

CREDIT OPINION

16 April 2018

Update

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RATINGS

Societe Generale

Domicile	Paris, France
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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Société Générale

Update to credit analysis following the upgrade of the LT deposit and senior unsecured debt ratings to A1 from A2

Summary credit rationale

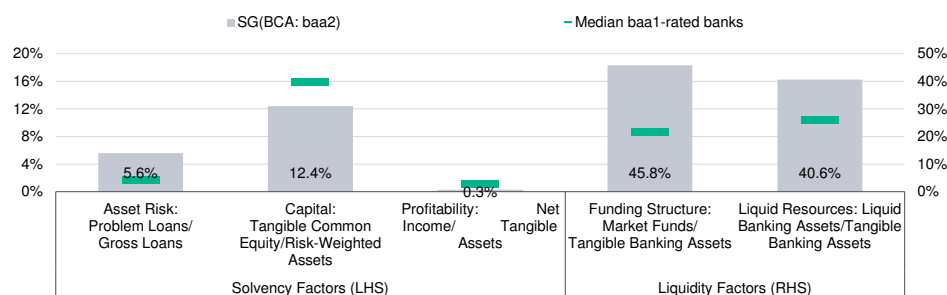
[Société Générale](#) (SG) is a global systemically important bank based in [France](#) (Aa2 stable) with sizeable international operations.

On 11 April 2018, [we upgraded](#) the long-term deposit ratings of SG to A1 from A2, its senior unsecured debt to A1 from A2 and its junior senior unsecured debt (known as senior non-preferred securities) to Baa2 from Baa3. The rating upgrades were prompted by our expectation of a significant issuance of additional loss-absorbing capital, which the firm announced on 28 November 2017, as part of its strategic plan for 2020. As part of the same rating action, we affirmed the bank's baa2 baseline credit assessment (BCA) and maintained a stable ratings outlook.

SG's baa2 BCA reflects the bank's (1) strong franchise and well-diversified universal banking business model, (2) good and improving regulatory capitalisation, despite higher leverage than many of its global peers, and (3) strong liquidity. The BCA is, however, constrained by (4) some weak exposures, mainly to [Russia](#) (Ba1 positive) and certain African countries; (5) the risks stemming from the bank's sizeable capital market activities; (6) constrained profitability prospects over the next 12-18 months; and (7) an elevated stock of confidence-sensitive wholesale funding.

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 translates into a further notch uplift included in these ratings.

Exhibit 1
Rating scorecard - key financial ratios



Source: Moody's Banking Financial Metrics

Credit strengths

- » Well-diversified universal banking business model provide stable and predictable earnings but we expect profitability to remain constrained over the next 12-18 months.
- » Regulatory capitalisation is good and improving, underpinned by a strong earnings generation capacity though leverage is higher than many of its global peers.
- » Liquidity is strong and broadly in line with large European peers.
- » 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 firm's baa2 adjusted BCA.
- » The long-term deposit and senior unsecured debt ratings incorporate one notch of government support uplift.

Credit challenges

- » SG has sizeable capital market activities, which carry tail risks for creditors.
- » Credit quality profile is good, although exposures to some countries with weaker operating conditions than SG's home market weaken its credit profile and pose downside risks.
- » Elevated stock of confidence-sensitive wholesale funding is partly mitigated by strong liquidity, well-diversified funding sources and proven access to wholesale funding markets.

Rating outlook

The ratings outlook is stable, as we expect no material changes in the bank's credit fundamentals over the next 12-18 months. The current ratings already incorporate the operating challenges from weak economic growth and protracted low interest rates in Europe, as well as the stabilisation of operating conditions in Russia.

Factors that could lead to an upgrade

The BCA could be upgraded in case of:

- » structural improvement in the bank's funding profile
- » strengthened profitability
- » significantly higher capitalisation
- » a material reduction in capital markets activity

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 operating conditions in SG's main markets, beyond our current expectations
- » a weakening in funding and liquidity
- » lower regulatory capitalisation or higher leverage
- » a material risk management failure or increase in risk appetite

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

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

SG's ratings could also be downgraded if management deviates from its committed funding plan in a way that would lead to a reduction in expected debt issuance; or a more rapid increase in assets, than what we currently expect, increasing loss-given-failure for its creditors.

Key indicators

Exhibit 2

Societe Generale (Consolidated Financials) [1]

	12-17 ²	12-16 ²	12-15 ²	12-14 ²	12-13 ³	CAGR/Avg. ⁴
Total Assets (EUR million)	1,156,141	1,198,338	1,159,470	1,107,984	1,058,569	2.2 ⁵
Total Assets (USD million)	1,388,291	1,263,950	1,259,527	1,340,719	1,458,647	-1.2 ⁵
Tangible Common Equity (EUR million)	43,718	45,162	41,964	38,130	35,417	5.4 ⁵
Tangible Common Equity (USD million)	52,497	47,635	45,585	46,139	48,802	1.8 ⁵
Problem Loans / Gross Loans (%)	5.0	5.7	6.1	7.0	7.6	6.3 ⁶
Tangible Common Equity / Risk Weighted Assets (%)	12.4	12.7	11.8	10.8	10.3	11.9 ⁷
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	37.2	39.8	42.9	47.8	52.8	44.1 ⁶
Net Interest Margin (%)	0.9	0.8	0.8	0.9	1.0	0.9 ⁶
PPI / Average RWA (%)	1.5	2.1	1.9	1.9	2.2	1.9 ⁷
Net Income / Tangible Assets (%)	0.3	0.3	0.3	0.3	0.3	0.3 ⁶
Cost / Income Ratio (%)	76.7	69.7	72.0	71.0	69.6	71.8 ⁶
Market Funds / Tangible Banking Assets (%)	45.8	47.1	49.7	52.5	55.6	50.1 ⁶
Liquid Banking Assets / Tangible Banking Assets (%)	40.6	43.9	45.0	47.2	49.3	45.2 ⁶
Gross Loans / Due to Customers (%)	102.9	102.3	109.0	111.2	115.2	108.1 ⁶

[1] All figures and ratios are adjusted using Moody's standard adjustments [2] Basel III - fully-loaded or transitional phase-in; IFRS [3] Basel II; IFRS [4] May include rounding differences due to scale of reported amounts [5] Compound Annual Growth Rate (%) based on time period presented for the latest accounting regime [6] Simple average of periods presented for the latest accounting regime. [7] Simple average of Basel III periods presented

Source: Moody's Financial Metrics

Profile

SG's operations are organised across three main business lines.

The French Retail Banking (FRB) division includes the group's strong domestic retail and small to medium-sized enterprise banking franchise.

The International Retail Banking and Financial Services (IBFS) comprises SG's international retail activities, which are spread across a number of countries in Central and Eastern Europe, Russia and Africa. SG's franchises in most of these countries are well recognised, but remain smaller than its retail franchise in France. The Financial Services (to corporates) and Insurance (FSI) operations are also key franchises, as the group's sizeable bancassurance product offering includes life insurance contracts, mutual funds and other investment services, which form an important part of household savings in France. This business line also includes Specialised Financial Services (SFS), comprising an array of different services, such as auto finance, personal finance and leasing, some of which are offered globally.

The Global Banking and Investor Solutions (GBIS) division houses the group's capital markets, financing and advisory, and asset management operations. We consider SG a tier-two global investment bank due to its multi-specialist business model, focussed on cross-asset solutions (structured equity and fixed-income) and flow equity derivatives. SG has strong expertise in structured products (with a global leadership in equity derivatives), exchange-traded funds (under the brand Lyxor), commodities, research and market making.

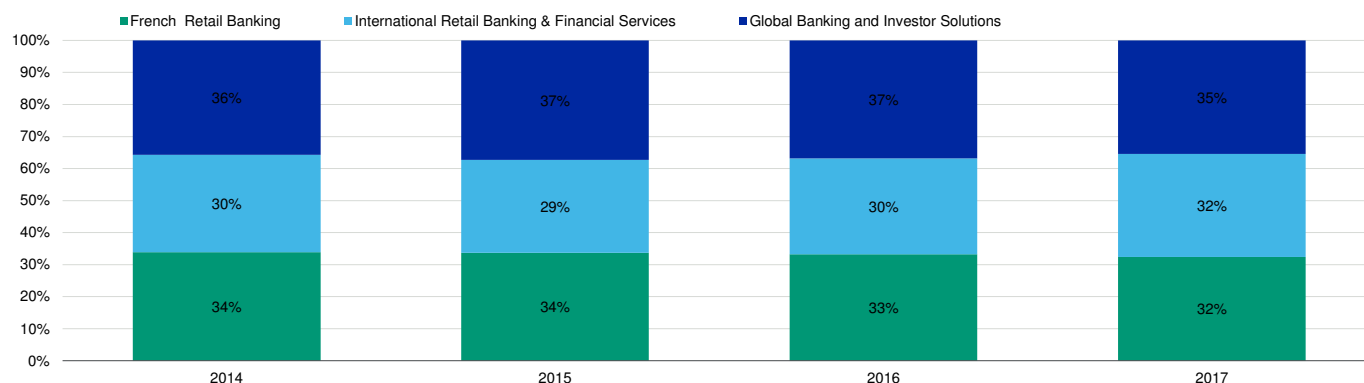
Detailed credit considerations

Well-diversified universal banking business model provide stable and predictable earnings but we expect profitability to remain constrained over the next 12-18 months

SG's three main businesses contribute roughly equal shares to the group's revenue (see Exhibit 3).

Exhibit 3

SG's net banking income breakdown by business line



Source: Company reports

We consider FRB as one of SG's key credit strengths and it also offers good cross-selling opportunities for products and services from the other divisions of the group. SG's domestic operations have historically proven very resilient to changes in operating conditions, although the prolonged low interest rate environment has translated into tangible declines in net interest income in French retail for SG and the other large domestic banks, due to large volumes of retail mortgage renegotiations. Thus far, this has partly been offset by declining credit costs, from which we do not expect further benefits over the next 12-18 months. However, we believe that a high degree of product and geographical diversification will allow SG to continue to mitigate these revenue pressures.

The product lines within IBFS have mixed risk-return profiles, and some of them in which SG is a European market leader (i.e., auto leasing and fleet management, equipment finance) generate strong profitability levels at relatively limited risk. IBFS also includes consumer finance activity in Italy, carrying downside risks. However, the portfolios of operations are very diversified, both by product and region, and the weaker exposures are contained compared with the group's sizeable loan book.

Management has recently announced its intention to focus on post-trade services and a plan to expand its bond origination and trading businesses with existing European clients within GBIS. SG operates in the US through Société Générale Americas Securities, a core operating subsidiary through which it conducts its institutional equities, fixed-income brokerage and futures commission merchant activities in the region.

SG has historically maintained adequate profitability levels and has shown lower (and declining) earnings volatility compared with many of its global peers. We believe that the group has benefitted from the good diversification of its operations, which we recognise with a positive one-notch adjustment for Business Diversification in the qualitative section of our BCA scorecard.

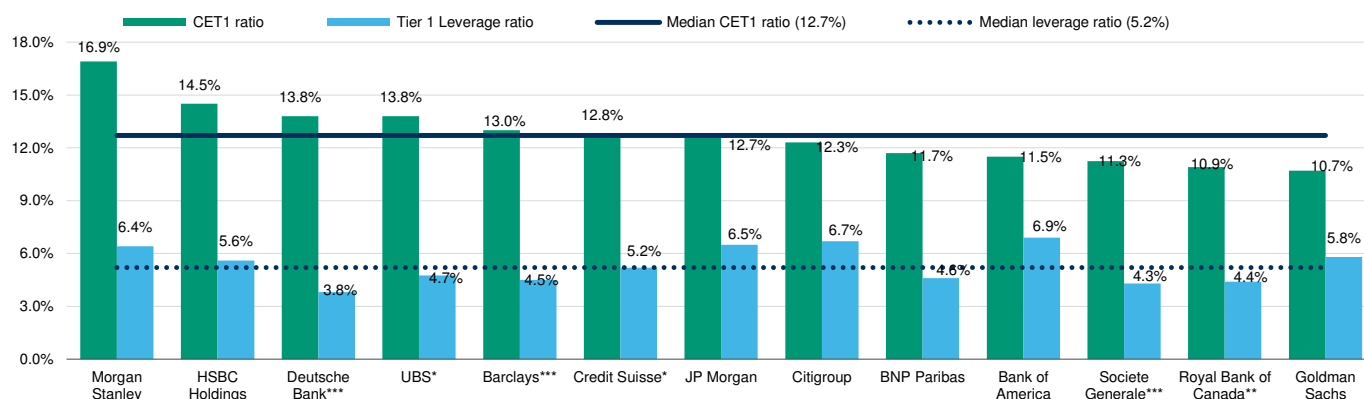
However, we assess that the bank's profitability prospects will remain constrained over the next 12-18 months, challenging the group's overall profitability, due to: (1) the current challenging operating conditions, including prolonged low interest rates in Europe; (2) still weak (although stabilising) operating conditions in Russia and some smaller markets in which SG operates; and (3) investment costs related to planned investment in technology.

We have reduced our assigned score for Profitability to ba1, from baa2 previously, to reflect the bank's profitability challenges, while recognising the very low level of earnings volatility, which SG has demonstrated in recent years.

Regulatory capitalisation is good and improving, underpinned by a strong earnings generation capacity though leverage is higher than many of its global peers.

We consider SG's capitalisation as good, as illustrated by its Basel III fully applied Common Equity Tier 1 (CET1) ratio of 11.4% as of the end of December 2017. SG has disclosed that the implementation of IFRS 9 will have a 15 bp impact on its CET1 ratio, resulting in a pro-forma fully loaded CET1 ratio of 11.25% as at 1 January 2018. SG's CET1 ratio remains well below the global peer group's median of 12.7% (Exhibit 4) and below its 2020 target of 12%, but above its SREP 2018 requirement of 8.68%.

Exhibit 4
CET1 and Tier1 leverage ratios for Global Investment Banks, as at end-2017



Notes: *UBS and CS leverage ratio reflect group-level Common Equity Tier plus Low Trigger Additional Tier 1 and High-Trigger Additional Tier 1 securities**figures as of 31 October 2017*** For DB includes January impact of IFRS 9 implementation and irrevocable payment commitments of 20 bps; for BNPP includes January impact of IFRS 9 of 10 bps; for SG includes impact of IFRS 9 of 15 bps and for Barclays includes impact of IFRS 9 of 34 bps

Source: Company reports

SG had a Basel III leverage ratio of 4.3% as of end-December 2017, in line with many large European competitors but lower than the median of its global peer group.

Our a3 assigned score for Capital reflects both the bank's current good and improved capital position, and our expectation that its regulatory capitalisation, including leverage, will continue to improve over the next 12-18 months, mostly through earnings retention.

Elevated stock of confidence-sensitive wholesale funding is partly mitigated by strong liquidity, well-diversified funding sources and proven access to wholesale funding markets

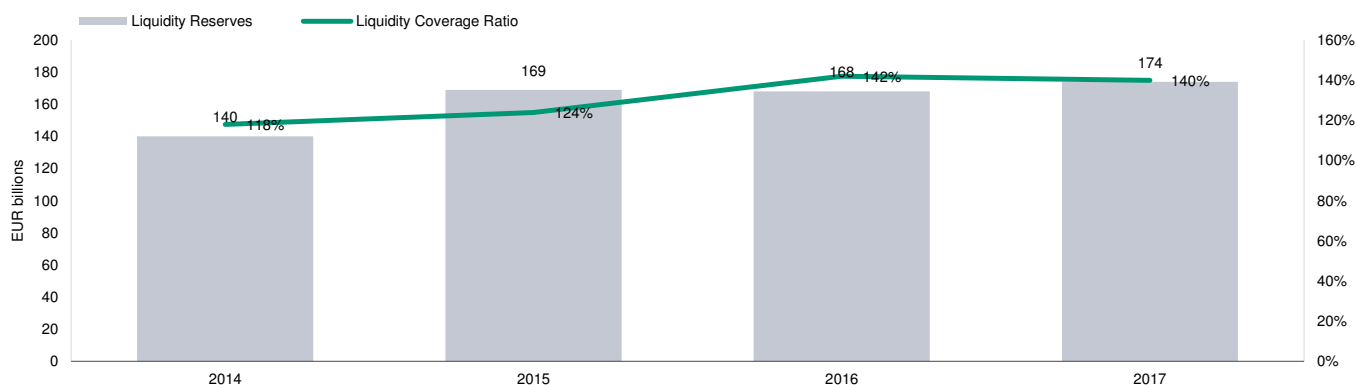
Similar to other French banks and some of its international peers with sizeable capital markets operations, SG has a high stock of wholesale funding on its balance sheet. We believe this exposes these firms to changes in market conditions and renders them more sensitive to swings in investor confidence compared with banks that have a greater proportion of deposits.

SG's wholesale-funding stock was €258 billion as of end-December 2017, driven by large trading and investment portfolios. Around 35% of the bank's total funding was short term (including the portion of long-term debt maturing within the following 12 months). Our b1 assigned score for Funding Structure reflects the bank's elevated reliance on wholesale funding, whose associated refinancing risk is partly mitigated by the good diversification of the wholesale funding sources both by investor base and currency.

However, SG has a strong liquidity position, which has been improving over the last few years and is now in line with most of its international peers. As of end-December 2017, SG had a liquidity buffer of €174 billion, which covered more than 2x the correspondent stock of short-term funding, inclusive of the long-term debt maturing within the following 12 months (see Exhibit 5). SG's strong liquidity position is also illustrated by its liquidity coverage ratio of 140% as of end-December 2017. Our assigned score of a1 for Liquid Resources reflects these considerations and partly mitigates the weak Liquid Resource rating factor, resulting in a Combined Liquidity Score of baa3.

Exhibit 5

SG's liquidity reserves and liquidity coverage ratio



Source: Company reports

Credit quality profile is good, although exposures to some countries with weaker operating conditions than France weaken the bank's credit profile and pose downside risks

SG's Strong Macro Profile is largely driven by its exposure to [France](#) (Aa2 stable, Macro Profile: Strong+) and its sizeable operations in the [US](#) (Aaa stable, Macro Profile: Very Strong-), partly offset by the group's operations in Central and Eastern Europe, Russia and Africa, which have weaker Macro Profiles.

French banks benefit from operating in a country with a large and broadly diversified economy, a robust institutional framework and a very low susceptibility to event risk. Nevertheless, France's medium- and long-term economic performance will remain constrained by weak economic growth, which, coupled with institutional and political constraints, poses for the material reduction in the government's high debt burden.

The main risk to which SG is exposed to is credit risk, which represented around 82% of the group's risk-weighted assets (RWA) as of end-December 2017 and mainly related to lending in France, Central and Eastern Europe, and Russia. SG's customer loan book of €416 billion as of end-December 2017 is exposed to country and sector concentration risks. Exposures to a few relatively large corporates in its financing activities and notable industry concentrations to the financial services sector in the capital market operations also affect SG's asset risk assessment.

SG's credit quality has improved in recent quarters, and problem loans were equal to 5.0% of gross customer loans at end-2017. High levels of doubtful loans tend to reflect protracted workout practices, in common with other French banks, which are partly mitigated by collateral and provisions. However, SG's problem loans relative to its loan book remain higher than those of most domestic banks due to the firm's exposure to Eastern Europe and Russia, and its large presence in the mid-corporate French market.

As of end-December 2017, the coverage ratio was adequate at 60%, including specific and portfolio-based provisions. Over the last few quarters, SG's cost of risk has been trending down (19 basis points in 2017 compared with 37 basis points in 2016), as a result of tightened risk management, improved credit conditions in France helped by prolonged low interest rates, and a stabilisation of economic conditions in Russia. We have reflected these factors in our assigned baa2 assigned score for Asset Risk. We expect moderate increase in the cost of risk, over the next 12-18 months, from the current very low level.

SG's operations in Russia, which amounted to €16 billion of exposure at default (EAD) as of end-December 2017, representing around 2% of the group's total at the same reporting date, are currently under strain due to weak operating conditions. Our stress test shows that even in an adverse scenario, the negative impact on SG's capital would be limited. However, the potential volatility in the country's economy and the heightened geopolitical risk mean that SG's exposure to Russia remains a key, although decreasing, risk. SG reported a net profit in Russia of €121 million in 2017 and €8 million in 2016, in line with our expectation.

SG has sizeable capital market activities, which carry tail risk for creditors

Market risk has significantly decreased over the last two years, as illustrated by market risk RWA of €15 billion, representing only 4% of the total, as of end-December 2017. The average value-at-risk, which was €19 million in Q4 2017, is limited. In addition, counterparty risk and operational risk arise from SG's capital market activities, particularly from its large stock of financial assets and derivatives.

We believe that the firm's market risk appetite has declined and its risk management capabilities have been overhauled in recent years, following the financial crisis and in response to the rogue trader fraud in 2008.

Our baa2 assigned score for Asset Risk takes into account the risks associated with the group's investment banking activities.

We estimate that pure capital market activities, represented around 23% of total revenue in 2017. Although this proportion is lower than those of some of the bank's global peers, it brings elements of earnings volatility, confidence sensitivity and complexity that reduce the value we attribute to these franchises. The high degree of volatility in capital market revenue and the inherent greater risks carried by these types of activities currently constrain the credit profile of SG and those of its global peers, and are reflected in a one-notch adjustment for Opacity and Complexity in the qualitative section of our BCA Scorecard.

Support and structural considerations

Loss Given Failure

We apply our advanced LGF analysis to SG as the bank is incorporated in France, which we consider to be 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 stand at 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.

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 firm's baa2 Adjusted BCA. For junior senior creditors, due to 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.

The Assigned LGF notchings for long-term deposit, senior unsecured debt and junior senior unsecured bank are positioned one notch higher than the correspondent LGF notching guidance. This reflects our expectation that SG will continue to issue debt in line with its medium-term funding plan, to which management committed last November, and will be able to maintain continued access to the capital markets. SG has communicated planned issuance of around €11 billion of bail-in-able liabilities despite already complying with its minimum TLAC requirement for 2019, to strengthen further its loss absorbing capacity.

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 and preference share instruments, 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.

Rating methodology and scorecard factors

Exhibit 6

Societe Generale

Macro Factors

Weighted Macro Profile	Strong	100%
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Factor	Historic Ratio	Macro Adjusted Score	Credit Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	5.6%	baa3	← →	baa2	Quality of assets	Market risk
Capital						
TCE / RWA	12.4%	baa1	↑	a3	Capital retention	Stress capital resilience
Profitability						
Net Income / Tangible Assets	0.3%	ba3	← →	ba1	Return on assets	Loan loss charge coverage
Combined Solvency Score		baa3		baa2		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	45.8%	b1	← →	b1	Term structure	
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	40.6%	a1	← →	a1	Stock of liquid assets	
Combined Liquidity Score		baa3		baa3		
Financial Profile				baa2		
Business Diversification				1		
Opacity and Complexity				-1		
Corporate Behavior				0		
Total Qualitative Adjustments				0		
Sovereign or Affiliate constraint:				Aa2		
Scorecard Calculated BCA range				baa1-baa3		
Assigned BCA				baa2		
Affiliate Support notching				0		
Adjusted BCA				baa2		

Balance Sheet	in-scope (EUR million)	% in-scope	at-failure (EUR million)	% at-failure
Other liabilities	444,071	49.0%	476,485	52.6%
Deposits	317,788	35.1%	285,374	31.5%
Preferred deposits	235,163	25.9%	223,405	24.6%
Junior Deposits	82,625	9.1%	61,969	6.8%
Senior unsecured bank debt	87,710	9.7%	87,710	9.7%
Junior senior unsecured bank debt	7,850	0.9%	7,850	0.9%
Dated subordinated bank debt	13,120	1.4%	13,120	1.4%
Junior subordinated bank debt	210	0.0%	210	0.0%
Preference shares (bank)	8,690	1.0%	8,690	1.0%
Equity	27,199	3.0%	27,199	3.0%
Total Tangible Banking Assets	906,638	100%	906,638	100%

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 Assessment	22.8%	22.8%	22.8%	22.8%	3	3	3	3	0	a2 (cr)
Deposits	22.8%	6.3%	22.8%	16.0%	2	3	2	3	0	a2
Senior unsecured bank debt	22.8%	6.3%	16.0%	6.3%	2	2	2	3	0	a2
Junior senior unsecured bank debt	6.3%	5.4%	6.3%	5.4%	-1	-1	-1	0	0	baa2
Dated subordinated bank debt	5.4%	4.0%	5.4%	4.0%	-1	-1	-1	-1	0	baa3
Junior subordinated bank debt	4.0%	4.0%	4.0%	4.0%	-1	-1	-1	-1	-1	ba1 (hyb)
Non-cumulative bank preference shares	4.0%	3.0%	4.0%	3.0%	-1	-1	-1	-1	-2	ba2 (hyb)

Instrument class	Loss Given Failure notching	Additional Notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
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 (hyb)	0	(P)Ba1 (hyb)	Ba1 (hyb)
Non-cumulative bank preference shares	-1	-2	ba2 (hyb)	0	Ba2 (hyb)	Ba2 (hyb)

Source: Moody's Financial Metrics

Ratings

Exhibit 7

Category	Moody's Rating
SOCIETE GENERALE	
Outlook	Stable
Bank Deposits	A1/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	baa2
Counterparty Risk Assessment	A1(cr)/P-1(cr)
Senior Unsecured	A1
Subordinate	Baa3
Jr Subordinate	Ba1 (hyb)
Pref. Stock Non-cumulative	Ba2 (hyb)
Commercial Paper	P-1
Other Short Term	(P)P-1
SG ISSUER	
Outlook	Stable
Bkd Senior Unsecured	A1

Source: Moody's Investors Service

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