<sup>14</sup> the bank will pursue its business in Africa, which differentiates the group from most of its large international peers. Although very diversified (14 countries excluding the aforementioned subsidiaries that will be sold) and focused on African regions with more stable operations, such as West Africa, the SG's involvement in the region, in particular in the more vulnerable SME segment, could imply higher credit risks. As of end-June 2023, Africa and the Middle East represented 7% of the group's total on-balance-sheet credit exposures but around 21% of its problem loans.

Exhibit 4

**France represents around 50% of the group's exposures****Breakdown of credit exposures<sup>(1)</sup> by geographical region (in € billion) and corresponding problem loan ratios**

(1) Credit exposures based on loans and advances, and debt securities. These exclude cash at central banks and off-balance-sheet exposures.

Source: Company data

Our analysis of asset risk at SG also factors in its sizeable capital market activities, which typically carry tail risks. Capital allocated to market activities represents some 14% of the bank's total capital at end-September 2023.<sup>15</sup> Pre-tax income generated by this business accounted on average for 16% of the group's total pre-tax income from 2018 to end-June 2023, which is at the higher end of the average for the five largest banks (11.5% over the same period). In H1 2020, SG's market activities were hit by substantial negative price adjustments on equity derivative transactions following the suspension of dividends by many companies, which fully reversed the Global Markets' profit of the year. This reflects the high level of risk arising from some derivative operations. The group has since then been de-risking its structured products portfolio with the objective of decreasing its sensitivity to market dislocations.

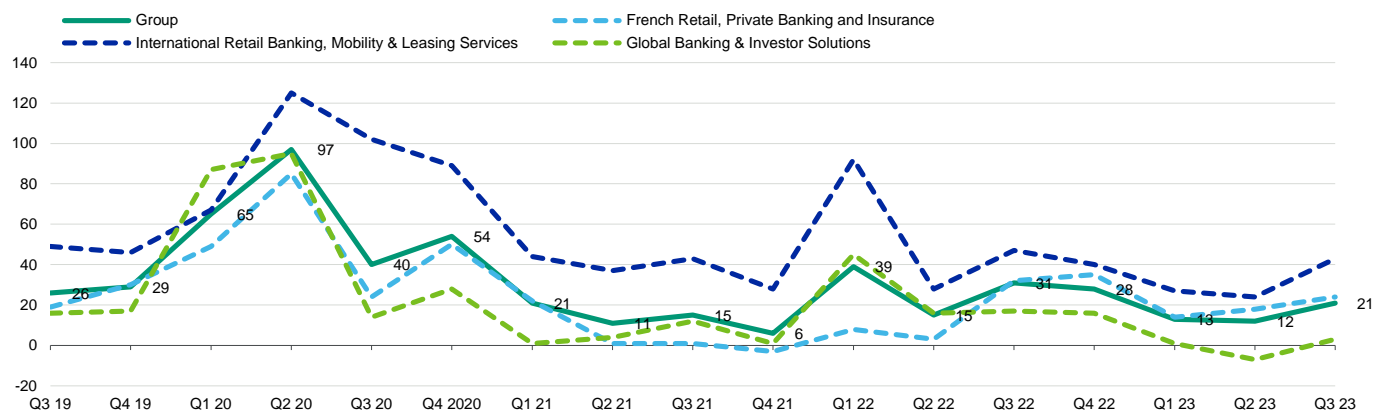
The group's asset performance remains good. The nonperforming loan (NPL) ratio was 2.9%<sup>16</sup> as of the end of September 2023, flat compared with that as of year-end 2022 and down from 3.3% as of year-end 2020, reflecting very low levels of defaults. The stage 2 loan ratio was also down to 6.8% at end-September 2023 from 7.6% at year-end 2022 and 9.6% at year-end 2020, which is lower than the EU average as reported in the last EBA's risk dashboard.

Cost of risk was 15 bps of gross loans (or €664 million) in the first nine months of 2023, down from 28 bps in full-year 2022 and slightly up from 13 bps in full-year 2021. The cost of risk of the first nine months of 2023 included a net release of stage 1 and stage 2 provisions (€165 million) whereas around 40% of the loan loss provision charge of full year 2022 consisted of forward-looking provisions. The loan loss charge on stage 3 loans nonetheless remains broadly stable at a low 19 bps for the first nine months of 2023 versus 16 bps in full-year 2022 and 18 bps in full-year 2021. SG lately revised its cost of risk guidance for full-year 2023 to less than 20 bps from below bps previously. The group's stock of forward-looking provisions was comfortable at €3.6 billion or 0.6% of total loans as of the end of September 2023. This remains close to the level of forward-looking provisions the bank had built at year-end 2020 (€3,622 million or 0.7% of total loans).

Exhibit 5

**Cost of risk increased in Q3 2023**

Loan loss provisioning charges by division (in basis points of outstanding loans)



Source: Company data

**Good capitalisation, albeit lower than its French banking system's average**

As of the end of September 2023, SG's CET1 ratio was 13.3% (including the phase -in of IFRS 9, resulting in a positive effect of 6 bps on the reported ratio), slightly down compared to 13.5% at year-end 2022. Organic capital generation was offset by the negative impact of several regulatory adjustments and the acquisition of LeasePlan.

The CET1 ratio at end-September 2023 was 350 bps above the maximum distributable amount (MDA) of 9.80%.<sup>17</sup> It nonetheless remains materially lower than the French banking system's average CET1 ratio of 15.8% as of end-September 2023, which is pulled by the high solvency of the mutual banking groups.

In September 2023, SG raised its 2026 target for the Common Equity Tier 1 (CET1) ratio to 13% from 12%. The bank plans to attain this threshold via restrained organic growth, disciplined portfolio management, and active risk transfer strategies. We interpret this increase in the 2026 capital target as a credit-positive development. However, due to the anticipated 85 basis point impact of Basel IV beginning in 2025, SG's CET1 ratio might temporarily dip below the 13% target in 2025. SG indicates that, post the Basel IV finalisation, it will sustain a minimum buffer of 200 basis points over the MDA.

The leverage ratio declined to 4.2% at end-September 2023 from 4.4% at the close of 2022. This drop is primarily attributed to a 9% surge in the exposure amount, which we interpret as being more reflective of capital market activities' seasonal effects rather than a long-term structural shift. SG's leverage ratio also remains lower than the French banking system's average which stood at 5.3% at end-September 2023. From 2026, SG has set a through-the-cycle leverage ratio target of between 4% and 4.5%.

With a total loss-absorbing capacity (TLAC) ratio of 29% excluding senior preferred debt as of the end of September 2023, SG meets the 2023 requirement of 22.1% including countercyclical buffers. SG also meets both the 25.7% minimum requirements for own funds and eligible liabilities (MREL) and 21.1% subordinated MREL ratios notified to the bank for 2023.

Our baa2 assigned score for Capital reflects the bank's resilient capital position despite a leverage ratio lower than that of most peers. It also incorporates our expectation that SG's CET1 ratio will remain well above 12% over the next two years.

**Profitability is constrained by large one-offs and transformation costs**

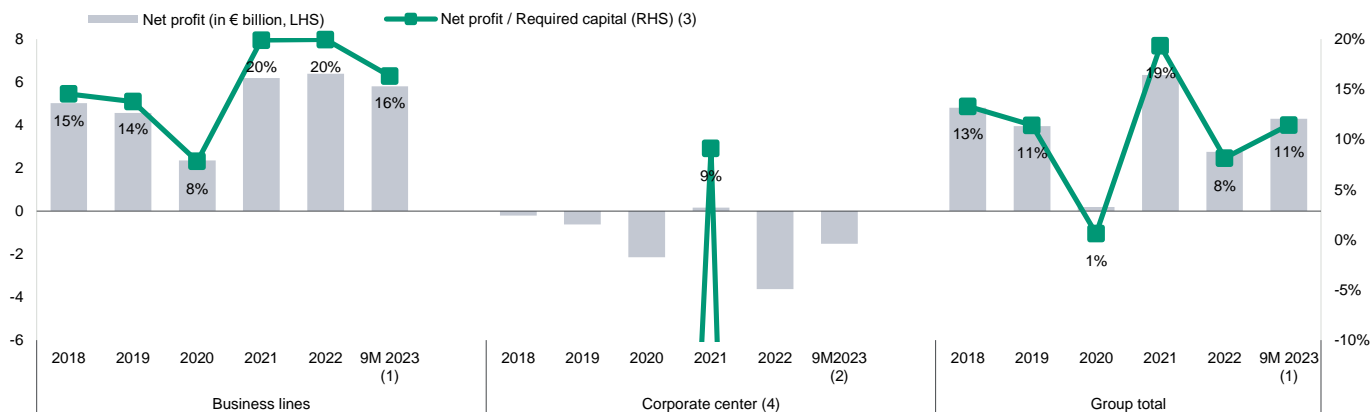
Based on its average return on tangible assets from 2018 to end-June 2023, SG's profitability is modest relative to both its global investment bank peers and French universal bank peers. SG's average ratio of adjusted net income<sup>18</sup> to tangible assets was 29 bps over the period, below the average ratio of the global investment banks (65 bps) and that of the French banking system (36 bps<sup>19</sup>). Based on the average ratio of reported net income to minimum required capital,<sup>20</sup> SG's ranking among the French banks remains the same with an average ratio of 11% from 2018 to end-June 2023, below the 13.3% average ratio for the French banking system<sup>21</sup>

Transformation charges as well as other non-recurring items (the largest of which was €3.3 billion capital loss on the disposal of the Russian subsidiary in 2022), generally reported under the Corporate Center,<sup>22</sup> have been the main driver of the volatility in the group's

reported profit since 2018 and materially contributed to lowering its average return over the period (Exhibit 6). Excluding the results allocated to the Corporate Center, the business lines' profitability measured as the return on minimum required capital has been holding within a range of 16% to 20% since 2021 despite some decline in 2023, above the pre-pandemic levels.

Exhibit 6

### Non-recurring items and transformation costs (under Corporate center) have driven the group's net profit volatility Breakdown of reported net profit between business lines and the Corporate Center



(1) Annualised

(2) Corporate Center's net result of 9M2023 is not annualised

(3) Required capital is calculated as the business line's risk-weighted assets multiplied by the group's SREP requirement

(4) In 2021, transformation charges and goodwill impairments were more than offset by around €0.6 billion gain on the disposals of Lyxor and Haussmann office. In 2022, Corporate Center's result included €3.3 billion capital loss on the disposal of its Russian subsidiary. In 9M2023, Corporate Center's result included €0.34 billion goodwill impairment, €0.26 billion TLTRO hedge unwinding cost and €0.27 billion impairment of deferred-tax assets. From 2023, transformation charges are reported under the business lines.

Sources: Company data, Moody's Investors Service

The main improvement in business lines' profitability compared with the pre-pandemic period comes from auto leasing businesses and market activities (Exhibit 7). Since year-end 2020, ALD (renamed Ayvens since 2023) indeed not only benefited from sustained business momentum but also from high profit generated by the sales of cars in the secondary market, underpinned by very strong secondhand car prices. Increased activity in capital markets since the beginning of 2021 boosted Global Markets' revenue and profitability. In 2021 and 2022, revenue from market activities reached its highest levels since 2009 in the equity business but also in fixed-income and currency activities, which benefited from the volatile interest rate environment in 2022.

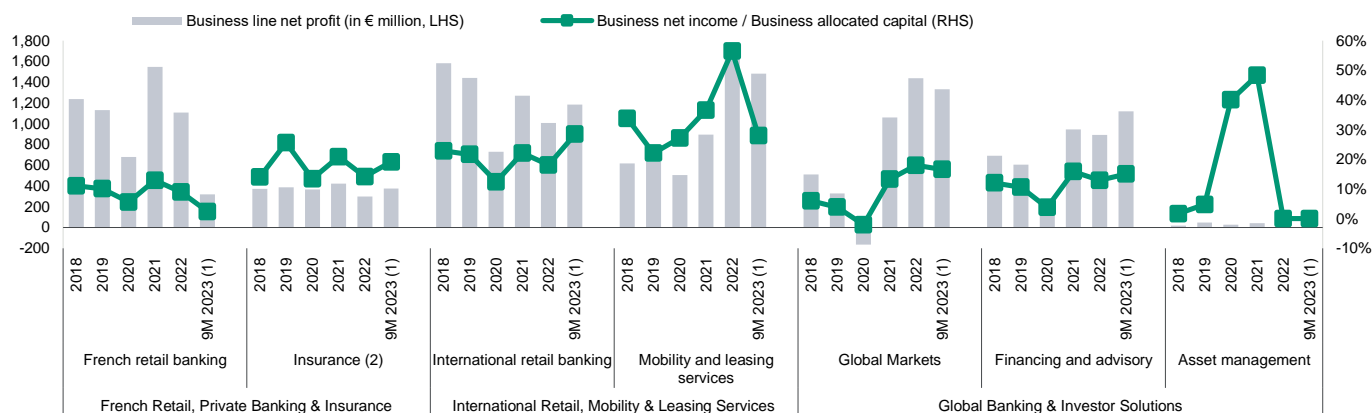
During the first nine months of 2023, the net profit generated by the business lines fell by 8% year-on-year (Exhibit 7), primarily driven by 74% drop in the result of the French retail banking business (excluding insurance), only partly offset by the resilience of the other activities and lower cost of risk across the businesses. Similar to peers, French retail banking was strongly affected from mid-2022 to mid-2023 by the successive hikes in the interest rate paid on regulated savings,<sup>23</sup> combined with the difficulty in fully reflecting the rise in interest rates in new housing loans because of the so called "taux d'usure" (the formula-based legal cap applicable on lending rates in France). Moreover, the business' profits further diminished as interest rates increased, due to the fixed rate receiver/floating rate payer swaps initiated in 2021. These were originally implemented with the intention of safeguarding the revenues of French retail banking from low interest rates.<sup>24</sup>

The performance of leasing and market activities, which had been the main drivers of the group's improved profitability in 2021 and 2022, has declined in 2023 compared to the two previous years. Ayvens' used cars sales results fell materially as a result of a progressive normalization in the second-hand car prices combined with the negative effects of further decrease in prospective depreciation.<sup>25</sup> The profitability of the newly acquired LeasePlan was also affected by the negative mark-to-market of hedging operations<sup>26</sup> and first-time consolidation adjustments. The slight decrease in the profitability of market activities in the first nine months of 2023 reflects lower performance amid less favourable market conditions from the record levels reported in 2022. The lower results of Global Markets were nonetheless more than offset by the strong performance of transaction banking (included in the Financing and Advisory segment in Exhibit 7).



Exhibit 7

**The drop in the result of French retail banking drove the 8% decrease in overall business lines' profit in the first 9 months of 2023**  
**Breakdown of reported net profit by business line (excludes the Corporate Center)**



(1) 9M2023 figures are annualised

(2) Insurance business was reporting under the International retail banking and financial services until Q2 2023. It is now reporting under the French Retail Banking, Private Banking and Insurance business line.

Sources: Company data, Moody's Investors' Service

The long-term profitability of the bank will hinge on its ability to (1) reduce the occurrence and magnitude of non-recurring charges and restructuring costs; (2) realize the benefits of the enlarged business scale and cost synergies within its Mobility and Leasing services through a successful integration of LeasePlan by Ayvens; (3) maintain the performance of market activities, which have benefited from refocus and cost savings since 2019, yet could be less favourable under future market conditions; (4) materialize the efficiency gains in French retail banking and further improve Boursobank's profitability.

In the short-term, assuming stable revenues from market activities, we expect limited change in the group's net profit over the coming quarters. Net banking income will likely slightly improve as French retail banking revenues gradually recover in the course of 2024 while the other businesses remain broadly flat. Operating expenses will likely remain stable as on-going transformation costs, the bulk of which will be achieved in 2024, will offset the expected decrease in contributions to the Single Resolution Fund. We also expect the cost of risk to slightly increase and absorb improvements in the pre-provision income.

Focusing on French retail banking, the negative impact of the aforementioned swaps will recede and we expect net interest margins (NIM) will bottom out as the origination of housing and consumer loans are no longer constrained by the *taux d'usure*. The French government's decision to freeze the interest rate on the main regulated savings until the beginning of 2025 instead of proceeding to further increases is also supportive of French retail banking's NIMs. Depositors' shift from sight to better remunerated term deposits ("so called beta") will likely continue across all business lines, which will at least partly absorb the positive effects of improved lending rates.

Our ba2 Profitability score, one notch above the Macro-Adjusted score of ba3,<sup>27</sup> reflects the improvement in the group's underlying profitability since 2021.

### Large stock of confidence-sensitive wholesale funding is mitigated by the high amount of liquid assets and proven access to wholesale funding markets

SG has a large customer deposit base stemming from both its retail networks and global banking businesses. Similar to other French banks, customer deposits have increased substantially since the beginning of the pandemic (+32% from year-end 2019 to end-June 2023), resulting in an improved loan-to-deposit (LTD) ratio of 89% as of end-June 2023 (year-end 2019: 106%)<sup>28</sup>, below the 104% average ratio of the five largest French banks as of the same date.

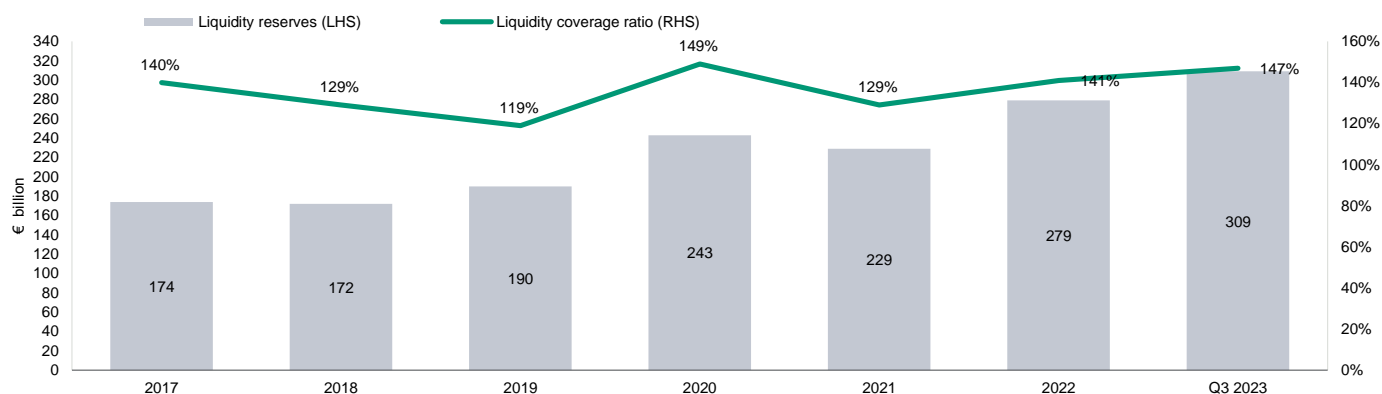
However, the high share of non-operational deposits within SG's total customer deposits (39% as of end-June 2023, based on our calculation) is a weakness, partly offsetting the benefit of its favourable LTD ratio. Although these have proven very stable over the past few years, these deposits, which include institutional and large corporate deposits, are deemed more volatile than retail deposits.

Similar to other French banks and some of its international peers with sizeable capital market activities and other specialised financing such as leasing and consumer finance that generate little or no customer deposits, SG is highly reliant on wholesale funding. Despite its well-diversified funding sources and proven access to wholesale funding markets, this exposes the bank to the risk of changes in market conditions. Additionally, a significant portion of the stock of wholesale funding is short term. Based on our calculation, 46% of the stock of funds raised in the wholesale markets were short term as of year-end 2022.<sup>29</sup> We estimate that the proportion of short-term wholesale funding at end-June 2023 was close to the level of year-end 2022.

The group's funding strategy is predicated on aligning the maturities of assets and liabilities, leaving minimal flexibility for individual business units to engage in maturity transformation. Our analysis leads us to the conclusion that the short-term segment of market funds primarily finances short-term assets. These include market activities and a portion of the liquidity portfolio. However, this setup makes the bank vulnerable to fluctuations in investor confidence.

On the other hand the bank is holding a substantial amount of liquid assets, which mitigates SG's reliance on market funds. As of the end of September 2023, SG had a liquidity buffer of unencumbered assets of €309 billion (Exhibit 7), 73% of which were cash at central banks and 18% were high-quality liquid assets, which amply covered the stock of short-term market funds,<sup>30</sup> inclusive of the long-term debt that matures within the following 12 months. Its average liquidity coverage ratio was 155% in Q3 2023, slightly up from 145% in Q4 2022. The net stable funding ratio was 117% as of the same date, slightly up from 114% at year-end 2022.

Exhibit 8

**SG has a high liquidity buffer****SG's liquidity reserves and liquidity coverage ratio**

Source: Company reports

We assign a baa3 Combined Liquidity score to SG, derived from an assigned ba3 Funding Structure score and an assigned a2 Liquid Resources score. Our ba3 score for SG's Funding Structure is one notch higher than the initial Macro-Adjusted score of b1. The one notch of positive adjustment reflects the following adjustments that are not captured in the historical ratio:

- » the portion of borrowings from the TLTRO redeposited at the European Central Bank (ECB), which temporarily inflates the bank's balance sheet is removed from the numerator. We expect SG to repay the remaining balances as and when they fall due at the latest;
- » the small-denominated structured notes that are traded to retail investors and, therefore, are stable in nature, are also removed from the market funds.

The positive effect on the score of the diversification of wholesale funding, both by investor base and currency, is offset by the negative effect stemming from the high share of non-operational deposits.

Our assigned score of a2 for Liquid Resources incorporates a one-notch negative adjustment from the initial Macro-Adjusted score of a1. This reflects the portion of encumbrance stemming from market activities in the stock of liquid resources retained for the calculation of our initial Liquidity score. The liquid resources ratio is also adjusted for the aforementioned impact of the TLTRO.

## Qualitative adjustments

We assign a positive one-notch adjustment for Business Diversification in the qualitative section of our BCA scorecard because of its diversification, not only geographically but also across different business types. SG has historically shown lower (and declining) earnings volatility than many of its global peers. We expect the acquisition of LeasePlan by ALD, which will enhance the group's position in auto leasing and fleet management, to further buttress the group's diversification.

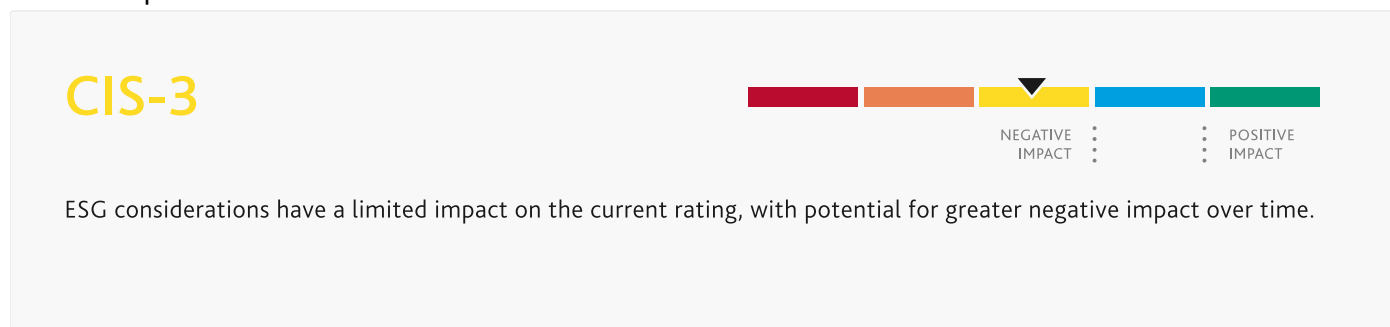
We also assign a negative one-notch adjustment for Opacity and Complexity in the qualitative section of our BCA scorecard. Although the proportion of capital market activities in the group is lower than those of some of the bank's global peers, it brings elements of earnings volatility - as recently seen - , confidence sensitivity and complexity, which all mitigate the value we attribute to these franchises.

## ESG considerations

### Societe Generale's ESG credit impact score is CIS-3

Exhibit 9

#### ESG credit impact score



Source: Moody's Investors Service

SG's **CIS-3** indicates limited impact of ESG considerations on the rating to date, with potential negative impact over time. It also reflects our industrywide view of the opacity, complexity and tail risks inherent to capital market activities, which is captured under our governance assessment. The bank's track record of managing these risks and its strong financial fundamentals are important considerations, but do not fully offset this exposure.

Exhibit 10

#### ESG issuer profile scores



Source: Moody's Investors Service

## Environmental

SG faces moderate exposure to environmental risks because of carbon transition risks from its diversified lending and investment activities, including corporate banking. SG is facing mounting business risks and stakeholder pressure to meet demanding carbon transition goals. In response, SG is actively engaging in further developing its comprehensive risk management and climate risk reporting frameworks and transitioning its lending and investment portfolios to achieve carbon neutrality targets.

## Social

SG faces high industrywide social risks related to regulatory risk and litigation exposure, in particular in the area of customer relations. The bank is required to meet high compliance standards. High cyber and personal data risks are mitigated by technology solutions and organizational measures to prevent data breaches.

## Governance

SG has strong corporate governance practices and a successful track record and generally conservative financial policies. However, the business opacity and complexity of capital markets operations, which accounts for around 20% of the group revenue, and in some of its riskier emerging market operations expose the firm to tail risks.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

## Support and structural considerations

### Loss Given Failure (LGF) analysis

We apply our Advanced LGF analysis to SG because the bank is incorporated in France, which we consider an operational resolution regime because it is subject to the EU Bank Recovery and Resolution Directive (BRRD). For this analysis, we assume that equity and losses are 3% and 8%, respectively, of tangible banking assets in a failure scenario. We also assume a 25% run-off of junior wholesale deposits and a 5% run-off in preferred deposits. Moreover, we assign a 25% probability to junior deposits being preferred to senior unsecured debt. These are in line with our standard assumptions. We apply a standard assumption for European banks that 26% of deposits are junior. Considering the bank's overseas subsidiaries, we view that groupwide resolutions will be coordinated in a unified manner for entities required to issue internal loss-absorbing capital in jurisdictions that have an operational resolution regime for banks, leading to a likely transfer of losses from subsidiaries to parents at the point of failure.

In the case of SG, we include the tangible banking assets of its Romanian subsidiary BRD - Groupe Societe Generale in the resolution perimeter of SG, designated as the single point of entry for the group resolution. We leave Komerční Banka, a.s.'s assets outside the group's resolution perimeter because we estimate that the financial and business independence of the Czech subsidiary, and its lower probability of default — reflected in a BCA of a3, two notches higher than SG's BCA — indicate a low probability that the subsidiary would have to be resolved simultaneously with the group at the point of its failure.

Under our forward-looking Advanced LGF analysis, the portion of SG's TLTRO drawdowns, which we estimate is redeposited at the ECB, is deducted from the bank's projected tangible banking assets, thereby reducing the inflationary impact of TLTRO on the bank's balance sheet. We assume that the portion of borrowed funds redeposited at the ECB will be running off in the next 12-18 months. This adjustment does not result in a change in the rating uplift.

Our Advanced LGF analysis indicates an extremely low loss given failure for junior depositors and senior unsecured creditors, resulting in a three-notch uplift in the relevant ratings from the bank's baa2 Adjusted BCA. For junior senior creditors, because of the subordination of these instruments, our Advanced LGF analysis indicates likely low loss severity in the event of the bank's failure, leading to a position in line with the bank's Adjusted BCA.

Finally, for SG's junior securities, our LGF analysis shows a high loss given failure, given the small volume of debt and limited protection from more subordinated instruments and residual equity. We also incorporate additional notching for junior subordinated instruments (one notch) and for preference share instruments (two notches), reflecting coupon suspension risk ahead of failure.

### Government support

We assess a moderate probability of government support for SG's long-term senior unsecured and junior depositors, resulting in a one-notch uplift to the relevant A1 ratings. For other junior securities, we continue to believe that potential government support is low and these ratings do not include any related uplift.

### Counterparty Risk Ratings (CRRs)

#### SG's CRRs are A1/P-1

The CRRs of A1 reflect the Adjusted BCA of baa2, incorporating three notches of uplift through the extremely low loss given failure from the high volume of instruments that are subordinated to CRR liabilities and one additional notch through our government

support assumptions. The CRRs also benefit from one notch of systemic support, given our assumption of a very high likelihood of government support. The short-term CRR is P-1.

### Counterparty Risk (CR) Assessment

#### SG's CR Assessment is A1(cr)/P-1(cr)

The CR Assessment is three notches above SG's BCA of baa2 based on the buffer against default provided to the senior obligations represented by the CR Assessment by subordinated instruments and one notch given our government support assumptions. The main difference with our Advanced LGF approach used to determine instrument ratings is that the CR Assessment captures the probability of default on certain senior obligations, rather than expected loss; therefore, we focus purely on subordination and take no account of the volume of the instrument class. SG's CR Assessment also benefits from one notch of government support, in line with the moderate support assumption incorporated into the group's long-term debt and deposit ratings.

### Methodology and scorecard

#### About Moody's Bank Scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgement. When read in conjunction with our research, a fulsome presentation of our judgement is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

## Rating methodology and scorecard factors

Exhibit 11

### Societe Generale

<b>Macro Factors</b>							
<b>Weighted Macro Profile</b>		<b>Strong</b>	<b>100%</b>				
<b>Factor</b>	<b>Historic Ratio</b>	<b>Initial Score</b>	<b>Expected Trend</b>	<b>Assigned Score</b>	<b>Key driver #1</b>	<b>Key driver #2</b>	
Solvency							
Asset Risk							
Problem Loans / Gross Loans	3.4%	baa1	↔	baa1	Quality of assets	Market risk	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - fully loaded)	12.6%	baa1	↔	baa2	Capital retention	Stress capital resilience	
Profitability							
Net Income / Tangible Assets	0.3%	ba3	↔	ba2	Return on assets	Loan loss charge coverage	
Combined Solvency Score		baa2		baa2			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	42.1%	b1	↔	ba3	Expected trend	Market funding quality	
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	46.1%	a1	↔	a2	Asset encumbrance		
Combined Liquidity Score		baa3		baa3			
Financial Profile				baa2			
Qualitative Adjustments				Adjustment			
Business Diversification				1			
Opacity and Complexity				-1			
Corporate Behavior				0			
Total Qualitative Adjustments				0			
Sovereign or Affiliate constraint				Aa2			
BCA Scorecard-indicated Outcome - Range				baa1 - baa3			
Assigned BCA				baa2			
Affiliate Support notching				0			
Adjusted BCA				baa2			
<b>Balance Sheet</b>		<b>in-scope (EUR Million)</b>	<b>% in-scope</b>	<b>at-failure (EUR Million)</b>	<b>% at-failure</b>		
Other liabilities		467,912	42.0%	516,241	46.3%		
Deposits		473,813	42.5%	425,484	38.2%		
Preferred deposits		350,622	31.5%	333,091	29.9%		
Junior deposits		123,191	11.1%	92,394	8.3%		
Senior unsecured bank debt		70,162	6.3%	70,162	6.3%		
Junior senior unsecured bank debt		41,200	3.7%	41,200	3.7%		
Dated subordinated bank debt		17,636	1.6%	17,636	1.6%		
Preference shares (bank)		10,010	0.9%	10,010	0.9%		
Equity		33,425	3.0%	33,425	3.0%		
Total Tangible Banking Assets		1,114,158	100.0%	1,114,158	100.0%		

Debt Class	De Jure waterfall		De Facto waterfall		Notching		LGF Notching Guidance vs. Adjusted BCA	Assigned LGF notching	Additional Notching	Preliminary Rating Assessment
	Instrument volume + subordination	Sub-ordination	Instrument volume + subordination	Sub-ordination	De Jure	De Facto				
Counterparty Risk Rating	23.8%	23.8%	23.8%	23.8%	3	3	3	3	0	a2
Counterparty Risk Assessment	23.8%	23.8%	23.8%	23.8%	3	3	3	3	0	a2 (cr)
Deposits	23.8%	9.2%	23.8%	15.5%	3	3	3	3	0	a2
Senior unsecured bank debt	23.8%	9.2%	15.5%	9.2%	3	2	3	3	0	a2
Junior senior unsecured bank debt	9.2%	5.5%	9.2%	5.5%	0	0	0	0	0	baa2
Dated subordinated bank debt	5.5%	3.9%	5.5%	3.9%	-1	-1	-1	-1	0	baa3
Junior subordinated bank debt	3.9%	3.9%	3.9%	3.9%	-1	-1	-1	-1	-1	ba1
Non-cumulative bank preference shares	3.9%	3.0%	3.9%	3.0%	-1	-1	-1	-1	-2	ba2

Instrument Class	Loss Given	Additional	Preliminary Rating	Government	Local Currency	Foreign
	Failure notching	notching	Assessment	Support notching	Rating	Currency Rating
Counterparty Risk Rating	3	0	a2	1	A1	A1
Counterparty Risk Assessment	3	0	a2 (cr)	1	A1(cr)	
Deposits	3	0	a2	1	A1	A1
Senior unsecured bank debt	3	0	a2	1	A1	A1
Junior senior unsecured bank debt	0	0	baa2	0	Baa2	Baa2
Dated subordinated bank debt	-1	0	baa3	0	Baa3	Baa3
Junior subordinated bank debt	-1	-1	ba1	0	(P)Ba1	
Non-cumulative bank preference shares	-1	-2	ba2	0	Ba2 (hyb)	Ba2 (hyb)

[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Investors Service

## Ratings

Exhibit 12

Category	Moody's Rating
<b>SOCIETE GENERALE</b>	
Outlook	Stable
Counterparty Risk Rating	A1/P-1
Bank Deposits	A1/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	baa2
Counterparty Risk Assessment	A1(cr)/P-1(cr)
Issuer Rating	A1
Senior Unsecured	A1
Junior Senior Unsecured	Baa2
Junior Senior Unsecured MTN	(P)Baa2
Subordinate	Baa3
Jr Subordinate MTN -Dom Curr	(P)Ba1
Pref. Stock Non-cumulative	Ba2 (hyb)
Commercial Paper	P-1
Other Short Term	(P)P-1
<b>ALD SA</b>	
Outlook	Stable
Baseline Credit Assessment	baa3
Adjusted Baseline Credit Assessment	baa2
Issuer Rating	A1
Senior Unsecured -Dom Curr	A1
ST Issuer Rating	P-1
<b>LEASEPLAN CORPORATION N.V.</b>	
Outlook	Stable
Counterparty Risk Rating	A1/P-1
Bank Deposits -Dom Curr	A1/P-1
Baseline Credit Assessment	baa3
Adjusted Baseline Credit Assessment	baa2
Counterparty Risk Assessment	A1(cr)/P-1(cr)
Issuer Rating -Dom Curr	A1
Senior Unsecured	A1
Pref. Stock Non-cumulative -Dom Curr	Ba2 (hyb)

Source: Moody's Investors Service

## Endnotes

- Counterparty Risk Ratings, and Counterparty Risk Assessment also benefit from it.
- Based on net profit excluding results generated by Corporate Centre.
- Private banking business results have entirely been reported under RPBI since the beginning of 2022. Private banking was previously located in different business segments.
- Insurance results have been reported under RPBI since September 2023. Previously, insurance business was located under the International Retail, Mobility and Leasing Services segment.
- SG's main subsidiaries in Central and Eastern Europe include [Komerční Banka, a.s.](#) (A1 deposit rating, stable, a3 BCA) in the Czech Republic and [BRD - Groupe Societe Generale](#) (Baa1 deposit rating, stable, ba1 BCA) in Romania. Both banks rank among the top three banks in their respective countries.
- SG is part of the three international banks with the largest footprint in Africa. It has a leading position in the Mediterranean Basin, Ivory Coast, Guinea, Cameroon and Senegal. On 8 June 2023, SG announced its decision to sell its subsidiaries in Congo, Equatorial Guinea, Mauritania and Chad and the opening of strategic review on its subsidiary in Tunisia. The sale of the subsidiaries on Congo and Chad were completed in January 2024.
- Excluding captives and financial leasing companies.
- This encompasses capital market activities (fixed income and currencies, equities and securities services), and financing and advisory activities.
- As of year-end 2022, GBIS was located in 35 countries and had operations in more than 50 countries.
- These include loans and advances, and debt securities. Cash balances at central banks are excluded from the calculation.
- As of the end of September 2023, SMEs represented 21% of total exposures to corporates (Exhibit 3). SMEs are primarily located in France.



- [12](#) Exposure to the oil and gas sector represented 32% of the group's CET1 capital as of the end of September 2023.
- [13](#) Exposure to the commercial real estate sector represented 46% of the group's CET1 capital as of the end of September 2023.
- [14](#) On 8 June 2023, SG announced its decision to sell its subsidiaries in Congo, Equatorial Guinea, Mauritania and Chad and the opening of strategic review on its subsidiary in Tunisia. The sale of the subsidiaries on Congo and Chad were completed in January 2024.
- [15](#) This also includes capital allocated to securities services.
- [16](#) This NPL ratio is that reported by the bank, and includes amounts due from banks in the calculation in addition to loans and advances to customers and finance leases. Our calculation of problem loan ratios presented in Exhibit 2 of this report is solely based on loans and advances to customers.
- [17](#) The MDA includes a 4.5% pillar 1 requirement, a 1.2% pillar 2 requirement, a 2.5% capital conservation buffer, a 1% global systemically important institution buffer and a 0.56% countercyclical buffer.
- [18](#) This calculation is based on adjusted profit and excludes the impact of items we consider as non-recurring.
- [19](#) Based on the average profitability of the five largest French banks.
- [20](#) Minimum required capital used in this ratio is calculated as banks' risk-weighted assets multiplied by their respective SREP CET1 ratio.
- [21](#) The figure for the French banking system is based on the average profitability of the five largest French banks. Individually, the ratio ranges from 8.4% for the worst performing bank to 16.4% for the best performing bank.
- [22](#) Business transformation costs were reported under Corporate Center until Q2 2023. Since the reporting of Q3 2023 results, they are allocated to the business lines.
- [23](#) The interest rate on the Livret A increased to 1% from 0.5% in February 2022, to 2% in August 2022 and then to 3% in February 2023.
- [24](#) The bulk of these swaps matured in 2023.
- [25](#) Since 2022, SG has been required to spread the gains on the disposal of used cars over time instead of taking them entirely at the time of sale. This accounting approach result in a reduced pace of car depreciation when secondhand car prices are high. This results in the "gain" to be partly taken before the sale of the vehicle through lower depreciation costs, and a decrease in the gain reported at the time of disposal through a higher book value. This had a very positive impact in 2022 because of reduced depreciation costs and still high gains on used car sales, but negative in 2023 because of lower sales price and higher book values.
- [26](#) Hedge accounting cannot be used for leasing operations
- [27](#) The Macro-Adjusted score significantly understates SG's current profitability levels because of the impact of the poor results of 2020.
- [28](#) According to MIS own chart of accounts.
- [29](#) This calculation is based on wholesale funding with a residual maturity of less than one year as of year-end 2022. We have excluded trading liabilities, repo transactions, the small-denominated structured notes and the portion of borrowings from the TLTRO redeposited at the ECB from both the numerator and the denominator of the ratio.
- [30](#) Excluding trading liabilities.

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