Asset securitisation: Since 1993, the group has been very active on this market and has participated in various securitisation programs, in some cases together with other highly solvent entities, granting mortgage loans, loans to small and medium sized enterprises, consumer loans and credit rights derived from financial lease agreements.

There are currently 35 outstanding asset securitisation operations (including the securitisation of Banco Guipuzcoano, Banco CAM, BMN, Banco Gallego and TSB), although part of the bonds issued were withheld by the entity as liquid assets eligible for financing operations with the European Central Bank, the rest of the bonds were placed on capital markets. At the closing of 2015, the balance of securitisation bonds placed on the market was of €6,974.4million euros.

For efficiency reasons, during 2015, seven securitisation operations with relatively small outstanding balances were cancelled early (see further details on securitisation funds in Schedule II of the memorandum).

Overall, in 2015 market performance has been positive, although there have been various episodes of volatility that have resulted in tensions and even the closing of markets over relatively extended periods of time. The system as a whole has not seen the refinancing of a large part of the market maturities. This, combined with the ECB stimulation measures over the last quarter of 2014, has caused an excess of liquidity.

Banco Sabadell has taken part in these ECB stimulation measures by attending targeted four-year liquidity auctions (TLTRO or Targeted Longer-term refinancing operations) in both 2014 and 2015, for a total amount of €11 billion. The entity has also participated in the Covered Bond Purchase Program (CBPP3) implemented by the European Central Bank.

The excess of liquidity in the market, together with a scenario of negative short-term interest rates, have driven down prices in repo financing compared to other alternatives. At 31 December 2015, the net amount of repo financing in nominal terms amounted to€ 5,303 million.

### Liquid assets

In addition to these sources of funding, Banco Sabadell also maintains a liquidity buffer in the form of liquid assets to face any possible liquidity needs (T6).

In the case of TSB, the first line of liquidity at 31 December 2015, consists mainly of gilts amounting to €1,718 million and an excess of reserves at the Central Bank of England (BoE) of €3,383 million.

There are no significant amounts of cash and cash equivalents that are not available for use by the group.

In addition to the first line of liquidity, the entity maintains a buffer of mortgage assets and loans to public administrations eligible as collateral for mortgage covered bonds and territorial bonds, respectively, which at the end of 2015 provided an additional €7,376 million in terms of the capacity to issue own new bonds eligible as collateral to be discounted at the ECB. At the closing of 2015, available liquidity amounted to  $\notin$ 29,623 million in cash, corresponding to the amount of the first line of liquidity plus the capacity to issue mortgage covered bonds and territorial bonds of the entity at year end.

## Fulfilment of regulatory ratios

The Banco Sabadell group has included, as part of its liquidity management, the monitoring of the new shortterm Liquidity Coverage Ratio or LCR and the Net Stable Funding Ratio or NSFR, reporting to the regulator on the required information on a monthly and quarterly basis, respectively. The measurement of liquidity based on these metrics forms part of the liquidity risk control in the set of the LMUs.

In terms of the LCR ratio, since 1 October 2015, the statutory minimum payment is 60%, a level that is widely surpassed by all LMUs of the entity, with the cases of TSB and Banco Sabadell España being noteworthy, with high levels of LCR. At the group level, the LCR ratio of the entity has been permanently and stably positioned over the year at well above 100%.

As regards the NSFR ratio, it is still in the analysis and final definition stage. The date set for its implementation is January 2018, and just as for the LCR ratio, a period of gradual application is planned. The bank has nonetheless already commenced the monitoring of this ratio as a liquidity metric at the LMU level.

Given the funding structure of the entity, with a high level of customer deposits, and the majority of the market financing being focused on the medium-/long-term, the entity has remained stable at levels that are well above 100%.

#### **Market risk**

Market risk arises from the possibility of incurring losses in the market value of positions maintained in financial assets, due to changes in risk factors which affect its prices and shares, its volatilities and their interconnections (for example: equity, interest rates or exchange rates).

These positions that generate market risk are normally kept for the treasury intermediation or capital markets management business or to maintain the entity's own positions of a discretionary nature.

It may also arise simply by maintaining global balance sheet positions (also known as structural positions) that in net terms are left open. In the latter case, the group uses the market risk management and monitoring system to treat the structural exchange rate risk position. Other market risks of a structural nature, affected by such factors as interest or liquidity rates, are addressed in the relevant sections.

The market risk acceptance, management and control system is based on the establishment of limits for expressly allocated positions and the approval of transactions

	2015
Cash(*) + Net interbank position	4,016
Available in policy	4,349
Pledged assets in policy(**)	15,899
Drawn balance in Banco of Spain policy (***)	11,550
ECB eligible assets not included in policy	10,785
Other ECB ineligible marketable assets (****)	3,097
Total available liquid assets	22,247

(\*) Surplus reserves in central banks.

(\*\*) At market value and after applying ECB reductions on monetary policy transactions.

(\*\*\*) Of which in 2015, €11,000 correspond to ECBryear TLTRO auctions (Targeted longer-tterm refinancing operations).
(\*\*\*\*) At market value and after applying reductions on the Liquidity Coverage Ratio (LCR). Includes fixed income, which is considered to be a high-quality and high-liquidity asset in terms of its LCR (HQLA) and other marketable

which is considered to be a high-quality and high-liquidity asset in terms of its LCR (HQLA) and other marketab assets from different companies in the group.

in each business unit, such that different management units have the obligation to manage their positions within the agreed limits at all times and their transactions are subject to approval by the risk department.

The changes in commodities prices have not had an impact in 2015, as the group maintains residual exposures, both direct and in underlying assets.

### **Trading activity**

Market risk is measured using the VaR and stressed VaR methodology, which allows the harmonisation of the risks in various types of financial market operations.

The VaR provides an estimate of the maximum potential loss posed by a position due to an adverse but normal movement of any of the identified parameters influencing market risk. This estimate is expressed in monetary terms and refers to a specific date, a specified level of confidence and a specific time horizon. The various market risk factors are taken into consideration for this purpose.

The feasibility of the VaR methodology used is verified using back testing techniques, used to ensure that the VaR estimates are within the considered confidence level.

Stressed VaR is calculated in the same way as the VaR but with a historical window of variations of the risk

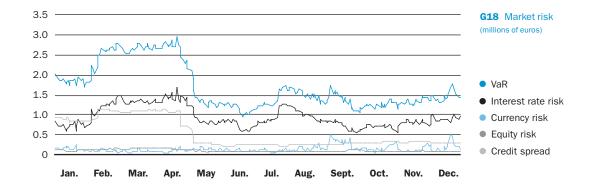
factors in stressed market conditions. Its monitoring is complemented with specific simulation exercises and adverse market scenarios (stress testing), which analyse the impact of various historical and theoretical scenarios on the portfolios, and the calculation of management results, used to monitor stop-loss limits.

T6

Market risk is monitored on a daily basis and reports on current risk levels and on compliance with the limits assigned to each unit established by the Risk Control Committee are sent to the control bodies (based on nominal amounts, VaR or sensitivity limits, as applicable). This makes it possible to keep track of changes in exposure levels and measure the contribution of each risk factor.

Risk control of this kind is supplemented by special simulation exercises and adverse market scenarios (stress testing), which provide the positions' risk profile. Therefore, the use of this methodology does not imply any restriction on the ability to incur losses that exceed the established limits, as significant changes in market conditions may exceed the established confidence levels. The reliability of the VaR methodology is validated by back testing techniques that are used to verify that VaR estimates are consistent with the specified confidence level.

Market risk by trading activity incurred in terms of the VaR at day 1 with 99% confidence for 2015 is shown in figure G18.



# Structural risks concerning interest rates and exchange rates

## Structural interest rate risk

Structural Interest rate risk arises from changes in market rates of interest that impact on different balance sheet assets and liabilities, which present temporary mismatches in the maturity or repricing dates, as is common in banking. Exposure to this risk in the event of unexpected interest rate movements may ultimately feed through into unforeseen changes in interest margins and economic value.

The metrics developed for the control and monitoring of structural interest rate risk in the group are aligned with the market best practices and are consistently implemented throughout the Balance sheet Management Units (BMUs) and at the heart of each of the local assets and liabilities committees. The diversification effect between currencies and BMUs is taken into account when presenting key figures at the global level.

The group therefore has two main objectives in terms of interest rate risk management:

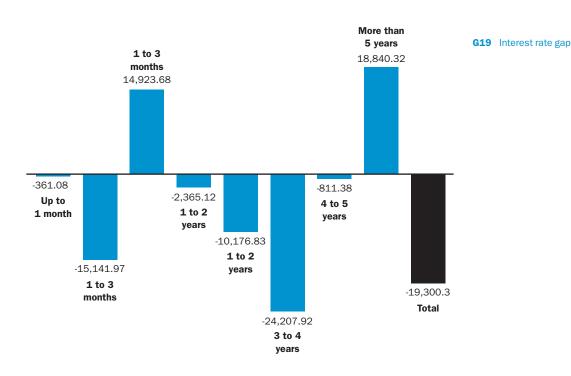
- Optimise the net interest income.
- Maintain the economic value of the balance sheet.

To accomplish these objectives and at the same time stay within the limits set for risk appetite, an active management of the balance sheet is used both through the development of commercial strategies providing natural hedges, and the contracting of market operations seeking to minimise the risk level assumed. The set of risk sources taken into account in the control and monitoring process depends on the materiality of each in the various BMUs and is as follows:

- Repricing risk: is that arising as a result of the different rate at which assets and liabilities renew their interest rates.
- Yield curve risk: is that arising as a result of the shifts of various different types that may be experienced by the market interest rates curve.
- Basis risk: is that arising from the unequal or disparate movements that may be seen in the various interest rate curves to which the sensitive assets and liabilities on the balance sheet are subject.
- Optionality risk: is that arising as a result of the contractual characteristics of certain products and instruments on the balance sheet. The optionality may be explicit, when clearly established in terms of an observable or implicit market variable, when it depends on possible considerations of customers. The latter case encompasses the prepayment and early withdrawal options.

The metrics used are as follows:

 Interest rate gap (G19), a static measure showing the distribution of maturities and repricing of sensitive items on the balance sheet. For amounts with no contractual maturity, estimated expected maturities based on the experience of the entity have been used, establishing assumptions of stability and remuneration according to product type.



- Net interest income sensitivity: measures the short and medium-term impact of fluctuations in interest rates. It is obtained by comparing the net interest income over a one-year period in the baseline scenario, which is obtained from implicit market rates, and that obtained from parallel and instantaneous movements of  $\pm 100$  basis points (\*), always considering the most unfavourable scenario.
- Economic value sensitivity: measures the long-term impact of interest rate fluctuations. It is obtained by comparing the economic value of the balance sheet in the baseline scenario and that of parallel and instantaneous movements of  $\pm 100$  basis points (\*), always considering the most unfavourable scenario.
- Other statistical and econometric models estimating correlations between various market variables or between these and the historical behaviour of the customer base.

Table T7 shows the interest rate risk levels in terms of sensitivity of the main foreign currencies of the group at the end of 2015.

Derivatives from financial markets are used as risk hedging instruments, mainly interest rate swaps (IRS), which are considered as hedging instruments for accounting purposes. Two different forms of macro-hedging are used:

- Macro-hedging of interest rates of cash flows, the purpose of which is to reduce the volatility of the net interest income as a result of interest rate variations, for a one-year time horizon.
- Macro-hedging of interest rates at fair value, the purpose of which is to maintain the economic value of the hedged items, consisting of assets and liabilities at a fixed interest rate.

The balance sheet items recorded at amortised cost do not present any valuation adjustments associated to fluctuations in interest rates. However, for financial assets classified as Financial assets available for sale recorded at fair value, changes in risk premiums have had a more significant impact than the fall in interest rates that has taken place during this year.

%

Immediate and parallel increase of 100 bp		
Interest rate sensitivity	Impact on net interest income	Impact on net interest income
EUR	(0.1)	(1.1)
GBP	2.0	(0.9)
USD	(0.2)	(1.8)

\* Due to the current level of market interest rates, in the downturn scenario, a maximum displacement of 100 basis points is used in each term, so that the resulting rate is always greater than or equal to zero.

Т7

## Structural exchange rate risk

This risk arises from changes (if any) in the market exchange rates between currencies, which may generate losses in financial investments or in permanent investments in offices and subsidiaries abroad which use currencies other than the euro.

Exchange rate risk is monitored on a daily basis and reports on current risk levels and on compliance with the limits assigned by the Risk Committee are sent to the risk control bodies.

The Financial Department, through the ALCO, designs and implements the strategies for hedging the structural position in foreign currency with the priority objective of minimising the negative impact on capital ratios -CET1- of fluctuations in exchange rates.

The Market Risk Department and the Audit and Control Department oversee compliance with the objectives and policies of the group and their effectiveness, reporting to the Risk Committee and the Audit and Control Committee, respectively.

The exchange value in euro of assets and liabilities in foreign currencies maintained by the group at 31 December 2015, classed in line with their nature, is shown in figure G20.

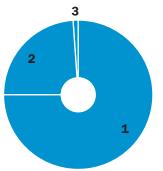
The net position of foreign currency assets and liabilities includes the entity's structural position valued at historic exchange rates which includes €1,656 million corresponding to permanent investments in GBP and €734 million corresponding to permanent investments in USD. The net total of assets and liabilities valued at the fixing exchange rate is covered by forwards operations and currency options, following the group's risk management policy and resulting in a total net open position of €58 million at 31 December 2015.

At year-end 2015 the equity exposure sensitivity to a 1% depreciation in exchange rates against the euro of the main currencies to which exposure exists amounted to  $\notin$ 21 million, of which 60% pertains to the British Pound Sterling, 36% pertains to the US Dollar and the remaining amount pertains to other currencies.

### **Operational risk**

Operational risk is defined as the risk of loss resulting from failures or inadequacies in people, processes and systems or from unforeseen external events. This definition includes reputational risk (which in turn includes behavioural risk), technological risk and model risk.

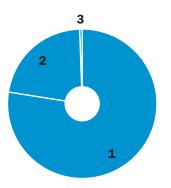
Management of operational risk is decentralised and devolved to process managers throughout the organisation. All of those processes are identified on a corporate process map, thus facilitating the compilation of information in a way that reflects the structure of the organisation. The group has a specialised central unit to manage operational risk, whose main functions are to coordinate, supervise and promote the identification, assessment and management of risks by process managers in line with the Banco Sabadell group's management model. **G20** Exchange value in euro of assets and liabilities in foreign currencies (%)



Assets in foreign currencies







Liabilities in foreign currencies

1	GBP	77.5%
2	USD	22.1%
3	Other currencies	0.4%