Banco Santander

The four-year financial analysis (2016-2019) has been performed quarterly on Santander Group, a multinational commercial bank based in Madrid being the 16th-largest banking institution in the world (with an efficiency ratio around 47,00% in 2019).
Furthermore, it is important to take in consideration the change in accounting regulation (from IAS39 to IFRS9) in January 2018 that has some impact on assets and liabilities interpretation (A1).

1. Balance Sheet analysis

1.1. Asset side

We can observe over the period that the Group's liquidity remains at comfortable levels, well above new regulatory requirements. (The liquidity coverage ratio is well above 100%).
Total loans (along with total deposits) increased over the four years (+19,20%), related to the increase of the clientele basis.
We can highlight the fact that in 2017 and 2018 considerable changes have occurred, reciprocally in terms of Group expansion and in the regulatory framework.
In particular, in June 2017 Group Santander announced the acquisition of *Banco Popular*: even though loans remained stable in the fourth quarter, in the following fiscal year landings grew substantially, resulting in an increase of 24,31% in net property and plants.
It is also noteworthy that, from 2016 to 2017, debt securities decreased by 15,65% due to low debt securities profitability and concerning total investment, Santander Group holds a portfolio of securities which totalled €310.650 million in 2019 (€288.721 in 2016).

1.2. Liability and Equity side

On the liabilities side, we can note that customer deposits amounted to €824.365 million in 2019, 19,28% higher than 2016 (€691.111 million). This expansion, which was experienced in all units around the world, was a result of the Group's strategy aiming at boosting customers' loyalty. In particular, there is a strong increase in the customer deposits of 71,84% between June and September 2017, related to the acquisition of Banco Popular. The net loan-to-deposit ratio stayed at a very comfortable level (below 120%) through the years, reflecting the retail nature of the balance sheet. It stood at 114,30% in December 2019, compared to 113,12% in December 2018. This stability shows a balanced and constant growth between assets and liabilities.
Concerning the customer funds (including customer deposits, time deposit and mutual funds; A2 and A3), they are largely contributing to the increase of the total funds from 2016 to 2019: demand deposits increased by 31% and mutual funds by 22%. The strategy of Santander was to maintain the traditional retail banking funds.
The total equity increased from 2016 to 2018 and decreased in 2019 due to the decrease of the Santander Group's profit.

2. Income Statement

Our financial analysis considers both the underlying income statement and the income statement (that follows regulations for the computation of the financial ratios). The underlying profit to the Group is a calculation made internally focusing on regular accounting cycle events and excluding one-time charges or infrequent occurrences. That is shown through the net capital gains and provisions (A4). As it can be globally seen (A5), the underlying profit shows a growth from 2016 to 2019 of 24,63% while the attributable profit to the Group has just increased by 5,01%. Indeed, in 2019 the attributable profit to the Group was €6.515 million, down 16,58% from 2018, affected by €1.737 million of net results that are outside the ordinary course performance of the business. Excluding these, underlying attributable profit amounted to €8.252 million, 2,33% higher than the

previous year. Therefore, the total income reached a record high of €49.494 million (+12,46% related to 2016 with year-to-year growth). This performance reflected Santander's greater loyal and digital customer base, the increased activity and an active management of spreads.
It is noteworthy the expansion of the underlying profit before taxes that for the analyzed four-year period saw an increase of 32,25% (from €11.288 to €14.929 million) backed by the rise in loyal and digital customers, increased business volumes (loans and deposits) and management of spreads. The greater expansion was experienced between 2016 and 2017 when the underlying EBIT increased by 20,04%. In effect, 2017 is a record year in gross income, with double digit growth in net interest income (+10,32%) and fee income (+13,92%). Concerning the operating expenses the income statement shows that during the four-year period these have increased by 10,40% due to higher investments in transformation and digitalization but the Group continued to improve its operational capacity while trying to optimize the cost base (for example operating expenses in real terms decreased by 0,6% from 2017 to 2018).

3.1 Financial ratios: Key profitability ratios

3.1.1 Net Interest Margin (NIM)

During the four-year period considered the NIM value remained stable, due to an almost equal increase in its two components: total assets (+13,71% due to greater loans and advances to customers and customer deposit volumes) and net interest income (+13,49% due to developing markets, and to a lesser extent, mature markets, both underpinned by greater volumes). Santander Group has a high NIM showing relatively high earnings on interest compared to outgoing expenditures it pays consumers.

3.1.2. RoE and RoA

Through all 2016-2018 years, we observe an increase in RoE, which can be explained mainly by the rise in net income due to the evolving of Santander Group and opening new branches in different countries. During 2019, net interest income was mainly improved (+13,49% from 2016), as non-performing asset (NPA) ratios declined and credit growth accelerated. During 2019 in both Net interest margin and Net non-interest margin decreased impacting the attributable profit to the group, which declined RoE in 2019.
Similar explanation can be provided for RoA with its growth from 2016 to 2018 and decrease during 2019. Consolidate profit decreased (2019) since PA and NPA decreased with constant increase of average total assets providing decrease in RoA.

3.1.3. Equity multiplier

Equity multiplier is high (12,30 in 2019) which implies a high debt portion of total assets which go above 90%. Even if this can be a normal value for banks, Santander Group needs to maintain its equity portion (~8% of total asset) level above required levels. The diagram with the Debt-Equity portion of Total Assets can be found in the appendix A6.

3.2. Solvency/Liquidity ratios

3.2.1. Liquidity coverage ratio

As of December 2016, the Group’s LCR ratio stood at 146%, comfortably exceeding the regulatory requirement (liquidity reserve amounted to €265.913). In 2017 LCR decreased to 133% due to higher total net cash outflow. In the following years flacutated (158% in 2018 and 147% in 2019) due to movements in the total net cash outflow and in stock of high quality liquid assets. Overall, Santander had a high level of liquidity to cover short term volatility in deposits withdrawal.

3.2.2. Loan to deposit ratio

LTD ratio constantly increased between 2017 and 2019 years after a desgrowth between 2016 and 2017 due to the higher variation in deposits (+12,53%) rather than in loans (+7,39%). Loans (assets) during all four years are higher than deposit (liability) inflow (positive signal in attracting and retaining customers). By LTD and LCR underlying Santander's ability to cover both loans, money outflow and deposits variation withdrawals with high quality liquid asset amount (HQLA).

3.2.3. Tier 1 Leverage Ratio

For G-SIB, regulatory requirements establish a minimum requirement of 13,50% of risk-weighted assets, or 5% of the leverage ratio exposure, whichever is higher. Therefore, Santander with its leverage ratio of constantly higher than 5% should be safe from domino effect in times of crisis (A7).

3.2.4. Common equity ratio (CET1):

Complying to regulatory standards Santander managed to maintain the CET1 ratio between 11,00% and 12,00% through all underlined years. Therefore, the bank is well capitalised, being able to face unforeseen risks and maintaining growth opportunities (A7).

4. Risks management analysis

4.1. Credit risk

The nature of the core business of the Group is strongly interlinked with the credit risk, which represents the most relevant one. It must be highlighted that the credit risk includes both components of exposure and consumption as well as counterparty risk, country risk and sovereign risk, mitigated through a process of customer and third-party credit rating, planning, monitoring and anticipation, and eventually of recovery management. As per appendix (A8) in December 2019, the performance can be summarised as follows: credit risk with customers increased by 6,1% vs. 2018; exposures, together with lower non-performing loans (NPLs) of €33.799 million (-5,3% vs. year end 2018) reduced the Group's NPL ratio to 3,32% (vs 3,73% in 2018).

4.2. Market risk

Group Santander recognizes market risk both trading and structural risk. The risk factor which is majorly impacting the Group performance is the interest rate risk, conditioning the value of positions in the trading book. Among other risks accounted in the market risk management the risk related to inflation rates, exchange rate, stock prices and credit spread can be found. Several tools are put in place pursuing the goal of having adequate risk measures in compliance with regulatory requirements. The main methodologies include Value at Risk (VaR), Stressed VaR (sVaR), Expected Shortfall (ES) and Scenario Analysis (A9).

4.3. Liquidity risk

The risk accounts for the lack of the Group of liquid financial resources to meet its obligations when they fall due or can only be obtained at high cost. In-depth balance sheet analysis and measurement of liquidity risk are put in place to meet demands from regulators to strengthen banks' risk management and control systems. The different methodologies include liquidity buffers, Liquidity coverage ratio (LCR), Wholesale gap metric, Asset encumbrance metrics, Other liquidity indicators and Liquidity scenario analysis.

Appendix

A1. From Santander website: Annual report, year 2018.

"Due to the application of IFRS 9 from 1 January 2018 and the decision to not restate the accounts, as permitted in the regulation, the balance sheet from the December 2018 is not comparable with previous reporting periods. As such, for comparative purposes, and given the portfolio reclassification and the corresponding nomenclature changes were not significant, the 2017 accounts have been reorganised in accordance with the new aims and valuation methods. The initial impact as of 1 January 2018 was a 1.8% increase in fair value portfolios and a 0.8% decrease in portfolios valued at amortised cost, including a EUR 2 billion increase in impairment losses. The resulting decrease in equity was just under EUR 1.5 billion:"

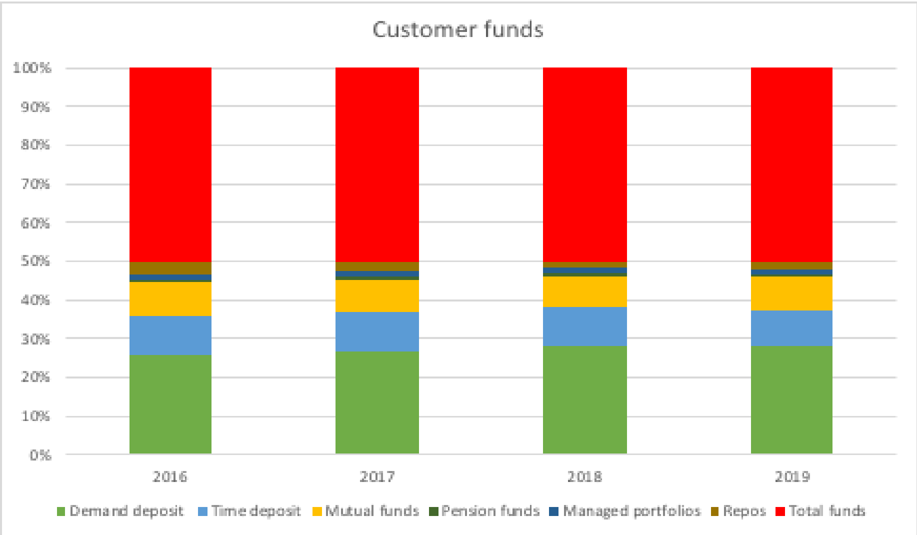
The objective of IFRS 9 is to establish principles for the financial reporting of financial assets and financial liabilities that will present relevant and useful information to users of financial statements for their assessment of the amounts, timing and uncertainty of the entity's future cash flows.

A2.

	2016	2017	2018	2019
Demand deposit	448.161	525.072	548.711	588.534
Time deposit	174.034	199.649	199.025	196.920
Mutual funds	147.416	165.413	157.888	180.405
Pension funds	11.298	16.166	15.393	15.878
Managed portfolios	23.793	26.393	26.785	30.117
Repos	60.217	53.009	32.760	38.911
Total funds	864.919	985.702	980.562	1.050.765

	2016	2017	2018	2019
Demand deposit	52%	53%	56%	56%
Time deposit	20%	20%	20%	19%
Mutual funds	17%	17%	16%	17%
Pension funds	1%	2%	2%	2%
Managed portfolios	3%	3%	3%	3%
Repos	7%	5%	3%	4%
Total funds	100%	100%	100%	100%

A3.



A4. Net capital gains and provisions

In 2019, net capital gains from the sale of Santander's stake in Prisma of EUR 136 million, net capital gains of EUR 693 million related to the agreement with Crédit Agricole S.A. to integrate the custody businesses, net positive results of EUR 551 million due to tax reform in Brazil, deterioration of goodwill ascribed to the UK for a net amount of EUR -1,491 million, net capital losses of EUR -405 million related to real estate assets and stakes (Spain), restructuring costs for a net impact of EUR -864 million, PPI provisions for a net amount of EUR -183 million and net charge of EUR -174 million related to intangible assets and other. (For a total of EUR -1.737 million).

In 2018, restructuring costs: the net impact of EUR -255 million on profit relates to restructuring costs in connection with the integration of Grupo Banco Popular, as follows: EUR -280 million in Spain, EUR -40 million in the Corporate Centre and EUR 20 million in Portugal and badwill in Poland for the integration of Deutsche Bank Polska's retail and SME businesses for a impact of EUR 45 million.

In 2017, integration costs (Popular: EUR -300 million and Germany: EUR -85 million), charges for equity stakes and intangible assets (EUR -130 million), capital gains from the disposal of the stake in Allfunds Bank (EUR 297 million), USA fiscal reform (EUR 73 million), goodwill charges (EUR -603 million) and in the US provisions for hurricanes, increased stake in Santander Consumer USA and other (EUR -149 million).

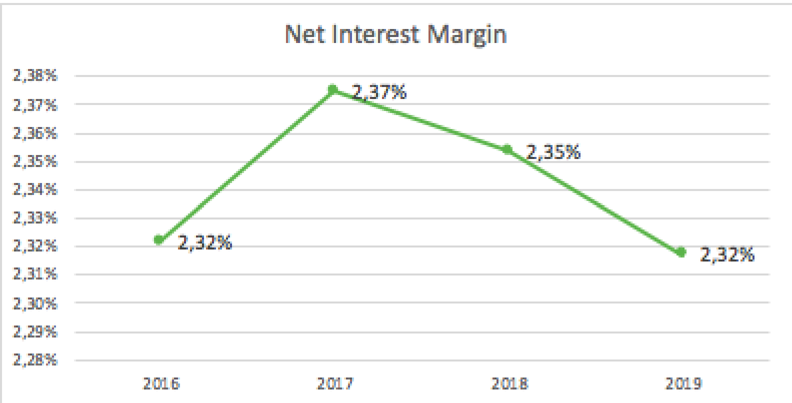
In 2016, capital gains from the disposal of the stake in Visa Europe (€227 million), restructuring costs (-€475 million), PPI (-€137 million) and restatement of Santander Consumer USA (-€32 million).

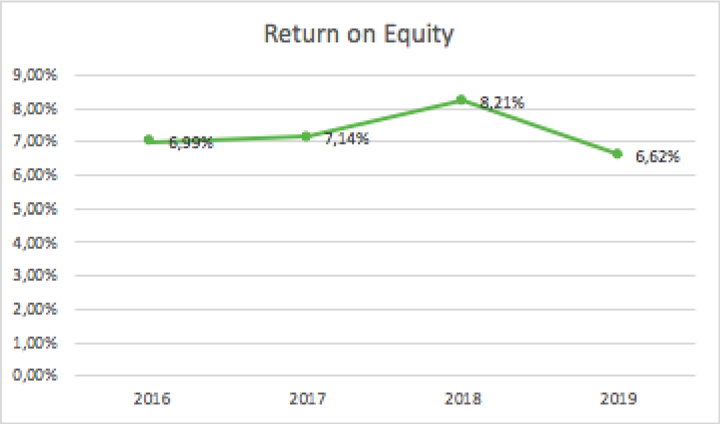
Source: Annual Financial Reports (2016, 2017, 2018, 2019) of Santander (website).

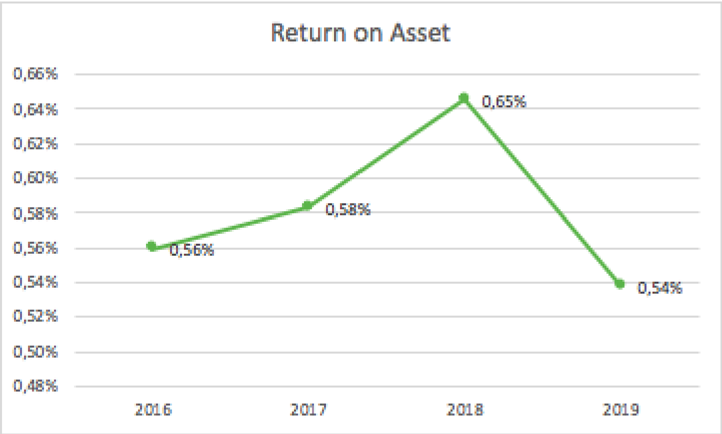
A5. Summarized Income Statements in million

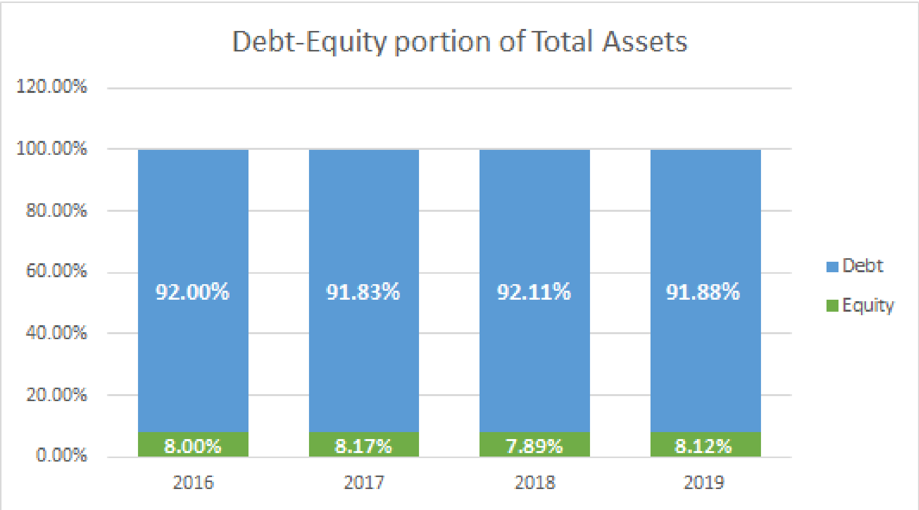
	2016	2017	2018	2019
Underlying Attributable profit to the Group	**6.621**	**7.516**	**8.064**	**8.252**
Net capital gains and provisions	**-417**	**-897**	**-254**	**-1.737**
Attributable profit to the Group	**6.204**	**6.619**	**7.810**	**6.515**

A6.




Return on Equity
9,00%
8,00%
7,00%
6,00%
5,00%
4,00%
3,00%
2,00%
1,00%
0,00%
6,99%
7,14%
8,21%
6,62%
2016
2017
2018
2019


Return on Asset
0,66%
0,64%
0,62%
0,60%
0,58%
0,56%
0,54%
0,52%
0,50%
0,48%
0,56%
0,58%
0,65%
0,54%
2016
2017
2018
2019

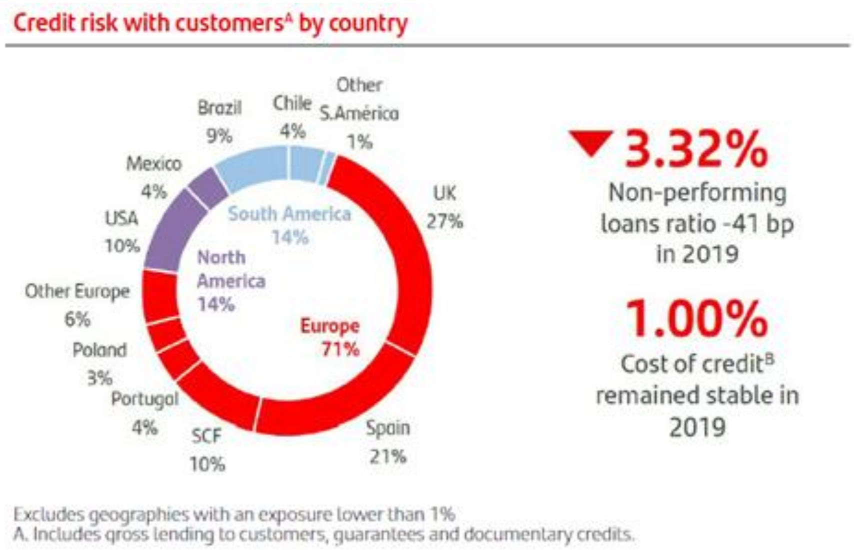

Debt-Equity portion of Total Assets
120.00%
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
92.00%
91.83%
92.11%
91.88%
8.00%
8.17%
7.89%
8.12%
2016
2017
2018
2019
Debt
Equity

A7. The table below shows the minimum capital conservation standards for the CET1 risk-weighted requirements and Tier 1 leverage ratio requirements of a G-SIB in the first bucket of the higher loss-absorbency requirements (ie where a 1% risk-weighted G-SIB capital buffer applies).

CET1 risk-weighted ratio	Tier 1 leverage ratio	Minimum capital conservation ratios (expressed as a percentage of earnings)
4.5–5.375%	3–3.125%	100%
> 5.375–6.25%	> 3.125–3.25%	80%
> 6.25–7.125%	> 3.25–3.375%	60%
> 7.125–8%	> 3.375–3.50%	40%
> 8.0%	>3.50%	0%

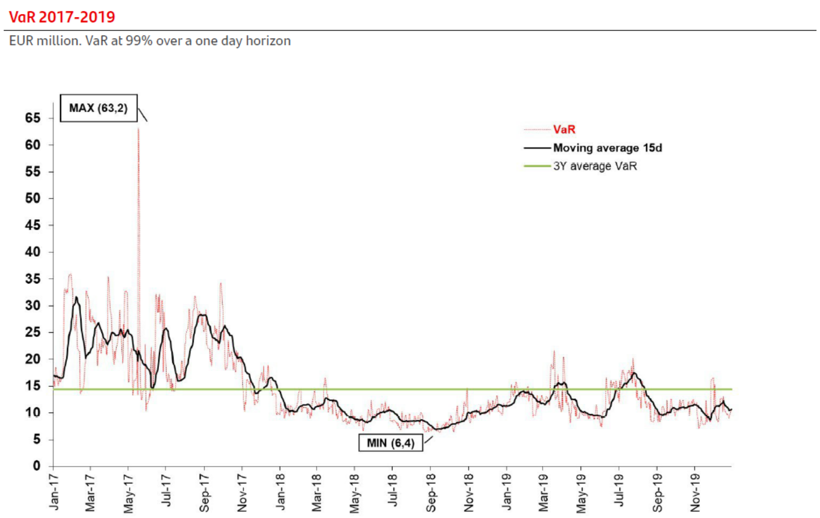
Source: “High-level summary of Basel III reforms” by Basel Committee on Banking Supervision

A8. Credit risk



Source: Annual Financial Reports (2019) of Santander (website).

A9. Market risk



Source: Annual Financial Reports (2019) of Santander (website).

References:

- Group Santander annual reports https://www.santander.com/en/shareholders-and-investors/financial-and-economic-information/annual-report
- Hübner G., Banking course Master 1 HEC-Liège