

Creditreform Covered Bond Rating

Banco Santander, S.A

Mortgage Covered Bond Program



Rating Object

Country Issuer	Spain	Repayment method	Hard Bullet
Cover pool asset class	Mortgage		Min (25,00%)
Legal framework	Spanish Mortgage Market Law	Overcollateralization	Current (109,29%)
Nominal value	EUR 40.449,20 m.		Committed (25,00%)
Cover pool value	EUR 84.657,43 m.		Fix (76,42%)
WAL maturity covered bonds	5,22 (Years)	Covered bonds coupon type	Floating (23,58%)
WAL maturity cover pool	14,91 (Years)		Other (0,00%)
Cut-off date Covered Pool Information:	30.09.2019		

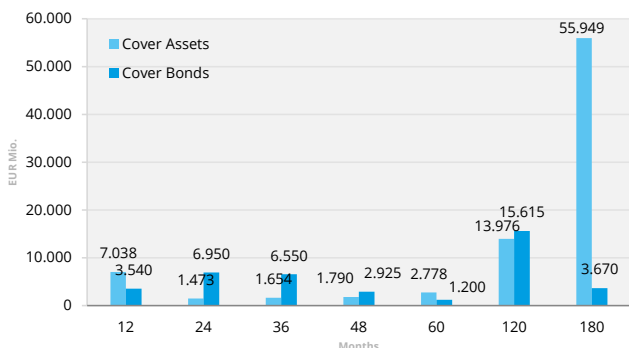
Rating Overview

Rating Summary		Credit Risk Metrics	
Issuer	Banco Santander, S.A	Metrics date	30.01.2019
LT Issuer Rating	A	Rating Case Default Rate	20,45%
ST Issuer Rating	L2	Rating Case Recovery Rate	54,54%
+Legal and regulatory framework analysis	+4 Notches	Expected Loss	9,30%
+Liquidity and refinancing risk	+1 Notch	Rating Case Breakeven OC	23,53%
= Rating after 1st uplift	AAA	<i>Program Key Counterparties</i>	
Cover Pool & cash flow analysis	A+	Servicer	NA
+ 2nd rating uplift	+/-0	Account Bank	NA
Rating covered bond program / Outlook	AAA / Stable	Sponsor	NA

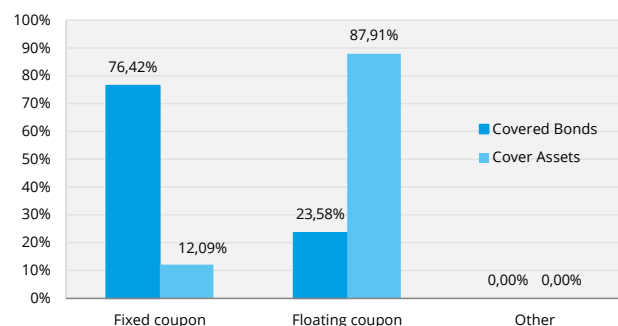
Cover Assets Composition

General Information		Property Type	
Cover Pool Balance	EUR 84.657,43 m.	Residential	EUR 62.456,57 m.
Average Seasoning	29,10 Months	Commercial	EUR 22.200,86 m.
Total number of exposures	826.424	Other	EUR 0,00 m.
Distribution by type of asset		Distribution by Loan size	
Mortgages	EUR 84.657,43 m.	Number of Commercial Loans	73.687
Public Sector	EUR 0,00 m.	Number of Residential Loans	752.737
Shipping	EUR 0,00 m.	Average Size Commercial Loans (000s)	301
Substitute Assets	EUR 0,00 m.	Average Size Residential Loans (000s)	83
Other	EUR 0,00 m.		

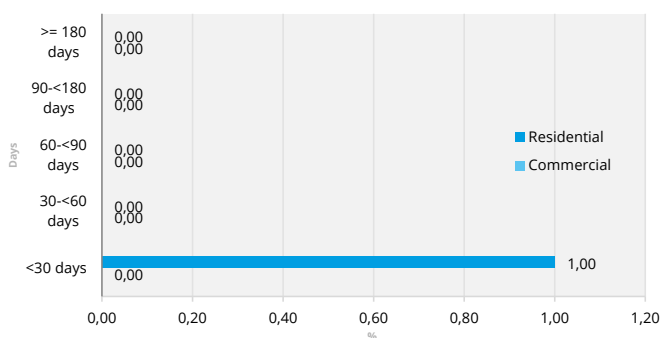
Asset-liability Profile



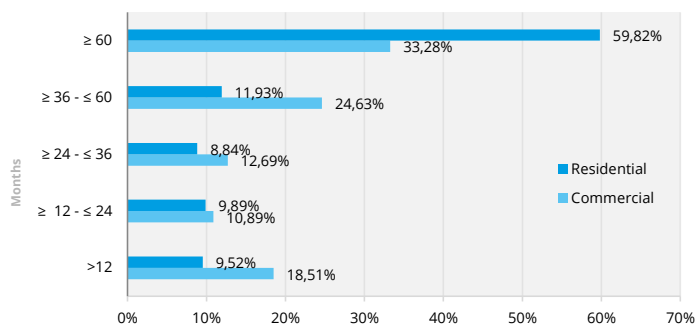
Interest Rate



Arrears Distribution



Seasoning Distribution



Creditreform Covered Bond Rating

Banco Santander, S.A

Mortgage Covered Bond Program

Creditreform
Rating

LTV Distribution Commercial Loans			LTV Distribution Residential Loans		
LTV	Nominal	% Loans	LTV	Nominal	% Loans
>0 - <=40 %	8.120,72	36,58%	>0 - <=40 %	19.308,83	30,92%
>40 - <=50 %	2.841,60	12,80%	>40 - <=50 %	8.772,99	14,05%
>50 - <=60 %	2.941,03	13,25%	>50 - <=60 %	8.895,88	14,24%
>60 - <=70 %	1.916,84	8,63%	>60 - <=70 %	8.435,62	13,51%
>70 - <=80 %	1.178,04	5,31%	>70 - <=80 %	6.249,96	10,01%
>80 - <=90 %	878,22	3,96%	>80 - <=90 %	2.977,40	4,77%
>90 - <=100 %	738,09	3,32%	>90 - <=100 %	1.946,74	3,12%
>100%	3.586,32	16,15%	>100%	5.869,17	9,40%

Currency Distribution			Loan Distribution by Regions (as % of total Mortgages)		
Currency	Covered Bonds	Cover Assets	Region	% Residential Loans	% Commercial Loans
EUR	40.449,20 m.	83.528,02 m.	Andalusia	18,55%	15,90%
AUD	0,00 m.	0,00 m.	Aragon	1,77%	2,67%
BRL	0,00 m.	0,00 m.	Asturias	1,52%	0,95%
CAD	0,00 m.	0,00 m.	Balearic Islands	2,81%	4,51%
CHF	0,00 m.	192,96 m.	Basque Country	3,25%	3,40%
CZK	0,00 m.	0,00 m.	Canary Islands	4,30%	4,52%
DKK	0,00 m.	0,00 m.	Cantabria	1,34%	1,12%
GBP	0,00 m.	72,54 m.	Castile La Mancha	2,60%	2,26%
HKD	0,00 m.	0,00 m.	Castile León	4,38%	3,70%
JPY	0,00 m.	0,00 m.	Catalonia	16,16%	16,76%
KRW	0,00 m.	0,00 m.	Ceuta	0,07%	0,06%
NOK	0,00 m.	0,00 m.	Extremadura	1,40%	1,10%
PLN	0,00 m.	0,00 m.	Galicia	6,13%	4,14%
SEK	0,00 m.	0,00 m.	La Rioja	0,39%	0,34%
SGD	0,00 m.	0,00 m.	Madrid	25,10%	30,53%
USD	0,00 m.	318,08 m.	Melilla	0,14%	0,06%
Other	0,00 m.	545,83 m.	Murcia	1,83%	2,01%
			Navarra	0,74%	0,95%
			Valencia	7,52%	4,99%

Swap Counterparties		
Name	Type of arrangement	LEI
NA	NA	NA
NA	NA	NA
NA	NA	NA
Swap Agreements		
Interest Rate Swap		NA
Currency Swap		NA

ISIN Lists

Issuer	ISIN	Coupon Type	Coupon Rate (%)	Issue date	Maturity date
Banco Santander, S.A	ES0413790298	Floating	EIEUR3M + 2	31.07.2013	30.10.2027
Banco Santander, S.A	ES0413790397	Fix	1,00	07.04.2015	07.04.2025
Banco Santander, S.A	ES0413790470	Floating	EIEUR6M + 0.77	30.03.2017	02.04.2024
Banco Santander, S.A	ES0413900434	Fix	0,13	21.06.2016	21.06.2021
Banco Santander, S.A	ES0413900517	Floating	EIEUR3M + 0.15	26.06.2018	26.06.2023
Banco Santander, S.A	ES0413790330	Floating	EIEUR3M + 2.5	17.02.2014	17.02.2026
Banco Santander, S.A	ES0413790421	Fix	0,88	01.10.2015	28.09.2021
Banco Santander, S.A	ES0413900087	Fix	4,00	07.04.2005	07.04.2020
Banco Santander, S.A	ES0413900384	Fix	0,75	09.09.2015	09.09.2022
Banco Santander, S.A	ES0413900467	Fix	0,45	20.12.2016	20.12.2021
Banco Santander, S.A	ES0413900541	Fix	0,40	20.11.2018	20.11.2023
Banco Santander, S.A	ES0413790264	Fix	5,28	03.07.2013	28.06.2029
Banco Santander, S.A	ES0413790454	Floating	EIEUR1Y + 0.07	27.10.2016	27.10.2021
Banco Santander, S.A	ES0413900194	Floating	EIEUR3M + 0.55	08.01.2010	10.01.2022
Banco Santander, S.A	ES0413900418	Fix	1,52	22.03.2016	22.03.2028
Banco Santander, S.A	ES0413900491	Fix	0,16	26.06.2017	26.06.2022
Banco Santander, S.A	ES0413790306	Floating	EIEUR3M + 2.25	31.07.2013	30.11.2028
Banco Santander, S.A	ES0413790405	Floating	EIEUR6M + 0.4	08.06.2015	08.06.2023
Banco Santander, S.A	ES0413790488	Floating	EIEUR6M + 1.04	26.04.2017	26.04.2027
Banco Santander, S.A	ES0413900368	Fix	1,13	27.11.2014	27.11.2024
Banco Santander, S.A	ES0413900442	Floating	EIEUR6M + 0.13	27.06.2016	27.06.2020
Banco Santander, S.A	ES0413900525	Fix	0,30	05.10.2018	05.10.2022
Banco Santander, S.A	ES0413790348	Floating	EIEUR6M + 1.6	14.03.2014	14.03.2022
Banco Santander, S.A	ES0413790439	Fix	1,00	03.03.2016	03.03.2022
Banco Santander, S.A	ES0413900129	Fix	3,88	06.02.2006	06.02.2026
Banco Santander, S.A	ES0413900392	Fix	1,50	25.01.2016	25.01.2026
Banco Santander, S.A	ES0413900475	Fix	0,13	26.06.2017	26.06.2022
Banco Santander, S.A	ES0413900558	Fix	0,88	09.05.2019	09.05.2031
Banco Santander, S.A	ES0405035009	Floating	EIEUR1Y + 3	17.07.2014	17.07.2028
Banco Santander, S.A	ES0413790280	Floating	EIEUR3M + 1.75	31.07.2013	30.09.2026
Banco Santander, S.A	ES0413790389	Floating	EIEUR6M + 0.75	29.09.2014	29.09.2022
Banco Santander, S.A	ES0413790462	Fix	1,13	23.12.2016	23.12.2024
Banco Santander, S.A	ES0413900293	Floating	EIEUR3M + 3.20	25.06.2012	25.06.2020
Banco Santander, S.A	ES0413900509	Floating	EIEUR6M + 0.16	29.11.2017	29.11.2029
Banco Santander, S.A	ES0413770100	Fix	4,55	26.04.2010	31.07.2020
Banco Santander, S.A	ES0413790322	Floating	EIEUR6M + 2.4	20.12.2013	20.12.2021
Banco Santander, S.A	ES0413790413	Fix	0,75	30.07.2015	29.09.2020
Banco Santander, S.A	ES0413900376	Fix	2,00	27.11.2014	27.11.2034
Banco Santander, S.A	ES0413900533	Fix	1,13	25.10.2018	25.10.2028
Banco Santander, S.A	ES0413790355	Fix	2,13	08.04.2014	08.10.2019
Banco Santander, S.A	ES0413790256	Floating	EIEUR6M + 2.70	05.04.2013	05.04.2021
Banco Santander, S.A	ES0413900160	Fix	4,63	04.05.2007	04.05.2027
Banco Santander, S.A	ES0413900400	Fix	2,04	29.02.2016	29.02.2036
Banco Santander, S.A	ES0413900483	Fix	0,03	26.06.2017	26.06.2021
Banco Santander, S.A	ES0413900566	Fix	0,25	10.07.2019	10.07.2029

Data Definitions

The data is presented with a cut-off date. Following the clarification regarding the source of information:
 Issuer: Issuer source of information are all available public information, i.e. Investor Reports, Harmonised Transparency Templates "HTT", National Transparency Templates "NTT", Prospectus etc. Not reported or non available information will be labeled as "NA".

Field Name	Source	Definition
Cover pool asset class	Issuer	The asset type in the cover pool (public sector assets or mortgage assets)
Legal framework	CRA	The set of legislative and regulatory rules of the respective jurisdiction that regulates the covered bonds (CB) program
Nominal value	Issuer	The total amount of outstanding covered bonds as of cut-off date expressed in millions
Cover pool value	Issuer	Aggregate value of all assets in the cover pool as of cut-off date expressed in millions
WAL maturity covered bonds	Issuer	The weighted average remaining maturity of all outstanding covered bonds in years
WAL maturity cover pool	Issuer	The weighted average remaining maturity of all outstanding covered assets in years
Repayment method	Issuer	Hard Bullet: Covered bonds are repaid on the maturity date which cannot be extended Soft Bullet: The maturity date of the covered bonds can be extended by a fixed period Conditional pass-through (CPT): Covered bonds with a scheduled maturity date, and an extension mechanism defined by certain conditions
Overcollateralization	Issuer	Current OC: The proportion of cover assets that exceeds the proportion of currently outstanding covered bonds, calculated as $(\text{Cover pool value} / \text{outstanding covered bonds} - 1) * 100$ Min OC: The OC level that the issuer must maintain according to the respective CB legislation Committed OC: The minimum OC level that the issuer has committed to maintain
Covered bonds coupon type	Issuer	Type of interest rate paid on covered bonds, expressed as a percentage of bond's face value
LT Issuer Rating	CRA	Long-term ratings assess the default risks for each category of a bank's financial instruments with a residual term-to-maturity of more than one year
ST Issuer Rating	CRA	Short-term ratings assess the default risks for each category of a bank's financial instruments with a residual term-to-maturity of less than one year
Legal and regulatory framework analysis	CRA	A qualitative assessment of legislative and regulatory rules of the covered bonds program
Liquidity and refinancing risk	CRA	A qualitative assessment of regulatory requirements for liquidity and refinancing risk of the covered bonds program
First rating uplift	CRA	The rating after adding up the notches from Legal and regulatory framework analysis and Liquidity and refinancing risk with LT Issuer rating
Cover pool and cash flow analysis	CRA	The quantitative assessment of the cover assets and covered bonds at different rating-level stressed scenarios
Second rating uplift	CRA	The rating after adding up the notches from cash-flow analysis with 1st rating uplift (only effective if the rating from cash-flow analysis is higher than the 1st rating uplift)
Metrics date	CRA	The date on which CRA assigned the initial / follow-up rating of the covered bond program
Rating Case Default Rate (RDR)	CRA	Stressed default rate of the cover assets represented by the base case stressed scenario
Rating Case Recovery Rate (RRR)	CRA	Stressed recovery rate of the defaulted assets represented by the base case stressed scenario
Expected Loss	CRA	Stressed loss rate of the cover assets represented by the base case stressed scenario. The expected loss rate has been calculated as $[\text{RDR} * (1 - \text{RRR})]$ [%]
Rating Case Breakeven OC	CRA	The required stressed OC level compatible with the base case rating
Average Seasoning	Issuer	Average length of the loans from the origination date to the cut-off date in months
Loan Size	Issuer	Average size of the loans (i.e. Total value of cover assets / Number of loans)
LTV	Issuer	The loan-to-value (LTV) is the ratio of a loan to the value of the property securing the loan
LEI	CRA	Legal Entity Identifier (LEI) enables unique identification of legal entities in financial transactions
Arrears Distribution	Issuer	The distribution of arrears of the cover assets with respect to each asset class
Seasoning Distribution	Issuer	The distribution of seasoning of the cover assets with respect to each asset class
Asset liability Profile	CRA	The maturity structure of the cover assets and liabilities
% Residential Loans	Issuer	Outstanding value of loans that are secured by the residential property expressed as % of total outstanding loans in the cover pool
% Commercial Loans	Issuer	Outstanding value of loans that are secured by the commercial property expressed as % of total outstanding loans in the cover pool
Fixed Coupon	Issuer	All assets and liabilities in the covered bond program that yield a fixed interest rate
Floating Coupon	Issuer	All assets and liabilities in the covered bond program that have variable interest rates
EIEURxM	Reuters	Euro x Month EURIBOR
EURSWExY	Reuters	Euro x Year Interest Rate Swap Fixing

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