Creditreform Bank Rating

Banco Santander S.A. (Group)

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Rating object		Rating information		
Banco Sar	ntander S.A. (Group)	Long Term Issuer A / stable	Rating / Outlook:	Short Term: L2
Creditreform ID:	6226 1857	Rating of Bank Capi	tal and Unsecured De	bt Instruments:
Incorporation: (Main-) Industry:	Banks	Senior Unsecured	Tier 2	Additional Tier 1
Management:	F. Ana Botín-Sanz (Group Executive Chairman) H. José Antonio Álvarez Álvarez (CEO)	Α	BBB-	BB+
	Bruce N. Carnegie-Brown (Vice Chairman) Guillermo de la Dehesa Romero (Vice Chairman) Rodrigo Echenique Gordillo (Vice Chairman)		15 August 2018 withdrawal of the rat	ing

Rating Type:

Rating Methodology:

Contents

SWOT-Analysis1
Company Overview2
Business Development4
Profitability4
Asset Situation and Asset Quality 5
Refinancing and Capital Quality 6
Liquidity8
Conclusion9
Ratings Detail10

SWOT-Analysis

Strengths

- + Spain's largest bank with high systematic relevance for the global banking sector
- + Internationally diversified business model with strong market positions in key markets

unsolicited

bank ratings;

rating of bank capital and unsecured debt instruments

- + Stable business model with constant net profit
- + Cost Income Ratio exceeds peers
- + Solid liquidity situation

Weaknesses

- Low capital ratios in peer group comparison
- Below-average performance in the 2016 EBA stress test

Opportunities / Threats

- Leading positions in 10 core markets with a high population and providing growth opportunities
- + Digital transformation is driven by high investments
- +/- Dependent on the economic development in South America
 - Challenging outlook in UK as a result of Brexit-related macro uncertainty
- Increasing banking regulation leads to rising costs

Analysts

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Philipp J. Beckmann Co-Analyst / Senior Analyst

Company Overview

Founded in 1857, the Banco Santander S.A. is managed by the Botin family in the fourth generation. The bank developed from a series of mergers and acquisitions into a globally operating and multinational financial group, beginning in the 1990s. After the merger with Banco Central Hispano in 1990, Banco Santander became the largest universal bank in Spain. Moreover, the bank is the largest bank in the eurozone in terms of its market capitalization of EUR 88.410 million in 2017. As Banco Santander is one of the global systematically important banks (G-SIB), the bank must comply with additional regulatory requirements. The bank's headquarter is in Madrid.

Santander's business model is based on geographic diversification and focuses on commercial banking, which accounted for approximately 91% of the bank's revenue in 2017. The bank operates in ten core markets with a distribution between mature markets and developing markets. In detail, these are the countries of Argentina, Brazil, Chile, Germany, Mexico, Poland, Portugal, Spain, the United Kingdom and USA, each with a centralized management structure. Santander's earnings power is primarily driven by its operations in Brazil, the UK, Spain and other European countries as shown in the following chart:



(Source: website of Santander; Note: excluding Corporate Center and Real Estate)

More than 202,251 people work for the bank Worldwide and it has approximately 133 million customers (end of 2017). With 29%, the majority of its customers are located in Brazil, followed by the United Kingdom with 19%.

On June 7th, the Single Resolution Board (SRB) announced the acquisition of Banco Popular through Banco Santander for EUR 1. Banco Popular was considered failing due to a liquidity crisis. Therefore Banco Santander increased its capital by EUR 7 billion in July 2017.

The two major globally acting subsidiaries are Santander Private Banking and Santander Consumer Finance (SCF). In Germany, Santander is represented by Santander Consumer Bank, which is specialized in sales financing of motor vehicles and consumer goods.

The shareholder structure of Banco Santander is as follows:

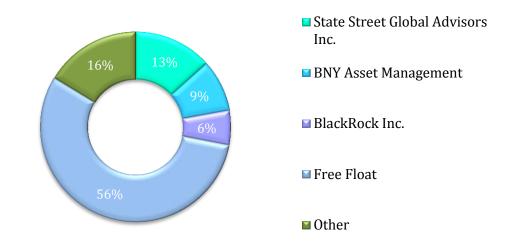


Chart 2: Major shareholders of Banco Santander S.A. (Source: Own presentation based on data of S&P Global Market Intelligence)

Business Development

Profitability

Operating income amounted to €48.6bn last year and notably increased by 10% YOY (+€4bn). Santander generates the majority of its revenue from interest income, at 70.6%, expanding by 10.3% YOY (+€3bn). Decisive for the improvement in net interest income are the large increases in developing countries, particularly Brazil, Mexico, Argentina and Poland, due to faster growth in volume. Fees and commissions contributed 23.9% (+€1bn) and also showed a double-digit growth of 13.9% YOY due to increased activity. Of the three main drivers of operating income, net trading income accounted for the smallest share with 3.4% and decreased by 20.8% YOY (-€0.4bn). In terms of net interest income and the other earnings figures, Santander benefits from its global diversification.

Operating expense was \in 26.1bn in the previous year, expanding by 10.3% YOY (+ \in 2bn) due to higher costs linked to regulatory matters and investments in transformation. Personnel expenses accounted for 46.2% of total expenses, with no significant change from last year. Other expense contributed 14.9% and increased by 7.9% YOY (+ \in 0.2bn) due to larger contributions to the Deposit Guarantee Fund and to the Single Resolution Fund. The reported net profit was \in 8.2bn last year, expanding by 9.6% YOY (+ \in 0.7bn).

A detailed group income statement for the years 2014 through 2017 can be found in Figure 1 below:

Income Statement	2014	%	2015	%	2016	%	2017	%
Income (€000)								
Net Interest Income	29.547.819	64,5%	32.812.131	71,2%	31.088.602	70,1%	34.295.535	70,6%
Net Fee & Commission Income	9.695.951	21,1%	10.032.621	21,8%	10.179.821	23,0%	11.596.688	23,9%
Net Insurance Income	136.893	0,3%	98.546	0,2%	62.961	0,1%	57.396	0,1%
Net Trading Income	2.849.794	6,2%	2.385.727	5,2%	2.101.009	4,7%	1.664.374	3,4%
Equity Accounted Results	243.214	0,5%	375.299	0,8%	444.106	1,0%	703.759	1,4%
Dividends from Equity Instruments	434.931	0,9%	454.579	1,0%	413.409	0,9%	384.166	0,8%
Rental Revenue	NA	0,0%	NA	0,0%	NA	0,0%	NA	0,0%
Lease and Rental Revenue	NA	0,0%	NA	0,0%	NA	0,0%	NA	0,0%
Other Noninterest Income	2.935.970	6,4%	-103.696	-0,2%	41.723	0,1%	-148.679	-0,3%
Operating Income	45.844.572	100%	46.055.207	100%	44.331.631	100%	48.553.239	100%
Expenses (€000)								
Depreciation and Amortisation	2.286.708	9,9%	2.418.600	9,7%	2.364.139	10,0%	2.593.071	10,0%
Personnel Expense	10.241.810	44,2%	11.106.884	44,7%	11.004.196	46,6%	12.047.480	46,2%
Occupancy & Equipment	1.930.000	8,3%	1.943.000	7,8%	1.853.000	7,8%	1.931.000	7,4%
Tech & Communications Expense	1.468.000	6,3%	1.775.000	7,1%	1.594.000	6,8%	1.786.000	6,9%
Marketing and Promotion Expense	655.000	2,8%	705.000	2,8%	691.000	2,9%	757.000	2,9%
Other Provisions	3.009.153	13,0%	3.105.634	12,5%	2.507.999	10,6%	3.057.777	11,7%
Other Expense	3.604.031	15,5%	3.771.590	15,2%	3.594.959	15,2%	3.879.393	14,9%
Operating Expense	23.194.702	100%	24.825.708	100%	23.609.293	100%	26.051.721	100%
Operating Profit & Impairment (€000)								
Pre-impairment Operating Profit	22.649.870		21.229.499		20.722.338		22.501.518	
Asset Writedowns	11.987.066		11.965.803		9.976.958		10.837.852	
Net Income (€000)								
Nonrecurring Revenue	17.103		283.376		22.343		425.000	
Nonrecurring Expense	0		0		0		0	
Pre-tax Profit	10.679.907		9.547.072		10.767.723		12.088.666	
Income Tax Expense	3.718.355	34,8%	2.212.743	23,2%	3.282.126	30,5%	3.883.360	32,1%
Discontinued Operations	-26.282		0		488		0	
Net Profit	6.935.270		7.334.329		7.486.085		8.205.306	

Figure 1: Group income statement (Source: S&P Global Market Intelligence)

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The cost/ income ratio changed only slightly compared to the previous year, still exceeding that of its peers. The ROAA figure of the bank was significantly more favorable than that of its peers, increasing marginally compared to the previous year, while the same figure improved for the peer group in the reporting year. The ROAE figure of the bank was well above the average and displayed an increase of 0.36 percentage points over the previous year, whereas the improvement for peer banks was more noticeable. The bank's RORWA was comparable to that of the peer group; however, the peer group showed a noticeable increase in that figure, while Santander only saw a marginal increase. The net interest margin increased by 0.11 percentage points from the previous year and is well above the average in peer group comparison. Of the four business development aspects examined, the earnings figures achieved the highest relative score. The disproportionate improvement in the income ratios compared to the peer group is attributable to the strong growth in Santander's customer loans.

A detailed overview of the income ratios for the years of 2014 through 2017 can be found in Figure 2 below:

Income Ratios (%)	2014	%	2015	%	2016	%	2017	%
Return on Average Assets (ROAA)	0,58	0,14	0,55	-0,03	0,56	0,01	0,58	0,02
Return on Equity (ROAE)	8,15	1,67	7,39	-0,76	7,47	0,08	7,83	0,36
RoRWA	1,26	0,26	1,22	-0,04	1,29	0,06	1,34	0,05
Net Interest Margin	2,67	0,39	2,66	-0,01	2,52	-0,14	2,63	0,11
Cost income Ratio ex. Trading	53,95	-4,19	56,85	2,90	55,91	-0,94	55,56	-0,35
Cost income Ratio	50,59	-2,82	53,90	3,31	53,26	-0,65	53,66	0,40
Change in %Points								

Figure 2: Group key earnings figures (Source: S&P Global Market Intelligence)

Asset Situation and Asset Quality

In terms of total assets, financial assets made up 92%, increasing markedly by 7.4% YOY (+€91bn). Net loans to customers contributed the largest share to Santander's total assets with 58.8%, increasing significantly by 7.4% YOY (+€58bn). These assets were broadly diversified within mature markets and developing markets. Total securities provided 20.3%, remaining largely unchanged over the previous year. Of the three main constituents of the asset side, cash positions comprised the smallest share with 7.7%, increasing considerably by 45.2% YOY (+€35bn). Total assets added up to €1,444bn, increasing markedly by 7.9% YOY (+€105bn).

A detailed overview of the development of the asset side for the years of 2014 through 2017 is shown in Figure 3 below:

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Assets (€000)	2014	%	2015	%	2016	%	2017	%
Cash and Balances with Central Banks	69.853.000	5,5%	77.750.799	5,8%	76.454.014	5,7%	110.994.931	7,7%
Net Loans to Banks	81.287.602	6,4%	82.530.558	6,2%	76.686.336	5,7%	77.430.687	5,4%
Net Loans to Customers	734.710.668	58,0%	790.848.130	59,0%	790.469.921	59,0%	848.914.175	58,8%
Total Securities	281.152.233	22,2%	289.665.641	21,6%	295.743.498	22,1%	293.492.439	20,3%
Financial Assets	1.167.004.301	92%	1.240.795.128	93%	1.239.353.769	93%	1.330.832.232	92%
Equity Accounted Investments	3.470.692	0,3%	3.250.427	0,2%	4.836.278	0,4%	6.183.588	0,4%
Other Investments	0	0,0%	0	0,0%	0	0,0%	0	0,0%
Insurance Assets	340.304	0,0%	331.185	0,0%	330.946	0,0%	341.273	0,0%
Noncurrent Assets HFS & Discontinued Ops	5.376.308	0,4%	5.645.869	0,4%	5.772.098	0,4%	15.280.296	1,1%
Tangible and Intangible Assets	53.656.861	4,2%	54.749.613	4,1%	52.706.357	3,9%	51.657.810	3,6%
Tax Assets	27.954.730	2,2%	27.813.409	2,1%	27.678.027	2,1%	30.243.202	2,1%
Total Other Assets	8.493.089	0,7%	7.676.104	0,6%	8.447.276	0,6%	9.766.394	0,7%
Total Assets	1.266.295.665	100%	1.340.261.735	100%	1.339.124.751	100%	1.444.304.795	100%

Figure 3: Development of assets

(Source: S&P Global Market Intelligence)

The NPL ratio of the bank was less favorable than that of its peers and displayed an increase of 0.18 percentage points over the previous year, whereas the peer group showed a decline in that figure. The NPL / RWA figure of the bank was comparable to that of its peers, but showed a significant increase of 0.49 percentage points over the previous year due to the acquisition and integration of Banco Popular. The same figure decreased for the peer group. Potential problem loans / NPLs of the bank were far better than that of its peers and displayed a significant decrease of 2.47 percentage points from the previous year. The reserved / impaired loans figure of the bank was more favorable than that of its peers but showed a decrease of 8.92 percentage points over the previous year, while the same ratio decreased more dramatically for the peer group. Net write-offs/ RWA of the bank was less favorable than that of its peers, remaining largely unchanged over the previous year; the same figure decreased for the peer group. The RWA / assets figure of the bank was significantly less favorable than that of its peers, showing a decrease of 2.02% over the previous year, with the same ratio decreasing for the peer group.

A detailed overview of the asset quality for the years of 2014 through 2017 can be seen in Figure 4 below:

Asset-Quality (%)	2014	%	2015	%	2016	%	2017	%
Non Performing Loans (NPL) / Loans	5,77	-0,63	4,81	-0,96	4,41	-0,41	4,59	0,18
NPL / RWA	7,12	-1,39	6,33	-0,79	5,72	-0,61	6,21	0,49
Potential Problem Loans / NPL	27,87	-3,99	0,00	-27,87	0,00	0,00	0,00	0,00
Reserves / Impaired Loans	67,42	5,65	73,39	5,97	74,89	1,50	65,97	-8,92
Net Write-offs / Risk-adjusted Assets	1,91	0,10	1,83	-0,08	1,92	0,09	1,95	0,02
Risk-weighted Assets/Assets	46,26	2,37	43,70	-2,57	43,92	0,22	41,89	-2,02
Change in %Points								

Figure 4: Development of asset quality (Source: S&P Global Market Intelligence)

Refinancing and Capital Quality

Santander's total liabilities increased significantly by 8% YOY (+€101bn); in the same period, equity was built up by 4%, and financial liabilities accounted for 97% of total liabilities, increasing significantly by 8.3% YOY (+€100bn). Customer deposits represented the largest share of total liabilities with 58.1%, increasing by 12.5% YOY (+€87bn). Total debt made up 16.3% of total liabilities, falling by 0.05% YOY (-€11bn) All other positions on the liabilities side have remained relatively unchanged in recent years.

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Liabilities (€000)	2014	%	2015	%	2016	%	2017	%
Total Deposits from Banks	155.616.649	13,2%	175.373.057	14,1%	149.397.733	12,1%	190.313.945	14,2%
Total Deposits from Customers	647.705.684	55,0%	683.142.112	55,0%	691.111.676	55,9%	777.730.390	58,1%
Total Debt	213.695.366	18,2%	226.160.175	18,2%	228.869.169	18,5%	217.966.347	16,3%
Derivative Liabilities	86.333.212	7,3%	85.525.466	6,9%	82.972.733	6,7%	66.265.672	5,0%
Securities Sold, not yet Purchased	17.628.350	1,5%	17.362.420	1,4%	23.004.801	1,9%	20.979.014	1,6%
Other Financial Liabilities	19.468.172	1,7%	20.877.782	1,7%	26.516.136	2,1%	28.427.224	2,1%
Total Financial Liabilities	1.140.447.917	97%	1.208.441.012	97%	1.201.872.248	97%	1.301.682.592	97%
Insurance Liabilities	712.508	0,1%	626.936	0,1%	652.217	0,1%	1.117.359	0,1%
Non-Current Liab. HFS & Discontinued Ops	21.474	0,0%	0	0,0%	0	0,0%	0	0,0%
Unit-Linked Insurance and Investment Contr.	0	0,0%	0	0,0%	0	0,0%	0	0,0%
Tax Liabilities	9.378.527	0,8%	7.724.369	0,6%	8.372.503	0,7%	7.591.821	0,6%
Noncurrent Asset Retirement Obligations	9.411.794	0,8%	8.272.368	0,7%	8.287.878	0,7%	8.031.415	0,6%
Other Provisions	5.963.923	0,5%	6.221.378	0,5%	6.170.726	0,5%	6.458.337	0,5%
Total Other Liabilities	10.645.323	0,9%	10.221.207	0,8%	11.069.276	0,9%	12.590.834	0,9%
Total Liabilities	1.176.581.466	92,9%	1.241.507.270	92,6%	1.236.424.848	92,3%	1.337.472.358	92,6%
Total Equity	89.714.199	7,1%	98.754.465	7,4%	102.699.903	7,7%	106.832.437	7,4%
Total Passiva	1.266.295.665	100%	1.340.261.735	100%	1.339.124.751	100%	1.444.304.795	100%
Deposits from Customers Growth*	6,56	NA	5,47	-1,09	1,17	-4,30	12,53	11,37
Change in %Points								

A detailed overview of the development of liabilities for the years of 2014 through 2017 can be found in Figure 5 below:

Figure 5: Development of refinancing and capital adequacy (Source: S&P Global Market Intelligence)

The bank's CET1 ratio, tier 1 ratio and total capital ratio were less favorable than those of its peers; the CET1 ratio decreased by 0.27 percentage points compared to the previous year. In the reporting year the peer banks observed an increase. The leverage ratio of the bank was comparable to that of its peers and showed an insignificant increase over the previous year, while the total equity / total assets ratio of the bank was more favorable than that of its peers; however, it decreased by 0.27 percentage points compared to the previous year, whereas the same figure increased for the peer group. The capital adequacy figures were the weakest compared to all of the other business development aspects examined.

A detailed overview of the development of capital ratios for the years 2014 through 2017 can be seen in Figure 6 below:

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Capital (€000)	2014	%	2015	%	2016	%	2017	%
Total Capital	70.482.639	-1,36	84.349.762	19,67	86.336.900	2,36	90.705.743	5,06
Total Risk-weighted Assets	585.828.893	19,62	585.633.290	-0,03	588.087.593	0,42	605.063.831	2,89
Capital Ratios (%)								
Core Tier 1 Ratio	10,97	-0,74	12,55	1,58	12,53	-0,01	12,26	-0,27
Tier 1 Ratio	10,97	-1,64	12,55	1,58	12,53	-0,01	12,77	0,24
Total Capital Ratio	12,03	-2,56	14,40	2,37	14,68	0,28	14,99	0,31
Leverage Ratio	3,70	-1,20	4,73	1,03	4,98	0,25	5,02	0,04
Fully Loaded: Common Equity Tier 1 Ratio	8,27	-3,44	10,05	1,79	10,55	0,50	10,84	0,28
Fully Loaded: Tier 1 Ratio	9,08	-3,52	11,00	1,92	11,53	0,54	12,11	0,58
Fully Loaded: Risk-weighted Capital Ratio	10,37	-4,22	13,05	2,68	13,87	0,82	14,48	0,60
Total Equity/ Total Assets	7,08	-0,05	7,37	0,28	7,67	0,30	7,40	-0,27
Change in %Points								

Figure 6: Development of capital ratios (Source: S&P Global Market Intelligence)

Due to Santander's bank capital and debt structure, the Group's senior unsecured debt instruments have not been notched down to the long-term issuer rating. However, the Group's Tier 2 capital rating is four notches below the long-term issuer rating based on the bank's capital structure and seniority in accordance with our rating methodology.

Additional Tier 1 capital is rated five notches below the long-term issuer rating, reflecting a high bail-in risk in event of resolution.

Liquidity

The LTD ratio of Europe's largest bank was comparable to that of its peers, with a decrease of 5.2 percentage points over the previous year. The decrease for peer banks was less pronounced. The interbank ratio significantly exceeds that of its peers, showing a considerable decrease of 10.6 percentage points over the previous year, with peer banks displaying a steeper decline. The liquidity coverage ratio deteriorated by 13.0 percentage points but is still well above the regulatory threshold.

A detailed overview of the development of liquidity for the years 2014 through 2017 can be seen in Figure 7 below:

Liquidity (%)	2014	%	2015	%	2016	%	2017	%
Liquidity Coverage Ratio	120,00	NA	146,00	26,00	146,00	0,00	133,00	-13,00
Interbank Ratio	52,24	-16,29	47,06	-5,18	51,33	4,27	40,69	-10,64
Loan to Deposit (LTD)	113,43	3,39	115,77	2,33	114,38	-1,39	109,15	-5,22
Change in %Points								

Figure 7: Development of liquidity (Source: S&P Global Market Intelligence)

Conclusion

Santander can look back on a year of favorable performance. Despite the low-interest environment in Europe, Santander was able to noticeably improve its net interest income in 2017 through its regional diversification of business activities in the different core markets of Central Europe, the United Kingdom, South America and the United States, as well as the bank's strong market position in its respective core markets. In addition, the bank was able to considerably increase its income from net fees and commissions. The bank was generally able to post stable profits in a multi-year comparison.

Due to the acquisition and integration of Banco Popular, the NPL-ratio and the total riskweighted assets increased, which had a negative impact on the bank's asset quality; however, the geographic diversification of Santander's business model has a positive impact on the quality of its assets.

The building up of equity should remain a priority in the coming years. The gap between Santander's capital ratios and those of the peer group has increased in recent years; retaining a larger share of profits could close this gap.

Due to its high systemic relevance and worldwide networking, the liquidity situation was guaranteed all times.

Brexit and the surrounding uncertainties regarding the relationship between the UK and the European Union may negatively impact Santander's earning potential. In the near future, growing regulation and the ECB's low interest rate policy pose a general challenge for the banking landscape; however, an interest rate reversal is becoming more likely amid rising inflation, and the ECB has announced the termination of its bond-buying program. In particular, a rapid increase in the interest rates would go hand-in-hand with an interest rate adjustment risk for banks, which have grown accustomed to long-term low-interest rates. Overall, the Santander Group has the potential to grow organically in the coming years and to improve its profitability with increased digitalization.

In a scenario analysis, the rating developed slightly better in the best case scenario and considerably worse in the worst case scenario. The ratings of bank capital and senior unsecured debt would behave similarly based on our rating system. These ratings are especially sensitive to changes in total equity and to the bank capital and debt structure in general.



Ratings Detail

Bank ratings

The bank ratings are dependent on a host of quantitative and qualitative factors. An improvement in either sub-category may result in a higher rating score.

LT Issuer / Short-Term / Outlook A / L2 / stable

Bank Capital and Debt Instruments Ratings

The ratings for bank capital and debt instruments are inter alia dependent on subordination and relative size of the instrument class, based on the long-term issuer rating of the bank.

Tier 1 (AT1):	BB+
Tier 2 (T2):	BBB-
Senior unsecured debt:	Α

Ratings Detail and History

Ratings			
Bank Capital und Debt Instruments			
Instruments	Rating Date	Publication Date	Ratings
Senior Unsecured / T2 / AT1	15.08.2018	16,08,2018	A / BBB- / BB+
Bank Issuer Ratings			
Туре	Rating Date	Publication Date	Ratings
LT Issuer / Outlook / Short-Term	15.08.2018	16,08,2018	A / stable / L2
Figure	8. Patings Dotail a	nd History	

Figure 8: Ratings Detail and History

Regulatory

Creditreform Rating AG was neither commissioned by the rating object nor by any other third parties for the rating. The analysis took place on a voluntary basis by Creditreform Rating AG and is to be described in the regulatory sense as an unsolicited rating.

The rating is based on publicly available information and internal evaluation methods for the rated bank. The quantitative analysis is based mainly on the latest annual accounts, interim reports, other investor relations information of the bank, and calculated key figures by S&P Global Market Intelligence subject to a peer group analysis were 25 competing institutes.

The information and documents processed satisfied the requirements according to the rating system of Creditreform Rating AG published on the website www.creditreform-rating.de. The rating was carried out on the basis of the rating methodology for unsolicited bank ratings as well as the methodology for the rating of bank capital and unsecured debt instruments in conjunction with Creditreform's basic document "Rating Criteria and Definitions".

On 15 August 2018, the rating was presented by the analysts to the rating committee and adopted in a resolution.

The rating result was communicated to Santander Group and the preliminary rating report was made available to it. There was no change in the rating score.

The rating is subject to one-year monitoring from the creation date (see cover sheet). Within this period, the rating can be updated. At the latest after one year, a follow-up is required to maintain the validity of the rating.

In 2011 Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration, Creditreform Rating AG (CRA) is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation.

Conflict of Interests

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or in approving credit ratings and rating outlooks.

In case of providing ancillary services to the rated entity, CRA will disclose all ancillary services in the credit rating report.

Rules on the Presentation of Credit Ratings and Rating Outlooks

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our 'Rating Committee' policy, all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, CRA has used following substantially material sources:

- 1. Transaction structure and participants
- 2. Transaction documents

3. Issuance documents

There are no other attributes and limitations of the credit rating or rating outlook other than those displayed on the CRA website. Furthermore CRA considers satisfactory the quality and extent of information available on the rated entity. In regard to the rated entity Creditreform Rating AG regarded available historical data as sufficient.

Between the time of disclosure of the credit rating to the rated entity and the public disclosure, no amendments were made to the credit rating.

The 'Basic Data' information card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In cases where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the rating report and indicates how the different methodologies or other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings and best-case scenario credit ratings are explained.

The date at which the credit rating was initially released for distribution and the date when it was last updated including any rating outlooks is indicated clearly and prominently in the 'Basic Data' card as a "rating action"; initial release is indicated as "initial rating", other updates are indicated as an "update", "upgrade" or "downgrade", "not rated", "confirmed", "selective default" or "default".

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