

CREDIT OPINION

13 September 2017

Update

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RATINGS

Societe Generale

Domicile	Paris, France
Long Term Debt	A2
Type	Senior Unsecured - Fgn Curr
Outlook	Stable
Long Term Deposit	A2
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 publication of Q2 2017 financial results

Summary credit rationale

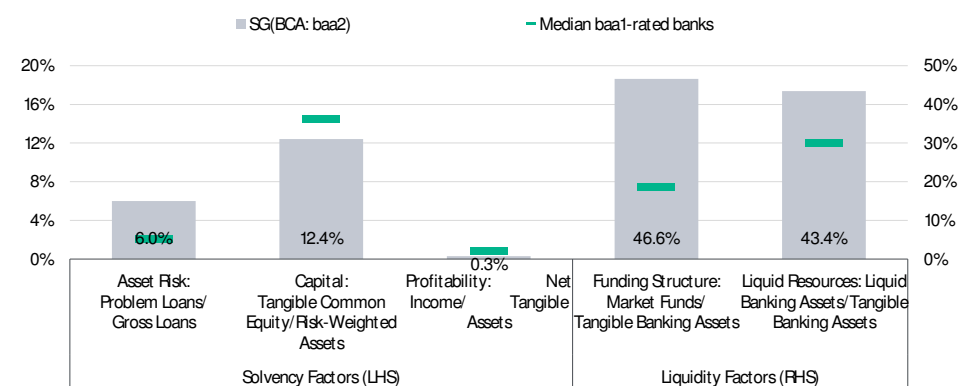
[Société Générale](#) (SG) is a France-based global systemically important bank with sizeable international operations. We rate SG's long-term deposit and senior unsecured debt A2 with a stable outlook and the bank's junior senior (senior non-preferred) debt Baa3.

SG's baa2 Baseline Credit Assessment (BCA) reflects the bank's (1) strong franchise and well-diversified universal banking business model, (2) good and improving regulatory capitalisation, and (3) strong liquidity. The BCA is, however, constrained by (1) some weak exposures, mainly to [Russia](#) (Ba1 stable) and certain African countries; (2) the risks stemming from the bank's sizeable capital market activities; and (3) an elevated, although declining, stock of confidence-sensitive wholesale funding.

SG's A2 long-term deposit and senior unsecured debt ratings include a two-notch uplift resulting from the Loss Given Failure (LGF) analysis, reflecting our view that the bank's junior depositors and senior unsecured creditors face a very 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

- » The strong franchise and the well-diversified universal banking business model provide stable and predictable earnings. Profitability is, however, challenged in the current low interest rate environment in Europe and still challenging (although stabilising) operating conditions in Russia.
- » Regulatory capitalisation is good and improving, underpinned by a strong earnings generation capacity.
- » Liquidity is strong and broadly in line with large European peers.
- » Our Advanced LGF analysis indicates a very low loss-given-failure for junior depositors and senior unsecured creditors, resulting in a two-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, although declining, 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
- » a material reduction in capital markets activity
- » a much stronger capitalisation

An upgrade of the bank's BCA would likely affect all ratings.

Factors that could lead to a downgrade

The BCA could be downgraded in case of:

- » a deterioration in the operating environment beyond our current expectations
- » a weakening in funding and liquidity
- » lower regulatory capitalisation or higher leverage
- » an increase in risk appetite

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

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.

Key Indicators

Exhibit 2

Societe Generale (Consolidated Financials) [1]

	6-17 ²	12-16 ²	12-15 ²	12-14 ²	12-13 ³	CAGR/Avg. ⁴
Total Assets (EUR million)	1,205,553	1,211,657	1,159,470	1,107,984	1,058,569	3.8 ⁵
Total Assets (USD million)	1,374,993	1,277,998	1,259,527	1,340,720	1,458,647	-1.7 ⁵
Tangible Common Equity (EUR million)	43,644	45,162	41,964	38,130	35,417	6.1 ⁵
Tangible Common Equity (USD million)	49,778	47,635	45,585	46,139	48,802	0.6 ⁵
Problem Loans / Gross Loans (%)	5.3	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) (%)	38.1	39.8	42.9	47.8	52.8	44.3 ⁶
Net Interest Margin (%)	0.9	0.8	0.8	0.9	1.0	0.9 ⁶
PPI / Average RWA (%)	1.6	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 (%)	74.9	69.7	72.0	71.0	69.6	71.5 ⁶
Market Funds / Tangible Banking Assets (%)	47.3	46.6	49.7	52.5	55.6	50.3 ⁶
Liquid Banking Assets / Tangible Banking Assets (%)	42.9	43.4	45.0	47.2	49.3	45.6 ⁶
Gross Loans / Due to Customers (%)	104.7	102.3	109.0	111.2	115.2	108.5 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

Detailed credit considerations

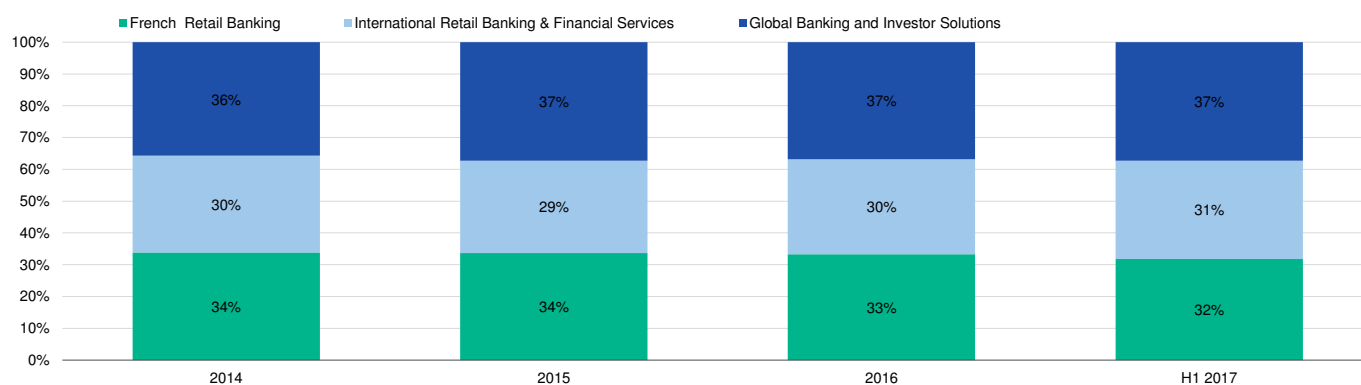
The financial data in the following sections are sourced from SG's financial statements, unless otherwise indicated.

Strong franchise and well-diversified universal banking business model provide stable and predictable earnings. Profitability is, however, challenged in the current low interest rate environment in Europe and still challenging (although stabilising) operating conditions in Russia

SG's operations are organised across three main business lines, which contribute roughly equal shares to the group's revenue (see Exhibit 3).

Exhibit 3

Net banking income by business line



Excludes corporate center; H1 2017 figures are annualized

Source: Company reports

The French Retail Banking division includes the group's strong domestic retail and small to medium-sized enterprise banking franchise, which we view as one of SG's key credit strengths. The division also offers good cross-selling opportunities for products and services that are offered in 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 is translating into tangible declines in net interest income in French

retail for SG and the other large domestic banks due to large volumes of 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 offset these revenue pressures.

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 product lines within IBFS have mixed risk-return profiles, and some of them in which SG is the market leader (i.e., auto finance, equipment finance) generate strong profitability levels at relatively limited risk. IBFS also includes other activities (i.e., consumer finance 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.

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 solutions) 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. 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. 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 relatively low (and declining) earnings volatility compared with its global peers. In addition, the bank only has a very small legacy assets portfolio to wind down, resulting in lower profitability problems compared with some of its European peers. We believe that the group has benefitted from the good diversification of its operations, which we recognise with a one-notch positive adjustment for business diversification in the qualitative section of our BCA Scorecard. However, the current challenging operating conditions, including prolonged low interest rates in Europe and still weak (although stabilising) operating conditions in Russia and some smaller markets in which SG operates, are challenging the group's overall profitability, including management's 10% return on equity target.

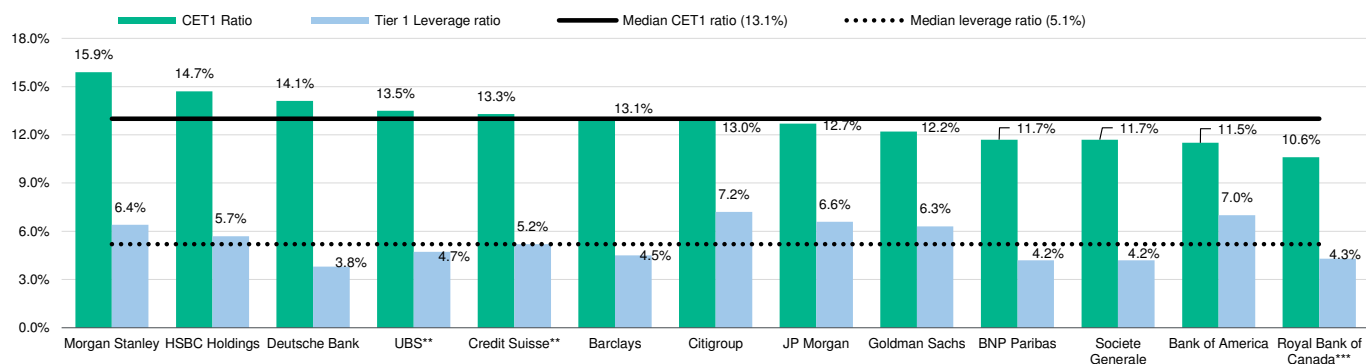
Our baa2 score for Profitability, which is in line with the bank's BCA, reflects these factors, as well as our expectation that SG's profitability will gradually improve over the next 12-18 months as a result of internal reorganisation and cost-rationalisation initiatives.

Good and improving regulatory capitalisation, underpinned by strong earnings generation capacity

We consider SG's capitalisation as good, as illustrated by its Basel III fully applied Common Equity Tier 1 (CET1) ratio of 11.7% as of the end of June 2017, which is below the median for its global competitors (see Exhibit 4) but well above the SREP 2017 requirement of 7.75%. This ratio is also close to the group's year-end 2018 CET1 target ratio of between 11.5% and 12.0%.

Exhibit 4

CET1 ratios for Global Investment Banks as at end-June 2017



UBS and CS leverage ratio reflect Common Equity Tier plus Low Trigger Additional Tier 1 and High-Trigger Additional Tier 1 securities; *end-April 2017

Source: Company data

SG had a Basel III leverage ratio of 4.2% as of end-June 2017, in line with many large European competitors, although lower than the median of its global peer group.

Our a3 assigned score for Capital (from baa2 previously) 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.

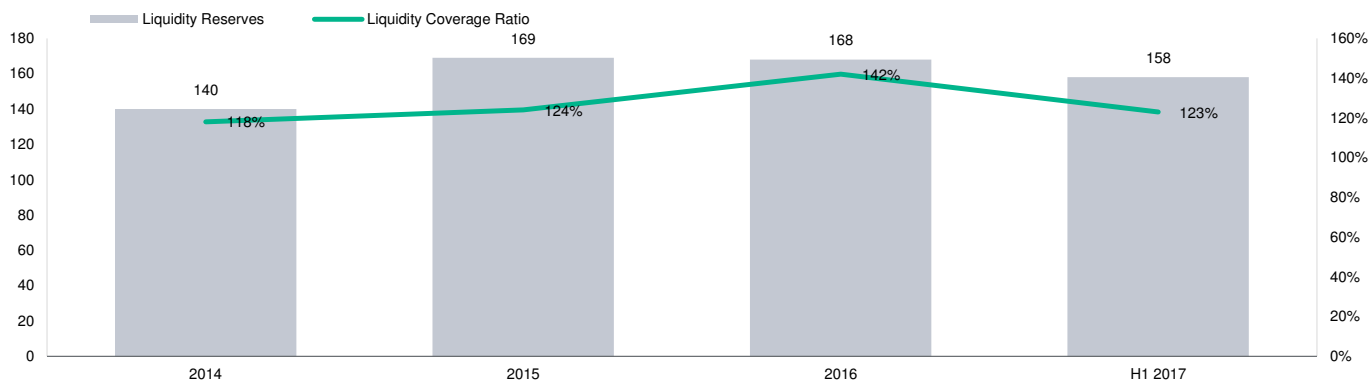
Elevated stock of confidence-sensitive wholesale funding is partly mitigated by strong liquidity, well-diversified funding sources and proven access to wholesale funding markets

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 stock 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 had an elevated funding stock of €237 billion as of end-June 2017, driven by large trading and investment portfolios. Around 38% 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-June 2017, SG had a liquidity buffer of €158 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 123% as of end-June 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

Improved credit quality profile, although exposures to some countries with weaker operating conditions than France weakens the bank's credit profile and poses 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, representing around 81% of its risk-weighted assets (RWA) as of end-June 2017, mainly relating to lending in France, Central and Eastern Europe, and Russia. SG's customer loan book of €412 billion as of end-June 2017 was 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.

SG's credit quality has improved in recent quarters, and problem loans were equal to 5.3% of gross customer loans. 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 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-June 2017, the coverage ratio was adequate at 62%, including specific and portfolio-based provisions. Over the last few quarters, SG's cost of risk has been trending down (15 basis points in the second quarter of 2017 compared with 38 basis points in Q2 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 an increase in the assigned score for Asset Risk to baa2 (from baa3 previously). 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 €15 billion of exposure at default (EAD) as of H1 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 exposures to Russia remains a key, although decreasing, risk (SG disclosed €2.7 billion of equity and €0.5 billion of intra-group funding [subordinated loans] to SG's Russian subsidiaries as of end-June 2017). SG reported a net profit in Russia of €31 million in 2016 and €40 million in the first half of 2017, in line with our expectation. The operating environment in Russia will continue to normalise over the next 12-18 months. Emerging signs of the country's macroeconomic stabilisation, banks' enhanced risk absorption capacity and lower refinancing risk, have led us to change recently the outlook on the Russian banking system to stable from negative.

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 €17 billion, representing 5% of total, as of end-June 2017. The average value-at-risk, which was €32 million in Q2 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. However, securities and client-trading assets of €160 billion as of end-June 2017 remain higher than those of some of SG's peers (as a percentage of the total cash on balance sheet) due to the large and liquid equity trading assets portfolio and the large securities book held to meet Basel III liquidity requirements.

Our baa2 assigned score for Asset Risk takes into account the risks associated with the group's investment banking activities and indicates that asset risk, overall, remains a modest weakness for SG's BCA.

We estimate that pure capital market activities, represented around 26% of total revenue in H1 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 a very low loss-given-failure for junior depositors and senior unsecured creditors, resulting in a two-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 high loss severity in the event of the bank's failure, leading to a position one notch below 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 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 A2 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	6.0%	ba1	← →	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	← →	baa2	Return on assets	Loan loss charge coverage
Combined Solvency Score		baa3		baa1		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	46.6%	b1	← →	b1	Term structure	
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	43.4%	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	480,918	48.1%	517,698	51.8%
Deposits	360,589	36.1%	323,809	32.4%
Preferred deposits	266,836	26.7%	253,494	25.4%
Junior Deposits	93,753	9.4%	70,315	7.0%
Senior unsecured bank debt	99,179	9.9%	99,179	9.9%
Junior senior unsecured bank debt	3,637	0.4%	3,637	0.4%
Dated subordinated bank debt	14,645	1.5%	14,645	1.5%
Preference shares (bank)	10,106	1.0%	10,106	1.0%
Equity	29,971	3.0%	29,971	3.0%
Total Tangible Banking Assets	999,045	100%	999,045	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%	5.8%	22.8%	15.8%	2	3	2	2	0	a3
Senior unsecured bank debt	22.8%	5.8%	15.8%	5.8%	2	1	2	2	0	a3
Junior senior unsecured bank debt	5.8%	5.5%	5.8%	5.5%	-1	-1	-1	-1	0	baa3
Dated subordinated bank debt	5.5%	4.0%	5.5%	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	2	0	a3	1	A2	A2
Senior unsecured bank debt	2	0	a3	1	A2	A2
Junior senior unsecured bank debt	-1	0	baa3	0	Baa3	Baa3
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	A2/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	baa2
Counterparty Risk Assessment	A1(cr)/P-1(cr)
Senior Unsecured	A2
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	A2

Source: Moody's Investors Service

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