Pillar 3 Disclosure

Update as at
31 December 2017

MONTE DEI PASCHI DI SIENA
BANK SINCE 1472

Pillar 3 Disclosure

Update as at
31 December 2017

Banca Monte dei Paschi di Siena SpA
Company Head Office in Siena, Piazza Salimbeni 3, www.mps.it
Recorded in the Siena Company Register – Registration no. and tax code 00884060526
Member of the Italian Interbank Deposit Protection Fund. Bank Register no. 5274
Parent Company of the Monte dei Paschi di Siena Banking Group, registered with the Banking Groups Register

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Introduction

The New Regulations for the Prudential Supervision of banks and banking groups entered into force as of 1 January 2014.

The regulations aim to align national requirements with the changes introduced to the International regulatory framework, following reforms in the Basel Committee agreements (Basel 3), particularly the European Union's New Regulatory and Institutional Framework for Banking Supervision.

In particular, the contents of the "Basel 3 framework" have been adopted within the EU through two capital requirement rules:

- ✓ CRR – Capital Requirements Regulation (EU) 575/2013 of the European Parliament and Council of 26 June 2013 regarding prudential requirements for credit institutions and investment firms, which amends Regulation (EU) 648/2012;
- ✓ CRD IV – Capital Requirements of the European Parliament and Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

The current regulatory package includes application criteria, set out in the Regulatory Technical Standards (RTS) and Implementing Technical Standards (ITS) adopted by the European Commission, upon the proposal of the European Supervisory Authorities.

At national level, the new harmonized framework has been implemented by Bank of Italy with:

- ✓ Circular 285 of 17 December 2013 and subsequent updates–Supervisory Provisions for Banks;
- ✓ Circular 286 of 17 December 2013 and subsequent updates–Instructions for Prudential reporting for banks and securities' firm;
- ✓ Circular 154 of 22 November 1991 and subsequent updates–Supervisory reports of banks and financial institutions. Reporting templates and instructions for transmission of information flows.

The current regulatory framework aims to improve the ability of banks to absorb shocks arising from financial and economic stress, whatever the source, improve risk management and governance and strengthen the bank's transparency and disclosures, while taking into account developments from the financial crisis.

The Basel Committee has maintained a three Pillars-based approach which was at the basis of the previous capital accord known as "Basel 2", but has integrated and strengthened it to increase the quantity and quality of banks' capital base and introduce countercyclical supervisory tools as well as new standards for liquidity risk management and financial deleveraging.

More specifically, Pillar 3 was designed on the notion that Market Discipline can be harnessed to reinforce capital regulation to promote stability and soundness in banks and financial systems.

Pillar 3, therefore, aims to complement the minimum capital requirements (Pillar 1) and supervisory review process (Pillar 2) by developing a set of transparent disclosure requirements which will allow market participants to have access to key, fully comprehensive and reliable information on capital adequacy, risk exposures and risk identification, measurement and management processes.

Public Disclosure (Pillar3) is now governed directly by European Regulation no. 575/2013 of 26 June 2013 of the European Parliament and Council, Part 8 and Part 10, Title I, Chapter 3 (hereinafter referred to as "The Regulations" or "CRR").

The previous Regulations (Bank of Italy Circular 263/06, Paragraph IV) along with the reporting templates and rules provided therein are to be considered no longer applicable.

Under the new regulations, the CRR requires banks to publish information at least on an annual basis along with their financial statements and to evaluate the need to publish some or all disclosures more frequently than once a year depending on their specific activities. Institutions are to assess the possible need for more frequent disclosure of items of information laid down in Article 437 (Own Funds), and Article 438 (Capital Requirements), and information on risk exposure and other items prone to rapid change. The EBA (European Banking Authority) subsequently issued its guidelines (EBA/GL/2014/14 of 23-12-2014), , on the need to publish information more frequently than once a year.

In view of the above regulations and in the interest of transparency and continuity, the Group publishes summary information on its Own Funds, Capital Requirements and Leverage in its quarterly reports, providing further information on exposures subject to internal models in its half-year report..

This document provides a full update as at 31 December 2017 and presents the disclosure templates provided for by the current regulatory framework.

In December 2016, the European Banking Association (EBA) published its Guidelines on disclosure requirements under Part Eight of the Capital Requirement Regulation (CRR), providing financial institutions with specifications on the information requested in specific articles of Part Eight of the CRR. This document was supplemented with the information schemes of such Guidelines, the placement of which within the document is summarised in Appendix 2. The information was also supplemented on the basis of the EBA orientations.

Information must be both qualitative and quantitative in nature and be structured so as to provide a comprehensive overview of the risks assumed, the features of the management and control system and the capital adequacy of the Montepaschi Group.

Pillar 3 Disclosure is prepared at consolidated level by the Parent Company. Unless otherwise indicated, all the amounts in this report are stated in TEUR (thousand Euros).
As an aid to understanding and clarifying certain terms and abbreviations used in this report, please refer to the Glossary provided at the end of the document.
The Montepaschi Group regularly publishes its Pillar 3 disclosure on its website at:
https://www.gruppomps.it/en/investor-relations/pillar-iii-reports.html .
Additional information required under the CRR is published in the Annual Report as at 31 December 2017, the Corporate Governance Report and the Remuneration Report. Based on art. 434 of the CRR, which provides for the possibility to make reference to other public disclosure documents, the Group makes use of this opportunity to complete the information, appropriately stating the reference to other documents. In particular, the the different types of risk to which the Banking Group is exposed are also reported in Part E of the Notes to the Consolidated Financial Statements based on the provisions of IFRS 7 and related instructions issued by the Bank of Italy (Circular 262 and its updates). Part E reports on:

- credit risk (Part E – Information on risks and hedging policies: Section 1 – Risks of the Banking: 1.1 Credit risk);
- market risk (Part E – Information on risks and hedging policies: Section 1 – Risks of the Banking: 1.2 Market risk);
- Banking Group Liquidity risk (Part E – Information on risks and hedging policies: Section 1 – Risks of the Banking: 1.3 Liquidity risk).

The Montepaschi Group does not publish the information required by art. 455 of the CRR on the use of internal models for market risk as it adopts the standardized approach to calculate capital requirements for market risk.

The Corporate Governance Report, published under the Corporate Governance section of the Group's website, *Corporate Governance Reports*, contains all the information required by paragraph 2 of art. 435 of the CRR:

- the number of directorships held by members of the management body;
- the recruitment policy for the selection of members of the management body and their actual knowledge, skills and expertise;
- the policy on diversity with regard to selection of members of the management body, its objectives and any relevant targets set out in that policy, and the extent to which these objectives and targets have been achieved;
- whether or not the institution has set up a separate risk committee and the number of times the risk committee has met;
- the description of the information flow on risk to the management body.

The Remuneration Report, published under the section Corporate Governance/

Governance Systems and Policies/ Remuneration Policies of the Group's website, _Governance System and Policies_, includes all the information required by art. 450 of the CRR regarding the remuneration policy and practices of the Group for those categories of staff whose professional activities have a material impact on its risk profile. Appendix 1 schematically summarises the placement of the information published with reference to Part Eight of the CRR within this document and the reference to other documents.

1. Risk management objectives and policies

Executive Summary

Key Metrics		
CET 1 Ratio	Tier 1 Ratio	Total Capital Ratio
14.78% *up 661 bps* *Dec-16: 8.17%*	14.78% *up 661 bps* *Dec-16: 8.17%*	14.97% *up 457 bps* *Dec-16: 10.40%*
Minimum Requirements Pillar 1		
CET1: 5.17%	*Tier1: 7.25%*	*Total capital ratio: 9.25%*
Total Srep Capital Requirement (TSCR): 10.75%		
Total RWA	Credit Risk EAD	
€ 60.6 mld *down -8%* *Dec-16: € 65.5 mld*	€ 160.9 mld *down -5%* *Dec-16: € 170.0 mld*	
LCR	Leverage Ratio	
199.51% *up +85%* *Dec-16: 108%*	5.97% *up +280 bps* *Dec-16: 3.17%*	
Minimum Requirements Pillar 1		
LCR: 80%	*n.a.*	
NPE Ratio	Coverage Ratio	
16.3% *down* *Dec-16: 19%*	67.2% *up* *Dec-16: 55.6%*	

The core objective of this disclosure is to provide a comprehensive description of the Montepaschi Group's risk profile as well as information on capital management and underlying risk drivers in addition to that already contained in the Annual Financial Report.

The annual disclosure provides detailed information on the Montepaschi Group's capital adequacy (under Pillar I) and on the assessment of risk using Risk Management models. The Group manages its capital by ensuring that the capital base and correlated ratios are consistent with the risk profile assumed and compliant with regulatory requirements. The assessment of regulatory capital adequacy is based on the constant monitoring of own funds and risk weighted assets (RWAs) as well as on a comparison with the minimum regulatory requirements, including the additional requirements to be maintained over time and communicated to the Group following the SREP and the additional capital reserves introduced by the new regulatory framework.

RWA and asset optimisation is achieved through the simultaneous monitoring the trend in volumes and changes in related risk metrics. The Group believes increasingly crucial oversee the evolution of the credit quality of the portfolio in the macroeconomic scenario.

As of 31 December 2014, disclosure has been prepared on the basis of the harmonised regulatory framework for banks and investment firms contained in the CRR and CRDIV. As mentioned earlier, the two rules (hereinafter, the regulatory framework) implement within the EU the "Basel 3 framework which establishes more stringent criteria for the capital adequacy levels of banks.

The introduction of the regulatory framework, CRR/CRD IV, is subject to a transition period that extends the full application of the rules to 2019 (2022 for the phase-out of certain capital instruments) and during which the new rules will be applied in an increasing proportion. In particular, there are several elements that will be eligible for full inclusion or deduction from common equity when the framework is fully effective, but currently only have a partial percentage effect on Common Equity; generally, the residual percentage, after the applicable portion, is included in/deducted from Additional Tier 1 Capital (AT1) or Tier 2 capital (T2), or is factored into risk-weighted assets.

Specific transitional provisions have also been established for subordinated instruments that do not meet the requirements envisaged in the new regulatory provisions, aimed at the gradual exclusion of instruments no longer regarded as eligible from Own Funds.

Accordingly, the prudential ratios as at 31 December 2017 and 2016 published in this document take account of the adjustments envisaged by the transitional provisions.

Under Prudential requirements, as of January 2014 all banks must comply with a CET1 ratio of at least 4.5%, a Tier 1 ratio of at least 6% and a Total capital Ratio of at least 8% of the Group's total risk exposure. Additionally, Banks are also required to hold the following buffers against Pillar 1 risks. In addition to maintaining these minimum requirements against Pillar 1 risk, there is a further Core Equity Tier 1 component against Pillar 2 risk, established following the annual SREP, as well as the following buffers:

- a capital conservation buffer of 2.5% from 1st January 2014 to 31 December 2016. The Bank of Italy recently modified the capital conservation buffer requirement, reviewing the choice made when it transposed the CRD IV to fully implement the buffer early and, instead, deciding to adopt the transitional arrangement provided for in the CRD IV, which entails the gradual phase-in of the buffer. Banks, on both a stand-alone and consolidated basis, will therefore be required to maintain a minimum capital conservation buffer of:
- 1.25% from 1 January 2017 to 31 December 2017;
- 1.875% from 1 January 2018 to 31 December 2018;
- 2.5% starting from 1st January 2019;

As of 2016, a specific countercyclical capital buffer for the bank in periods of excessive growth in loans. This capital buffer is equal to the Bank's total risk-weighted exposure (RWA) multiplied by the countercyclical capital buffer rate. The latter is equal to the weighted average of the countercyclical rates applied in the various countries where the Bank has significant credit exposures.

In particular, the Bank of Italy has set the countercyclical rate of exposures to Italian counterparties at 0% for the fourth quarter of 2017. For the other credit exposures the Bank uses the countercyclical rate set by the relevant State authorities, in accordance with applicable regulations;

- A *G-SII* capital buffer (1% – 3.5%; as of 2016) and a *O-SII* capital buffer (0% – 2%). The Montepaschi Group falls under the group of Other Systemically Important Institutions (O-SII), for which the Bank of Italy has established a buffer of 0% for 2017 0,06% for 2018, 0,13% for 2019, 0,19% for 2020 and 0,25% for 2021.
- a non-cyclical systemic risk or macroprudential buffer to be set by the Member States and currently not yet determined by the Bank of Italy.

Buffers are calculated by Member States (Bank of Italy) on the basis of the new regulatory framework (Bank of Italy) and are to be added to Common Equity Tier 1 capital. The amount of Core Equity Tier 1 necessary to comply with the requirement for each buffer determines the *Combined Buffer Requirement (CBR).*

In accordance with regulatory provisions, as at the date of this document the Group's CET1 requirement is determined as the sum of the following components:

- CET1 of 4.5% against Pillar 1 risks, as defined by art. 92 of the CRR;
- a component of CETI to be held in excess of CET1 against Pillar 2 risks, as required by art.16 of EU Regulation n. 1024/2013 and established on the basis of the annual SREP at 3.75% as of 31 December 2016;
- a capital conservation buffer equal to 1.25% of RWAs and consisting of CET1 capital, set by the Bank of Italy for all banks, in accordance with art. 129 of the CRD IV, starting from 1 January 2017 up until 31 December 2017;
- a countercyclical capital buffer equal to 0.002% of RWAs and consisting of Core Equity Tier 1.

Therefore, up until 31 December 2017 the MPS Group is required to maintain a CET1 SREP ratio of 10.75%, inclusive of the *Combined Buffer Requirement* and comply with Tier 1 and Total Capital Ratio requirements.

Capital adequacy indicators **December 2017**	Minimum capital requirements (art. 92 CRR, Pillar I)	Combined Buffer Requirement (*)	Pillar I Requirement + CBR	Target SREP Ratio
CET 1 Ratio	*4.50%*	*1.25%*	*5.75%*	*10.75%*
Tier 1 Capital Ratio	*6.00%*	*1.25%*	*7.25%*	-
Total Capital Ratio	*8.00%*	*1.25%*	*9.25%*	-

** CBR: the Combined Buffer Requirement includes Capital Conservation Buffer, Countercyclical Capital Buffer and O-SII Buffer*

As regards the SREP (Supervisory Review and Evaluation Process), on 19 June 2017 the ECB ordered the Bank to maintain the following requirements at consolidated level as of 1 January 2018:

- a Total SREP Capital Requirement ratio of 11%, which includes a minimum Pillar 1 requirement of 8% (as set forth in art.92 of the CRR), and an additional Pillar 2 requirement of 3% (P2R), entirely in terms of Common Equity Tier 1 capital and

- an *Overall Capital Requirement – OCR*, including, besides the TSCR, also the combined capital requirement. The following table shows the minimum capital requirements on a consolidated basis starting from 1 January 2018 (*phase-in*).

Capital adequacy indicators **as of 1 January 2018**	Minimum capital requirements (art. 92 CRR, Pillar I)	TSCR (Pillar I + Pillar II)	Combined Buffer Requirement	OCR Requirement (TSCR + CBR)
CET 1 Ratio	*4.50%*	*7.50%*	*1.94%*	*9.44%*
Tier 1 Capital Ratio	*6.00%*	*9.00%*	*1.94%*	*10.94%*
Total Capital Ratio	*8.00%*	*11.00%*	*1.94%*	*12.94%*

TSCR - Total Srep Capital Requirement

CBR - the Combined Buffer Requirement includes Capital Conservation Buffer, Countercyclical Capital Buffer and O-SII Buffer.

As a result, the Group must meet the following requirements at consolidated level as of 1 January 2018:

- CET1 Ratio of 9.44% on a transitional basis,
- Total Capital Ratio of 12.94% on a transitional basis, including, aside from the P2R, 1.875% for the Capital Conservation Buffer and 0.0625% for the O-SII Buffer (Other Systemically Important Institutions Buffer).

Furthermore, the ECB notified to the Bank the expectation for the Group to comply with an additional 1.5% threshold (the so called "Pillar 2 capital guidance") to be fully satisfied with Common Equity Tier 1. The following table shows the minimum capital requirements which Group must respect.

Capital adequacy indicators **as of 1 January 2018**	OCR Requirement (TSCR + CBR)	Pillar II capital guidance (P2G)	OCR Requirement +P2G
CET 1 Ratio	*9.44%*	*1.50%*	*10.94%*
Tier 1 Capital Ratio	*10.94%*	-	*10.94%*
Total Capital Ratio	*12.94%*	-	*12.94%*

CBR: the Combined Buffer Requirement includes Capital Conservation Buffer, Countercyclical Capital Buffer and O-SII Buffer

Please note that failure to comply with the *Pillar 2 Guidance – P2G* requirement is not equivalent to failure to comply with capital requirements; however, in the case of a reduction of capital below the level that includes the P2G requirement, BMPS will need to promptly disclose the reasons for non-observance to the Supervisory Authority, which will evaluate and communicate any measures on a case by case basis.

Until 31 December 2017, the CET1 threshold to be observed remains 10.75%, announced in November 2015 with the previous SREP letter.

For further details, please refer to chapter 4 of this document.

The MPS Group's capital requirements for 2017 and 2016 and related differences are summarized in the table below.

Own Funds and Capital Requirements Summary

Data in thousands of Euro

	dec-17	dec-16	Delta vs. 31-12-2016 Absolute	Delta vs. 31-12-2016 %
Common Equity Tier 1	8,951,233	5,353,400	3,597,833	67.2%
Additional Tier 1	-	-	-	-
Tier 2	112,487	1,463,924	-1,351,437	-92.3%
Own Funds	**9,063,720**	**6,817,323**	**2,246,396**	**35.0%**
↳ *of which Delta EL**	*162,039*	*181,906*	*-19,867*	*-10.9%*
Regulatory Capital Requirements				
Credit and Counterparty Risk	3,817,017	4,281,664	-464,647	-10.8%
↳ *of which Standard*	*1,655,880*	*1,855,698*	*-199,818*	*-10.8%*
↳ *of which AIRB*	*2,161,137*	*2,425,966*	*-264,829*	*-10.9%*
Market Risk	199,411	243,645	-44,234	-18.2%
↳ *of which Standard*	*199,411*	*243,645*	*-44,234*	*-18.2%*
↳ *of which Internal Model*	-	-	-	-
Operational Risk	800,923	678,061	122,862	18.1%
↳ *of which Foundation Approach*	*11,936*	*15,234*	*-3,298*	*-21.6%*
↳ *of which Standardised Approach*	-	-	-	-
↳ *of which Advanced Approach*	*788,987*	*662,827*	*126,160*	*19.0%*
CVA Risk	27,650	38,362	-10,712	-27.9%
Concentration Risk	-	-	-	-
Settlement Risk	-	-	-	-
Regulatory Capital Requirements	**4,845,001**	**5,241,732**	**-396,731**	**-7.6%**
Risk Weighted Assets	**60,562,512**	**65,521,653**	**-4,959,141**	**-7.6%**
of which Credit and Counterparty Risk	*47,712,717*	*53,520,804*	*-5,808,087*	*-10.9%*
of which Market Risk	*2,492,636*	*3,045,561*	*-552,925*	*-18.2%*
of which Operational Risk	*10,011,539*	*8,475,761*	*1,535,778*	*18.1%*
of which CVA Risk	*345,620*	*479,526*	*-133,906*	*-27.9%*

Capital ratios			Delta vs. 31-12-2016 in bp	Delta vs. 31-12-2016 in %
CET1 Capital Ratio	**14.78%**	**8.17%**	**661**	**6.6%**
Tier1 Capital Ratio	**14.78%**	**8.17%**	**661**	**6.6%**
Total Capital Ratio	**14.97%**	**10.40%**	**457**	**4.6%**

**The value represents the total contribution of the Delta PA, understood as the sum of the positive and deductions, to the determination of the Own Funds under the ner regulatory framework. The total amount of the Delta PA, prior to the application of the cap, amounts to 7,119,971 €/thousand (-3,174,266 €/thousand as at December 2016)*

As at 31 December 2017, the CET1 ratio of 14.78% is higher than the minimum coefficient set forth in art. 92 of the CRR, as well as the target ratio set by the ECB inclusive of the Combined Buffer Requirement laid out in the regulations. Likewise, the Tier 1 ratio and the Total Capital ratio equal to 14.78% and 14.97%, respectively, are higher than the regulatory requirements.

The significant increase in regulatory ratios compared to the previous year was therefore caused by the increase in own funds as well as the reduction in RWAs described above.

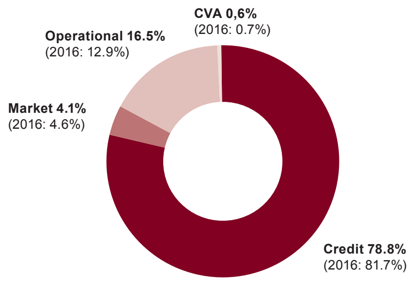
Compared to 31 December 2016, the CET1 rose by EUR 3,598 mln mainly as a result of:

- the share capital increase subscribed by the MEF for EUR 3,854 mln;
- the share capital increase deriving from Burden Sharing for EUR 4,473 mln, gross of treasury shares equal to EUR -314 mln;
- the recognition in a reserve of EUR 360.2 mln equal to the negative difference between the fair value of the ordinary shares assigned as a result of Burden Sharing to holders of the AT1 and T2 bond issues subject to conversion and the value of conversion into share capital (following the application of IFRIC 19);
- the loss for the year of EUR -3,502 mln;
- the increase in deferred tax assets which depend on future profitability and which do not derive from temporary differences for EUR -649 mln;
- other effects for EUR 107 mln.

Tier 2 reduced by EUR -1,351 mln primarily due to the Burden Sharing and the relative cancellation of subordinated bonds calculated (EUR -1,368 mln).

Total Capital recorded growth of EUR 2,246 mln .

RWA by risk type



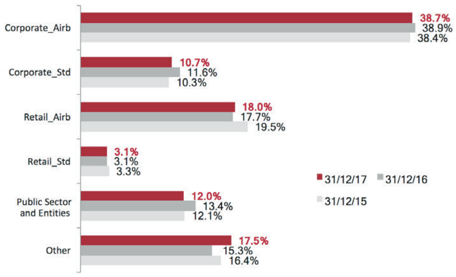
Compared to 31 December 2016, there was an overall reduction in RWAs (around EUR -4,959.1 mln) as a result of the decrease in "credit and counterparty risk" (around EUR -5,808.1 mln) due to the decline in the performing loan portfolio. The "market risk" (around EUR -552.9 mln) and "CVA risk" (approx. EUR -133.9 mln) components were also down due to the optimisation of the respective portfolios, while the "operational risk" is increasing (around EUR 1,535.8 mln).

Compared to 31 December 2016, there was an overall reduction in RWAs (around EUR -4,959.1 mln) as a result of the decrease in "credit and counterparty risk" (around EUR -5,808.1 mln) due to the decline in the performing loan portfolio. The "market risk" (around EUR -552.9 mln) and "CVA risk" (approx. EUR -133.9 mln) components were

also down due to the optimisation of the respective portfolios, while the "operational risk" is increasing (around EUR 1,535.8 mln), mainly due to model updates and to the increase of operational losses as a result of disputes with customers.

The breakdown of RWAs by risk type is concentrated mainly on Credit Risk (78.8%), despite an overall 10.9% reduction in absolute terms compared to the previous year.

RWA Performance Credit Risk by ptf (%)



RWAs against Credit Risk are focused mainly on corporate exposures (10.7% Standard and 38.7% AIRB) and retail exposures with AIRB approach (18%).

The Group also determined its overall internal Risk Appetite Framework (RAF) for 2017 also.

The objective of the RAF is to ensure alignment between the Group's actual risk profile and the risk appetite defined by the Board of Directors, taking into account pre-established risk tolerance levels and in any event within the maximum admissible limits (risk capacity) deriving from regulatory requirements or other restrictions imposed by the Superviosry Authorities (e.g. the ECB's SREP Decisions).

The RAF for 2017 was formalized in a Risk Appetite Statement (RAS 2017) approved by the BoD and designed along a set of Key Risk Indicators (KRI) defined by Group, Legal Entity and Business Units, in accordance with the processes internally approved by the Board itself.

As regards the Group indicators, the Capital Adequacy, Liquidity Adequacy, Leverage, Asset Quality and Performance indicators have been identified as well as the qualitative indicators concerning the adequacy of the Internal Controls.

For each KRI, more conservative target appetite thresholds compared to the minimum capacity thresholds were set ex-ante. The risk management and measurement systems allow for ongoing monitoring of the risk profile and periodic reporting to the Corporate Bodies with the activation of appropriate escalation mechanisms in the case of breach of the limit thresholds. At the end of 2017, compliance with all regulatory thresholds of the Capital Adequacy and Liquidity Adequacy indicators was confirmed, in addition to compliance with the more prudential internal risk appetite targets.

The other Group KRIs are all in line with the risk appetite expressed by the Board of

Directors for 2017, with the exception of the NPE Ratio and the RAROC. In particular, as regards the targets/restrictions on the NPE Ratio, the portfolio's asset quality will structurally improve only in 2018, once the planned disposal of doubtful loans is carried out. As regards the RAROC, profitability is expected to improve in 2018 in line with the gradual recovery in efficiency and productivity identified in the Restructuring Plan.

1.1 Risk Governance in the Montepaschi Group

The Group attaches the utmost importance to the process of identifying, monitoring, measuring, controlling and mitigating risks.
Risk governance strategies are implemented in line with the Group's business model, Restructuring Plan medium-term objectives and legal and regulatory requirements.
Policies relating to the assumption, management, coverage, monitoring and control of risk are established by the Board of Directors of the Parent Company. In particular, the BoD regularly defines and approves the strategic risk governance guidelines and establishes the total risk appetite of the entire Group in line with the annual and multi-year projections.
The Parent Company's Board of Directors defines the "Group Risk Appetite Framework" (RAF) and approves the "Group Risk Appetite Statement" (RAS) at least once per year. The Risk Control Function is specifically assigned the task of conducting the quarterly monitoring of indicators, drawing up a periodic report for the Board of Directors and implementing the escalation/authorisation processes in the event of overdrawn amounts.

The RAS represents an essential element in defining the Group's risk strategy. The risk objectives/restrictions are identified and the indicators are broken down by Business Unit/Legal Entity (known as "cascading down" of Risk Appetite). Its objective is to increase the Group's Risk Culture and fully instil accountability in all relevant Business Units with regard to respect and pursuit of the risk appetite objectives, as required by the regulations and recommended by best practices.

The overall RAF system is broken down in terms of the Group's main Business Units and Legal Entities, also in terms of operating limits for the various business areas, and formalised in governance policies and processes for the management of the various corporate risks.

The Risk Appetite Process is structured so as to ensure consistency with the ICAAP and ILAAP as well as with Planning and Budget and Recovery processes, in terms of governance, roles, responsibilities, metrics, stress testing methods and the monitoring of key risk indicators.

Group Risk governance is provided centrally by the Parent Company's Board of Directors, which also supervises and is responsible for the updating and issue of internal policies and regulations in order to promote and guarantee a continuously greater and more widespread risk culture at all levels of the organisation. Awareness of risks and the correct knowledge and application of the internal processes and models governing those risks - especially for those validated for regulatory purposes - are fundamental requirements for effective, sound and prudent business management.

The incorporation of macro risk and risk-adjusted performance indicators, consistent with the RAF, within staff remuneration and incentive policies represents an additional tool to promote awareness of the conduct of all resources and the cultivation of a healthy risk culture.

During 2017, internal initiatives proceeded to ensure continued compliance with national and international regulatory provisions. With regard to risk management, reference internal regulations were updated for the management of Banking Book Interest Rate Risk, Credit Risk, Market Risk, as well as for the processes of ICAAP, ILAAP and Internal Validation.

In addition, the ICAAP and ILAAP packages were sent to the Regulator in accordance with the ECB's regulatory prescriptions regarding the "Technical implementation of the EBA Guidelines on ICAAP/ILAAP information for SREP Purposes". Initiatives designed to strengthen Group Governance in the area of risk reporting were activated, in order to ensure compliance with the instructions from the Basel Committee on Banking Supervision (BCBS Paper no. 239), which requires systemically important banks to adopt a series of standards to guarantee accurate aggregation of risk data and an efficient reporting process, with the launch of a dedicated project that also resulted in the publication of the "Group Directive on Integrated Risk Reporting".

In reference to the Group's Risk Culture, in addition to pursuing initiatives regarding corporate bodies (board induction cycles on specific issues), general training programmes (on-line courses) were also launched during the year for all personnel in the areas of risk management and mitigation, as well as other classroom training sessions.

The Montepaschi Group is among the Italian banks subject to the ECB's Single Supervisory Mechanism.

For a more thorough account of the Group's corporate governance structure and detailed information pursuant to Art. 435, paragraph 2 of the CRR, please refer to the Corporate Governance Report available on the Group's website at *(https://www.gruppomps.it/en/corporate-governance/corporate-governance-report.html).*

1.2 Internal Control System and Risk Management Process

The general framework of controls within the Group is internally regulated by the Internal Controls System Policy, which defines a set of rules, functions, structures, resources, processes and procedures to ensure the sound and prudent management of the company.

The **Internal Controls System** plays a crucial role within the organisation in that it:

- constitutes a key source of knowledge for the Corporate Bodies to ensure full situational awareness and effective Corporate risk management;
- directs the changes in strategic guidelines and company policies and ensures the consistent alignment of the organisational framework;
- monitors the efficiency of operational systems and compliance with prudential supervisions requirements;
- it promotes a culture of risk awareness, compliance with the law and the respect of corporate values.

Consequently, the Internal Controls System plays a strategic role for the Group and the issue of controls assumes an important position within the framework of corporate values, involving all levels of the organisation (governing bodies, business units/structures, hierarchical levels, staff) in developing and applying the logical and systematic methods for identifying, measuring, disclosing and managing risk.

The **risk management process** is designed to identify and correctly map all current and future risks that the Montepaschi Group incurs or may incur, model and meaure these risks, ensure an effective level of controls as well as an adequate flow of operational and management reporting, support the implementation of proper risk mitigation and management actions.

The fundamental principles of the Montepaschi Group's risk management process are based on a clear-cut distinction of the roles and responsibilities of the different functions at first, second and third-levels of control and include the Business Functions.

The **Board of Directors** of the Parent company is responsible for defining and approving strategic guidelines and risk management policies and, at least once a year, quantitatively expresses the Group's overall risk appetite in terms of Internal Capital.

The **Board of Statutory auditors** and the **Risk Committee** are responsible for evaluating the level of efficiency and adequacy of the internal control Systems with particular regard to risk control.

The **CEO/General Management** is responsible for ensuring compliance with risk policies and procedures.

The **Director in charge of the internal control and risk management system**, appointed in compliance with the Corporate Governance Code for listed companies, is responsible for creating and maintaining an effective system of internal control and risk management. Specific management committees responsible for risk issues have been established in order to promote efficiency and flexibility in the decision-making process and facilitate interactions between the various corporate departments involved:

- The **Risk Management Committee** establishes risk management policies, evaluates the Group's risk appetite in accordance with annual and long-term Group value creation targets and ensures overall compliance with the limits defined for the various operating levels. It is responsible for assessing initiatives for capital allocation and submitting them to the Board of Directors as well as assessing risk profile and, therefore, capital consumption (Regulatory and Internal) at both Group level and individual Group company level. The Risk Management Committee also analyses the risk-return performance indicators;
- The **Finance and liquidity committee** of the Parent company has the task of setting the principles and providing strategic guidance for Proprietary Finance. Furthermore, it deliberates and submits proposals concerning the interest rate and liquidity risk exposure of the banking book and defines capital management actions required;
- The **Credit and Credit Policies Committee** formulates credit process guidelines and expresses an opinion, at least once a year, on credit policies by verifying their commercial sustainability and consistency with risk appetite levels. At least once a year, it approves company policies pertaining to credit assessment. Based on the authorities assigned to it, it is also responsible for taking decisions with respect to lending and the management of problem receivables and assets.

Five permanent and independent Corporate Control Functions (CCFs) have been set up within the Internal Controls System:

- Compliance;
- Risk Management;
- Internal Validation;
- Anti-Money Laundering;
- Internal Audit.

To ensure the proper implementation of activities carried out by the Corporate Control Functions (CCFs), the Montepaschi Group has identified the following basic requirements to be complied with by each CCF:

- Appointment and Dismissal of the Head of each CCF by the corporate governing bodies;
- Independence and authority: the Heads of the CCFs are placed in appropriate hierarchical, functional positions. They have no direct responsibility for the operating areas subject to control, nor are they hierarchically subordinate to the Heads of these areas;
- Separation of duties: the impartiality and independence of the various CCFs are ensured by their organizational segregation;

- Resources: the CCFs have the authority, resources (including financial resources, which may be independently managed with period reporting to the Corporate bodies) and skills required to perform their duties;
- Remuneration: In order not to compromise the impartiality and independence of the Heads of the CCFs, their remuneration is decided on by the corporate governing bodies by way of a specific incentive system that differs from the one established for the other corporate functions. The incentive system is based on duty-related objectives and not on the achievement of corporate targets.

As part of the internal control system, third-level controls are carried out by the Chief Audit Executive Division, second-level controls by the Chief Risk OfficerDivision and Compliance Area and first-level controls by the Business Control Units (BCUs).

The **Chief Audit Executive Division**, which reports directly to the BoD, performs an independent and objective "assurance" and advising activity, aimed both at monitoring operations compliance and risk trends (including through on-site audits) as well as assessing the efficiency of the overall internal control system in order to improve the effectiveness and efficiency of the organisation.

It also acts as Internal Secondary Supervisor with a view to focusing on the main characteristics of the prudential supervision process adopted by the European Supervisory Authority and on the orientations/priorities outlined by the latter over time so as to evaluate the Group's positioning with respect to the expectations of the Single Supervisor.

The **Chief Risk Officer Division**, which reports directly to the Board of Directors and functionally to the CEO, includes a risk management department, an anti-money laundering department and an internal validation department. This Division therefore has the following tasks:

- to guarantee the overall functioning of the risk management system;
- to verify capital adequacy based on the ICAAP and liquidity adequacy based on the ILAAP process;
- to participate in the definition and control of the Risk Appetite Framework (RAF);
- to ensure that significant transactions are consistent with the RAF;
- to perform the anti-money laundering duties required by Law and the internal validation of risk management models;
- to ensure the necessary reporting flows to the Group's Corporate Bodies and Top Management.
- to guarantee proper and adequate control activities for the Group Companies that have outsourced the analogous corporate function.

The task of the **Compliance Area** is to monitor the Parent Company's compliance with regulations. The department is directly responsible for managing risks relating to the violation of the most significant rules in bank-customer relations and it periodically reports to the company's top management and supervisory authorities regarding the overall state of compliance of the Bank's systems and operations. In accordance with supervisory provisions, the Compliance function reports directly to the CEO.

Outer **Business Control Units (BCU)**, which are internal to the Group subsidiaries or the main business areas of the Parent company, carry out compliance checks on transactions and are the first level of organisational supervision of operations within the more general system of internal controls.

In compliance with the requirements of autonomy and independence of each participating function, there is also a Function Coordination Committee with control responsibilities. The Committee promotes and shares operational and methodological aspects to identify possible synergies in control activities carried out by second and third-level Functions, coordinate methods and timing for planning and reporting to the Corporate Bodies and project initiatives connected with the Internal Control System, and share areas for improvement identified by all Functions with control responsibilities as well as the Supervisory Authorities.

The **Staff Regulatory Relationship**, reporting directly to the CEO, was established for the centralized oversight of the management of relations with and assessments by the Supervisory Authorities, coordinating and monitoring the planning of commitments undertaken and the main lines of development in the European regulatory framework.

1.3 Principal Covered Risk Factors and Internal Models for regulatory purposes

The main types of risk incurred by the Montepaschi Group in its day-to-day operations can be summarised as follows:

- Credit Risk;
- Market Risk;
- Operational Risk;
- Banking Book Interest Rate Risk;
- Counterparty Risk;
- Real Estate Risk;
- Issuer risk;
- Concentration Risk;
- Equity Investments Risk;
- Business/Strategic Risk;
- Liquidity Risk;
- Reputational Risk.

All of the types of risk mentioned above are involved in quantifying the Overall Internal Capital, with the exception of liquidity and reputational risk that, instead, are mitigated through organisational policies and processes.

Risks inherent in investment products/services for the Group's customers are also monitored, to protect the customer and prevent any potential repercussions in terms of reputation.

Each risk factor corresponds to a model that has been developed and is used internally for operational or regulatory purposes. For an account of strategies, processes and management models for the various risks, please refer to the paragraphs below.

From a regulatory standpoint, in accordance with the principles contained in the New accord on capital adequacy (Basel 2) in relation to First Pillar risks, the Montepaschi Group's internal credit and operational risk models were already authorised in the first half of 2008. Pursuant to circular letter 263/2006 of the bank of Italy, on 12 June 2008 the Montepaschi Group was officially authorised under regulation no. 647555 to use the advanced models for the measurement and management of credit risk (AIRB - Advanced Internal Rating Based) and operational risk (AMA – Advanced Measurement Approach) as of the first consolidated report at 30-06-2008. Over time, these models have been further developed and their scope of application extended to Group entities not originally included in the initial scope of validation. As at 31-12-2017, the following portfolios/entities/parameters of the Montepaschi Group had been validated for regulatory purposes:

Credit Risk: regulatory treatment

Legal Entity	Corporate AIRB	Retail AIRB
Banca MPS	PD, LGD	PD, LGD
MPS CS	PD, LGD	PD, LGD
MPS L&F	PD, LGD	PD, LGD

To calculate capital requirements for Specialized Lending transactions of more than EUR 5 bn, the Group was authorised to adopt the "Slotting Criteria" AIRB method. The Group has adopted the standard approach for the remaining credit risk exposures/entities for regulatory purposes.

Operational Risk: regulatory treatment

Legal Entity	AMA	BIA
Banca MPS	✓	-
MPS CS	✓	-
MPS L&F	✓	-
COGMPS	✓	-
Other entities	-	✓

The Group has adopted the standard approach to calculate capital requirements relative to market risk. Instead, capital requirements relating to counterparty risk are calculated using the current market value for OTC derivatives and long settlement transactions (LST) as well as the comprehensive method for securities financing transactions (SFT).

1.4 Organization of the Risk Management Function

In the course of 2016, the Chief Risk Officer Division was subject to further organisational changes aimed at achieving regulatory compliance, strengthening its role, powers and headcount and streamlining its structure in line with the growing importance of risk management and control within the Montepaschi Group.

As at 31 December 2017, the Chief Risk Officer Division was organised into the following structures:

- Financial Risk Officer Area;
- Lending Risk Officer Area;
- Operating Risk Officer Area;
- The Validation and Risk System Service;
- Anti-Money Laundering Area;
- Chief Risk Officer's Technical Secretariat.

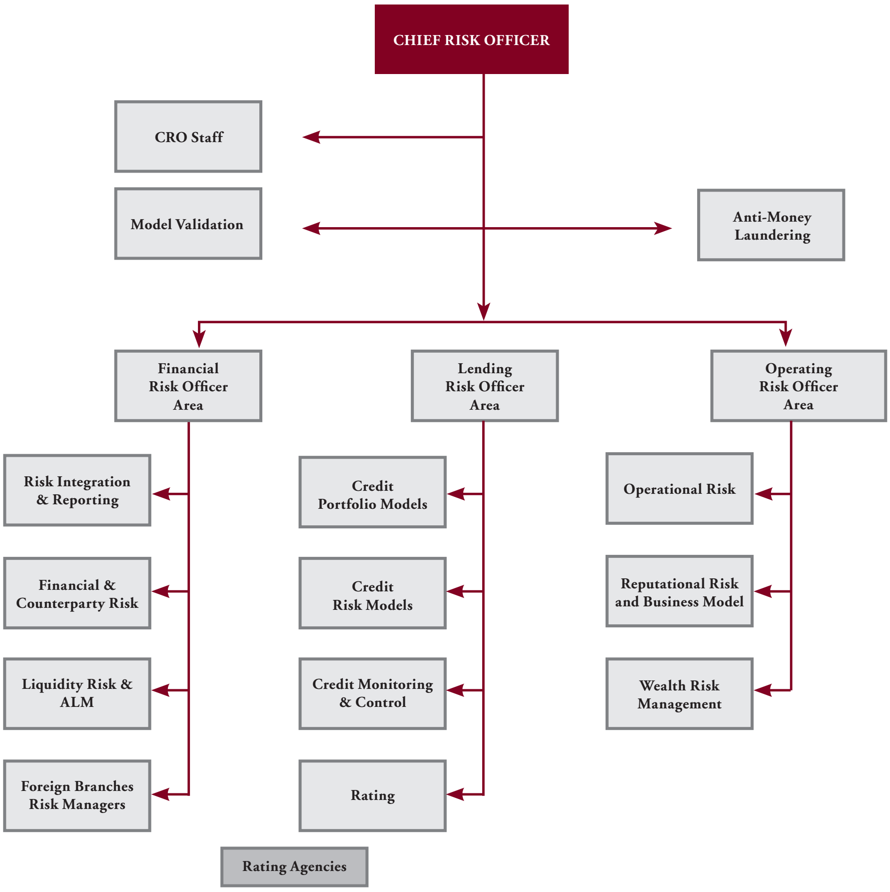
The Chief Risk Officer (CRO) is the head of the Parent Company's Risk Control Division.

The Risk Managers of the Parent Company's Foreign branches also report to the Chief Risk Officer (CRO).

As it currently stands, the Chief Risk Officer Division includes all second-level Corporate Control Functions, with the exception of the Compliance Function, as established by Supervisory Regulations regarding the Internal Controls System.

The Division's autonomy and independence are ensured as it reports directly to the Corporate Body with strategic supervisory functions and only functionally to the Management Body. It has direct access to the Body with control functions and may communicate continuously with no restriction or intermediation. The CRO is also entitled at his or her discretion to participate in Risk Committee meetings to intervene or propose discussions on specific topics. Furthermore, the Board of Directors appoints and removes the Chief Risk Officer, upon

In this document, the Chief Risk Officer Division structures relevant for the identification of the **Risk Management Function** are represented by the Head of the Chief Risk Officer Division, the Lending Risk Officer Area, Financial Risk Officer Area and Operating Risk Officer Area and **Internal Validation Function** by the Validation and Risk System Service.



The Parent Company's **Financial Risk Officer Area** (hereinafter FRO) defines the integrated methods of risk measurement/ analysis and ensures they are constantly monitored, verifying their consistency with the risk appetite and compliance with the thresholds defined in terms of adequacy with respect to capital and liquidity reserves, participating in the definition of any mitigating actions required. It participates in the preparation, drafting and monitoring of the Recovery Plan. It governs the development of the proprietary financial risk measurement and control system in line with internal and regulatory principles. It guarantees management risk reporting for the Corporate Bodies and the Top Management. The Risk management departmental sectors of the Foreign branches report hierarchically to the FRO Area. These sectors conduct second-level controls on their operations by identifying and monitoring the riskiness of the branch in relation to the objectives, business strategies and risk appetite assumed by the Bank. In addition, the local Risk Managers of the Group's foreign branches are functionally reporting to the Area.

The **Lending Risk Officer Area** (hereinafter LRO)

governs the evolution of the credit risk measurement system, in line with internal and regulatory principles, in terms of statistical models as well as analytical and process assessments, overseeing the credit risk assessment from portfolio quality to the single name level. It conducts second-level controls on the Group's credit exposures

Furthemore the LRO Area develops and maintains internal models of credit risk expertise. It defines the rules and methodologies for determining each risk measure (estimation of the AIRB parameters, PD LGD, EAD, and the macroeconomic models applied to them for Accounting, RAF, ICAAP and Recovery Plan purposes).

The **Operating Risk Officer Area** (hereinafter ORO) governs the evolution of the risk measurement and control system correlated with the operational application of the Group's business model (including operational, reputational, business model and customer portfolio risks).

The ORO Area also defines, coordinates and prepares the Group Risk Disclosure for external and institutional purposes (Pillar 3 Public Disclosure) and provides support for the preparation of other external/institutional information (Financial Disclosure, Consob Prospectuses, Capital increase, Rating Companies, Regulators). It manages the process of monitoring the execution of the Restructuring Plan and the related Committments, verifying their consistency with the Business Model and the Business Plan.

The Parent Company's Validation and Risk System Service continuously verifies the reliability of results obtained from the advanced risk measurement systems as well as their constant alignment with regulatory requirements.

The Chief Risk Officer Division of the Parent Company, which, as illustrated above, carries out Risk Management and Internal Validation Functions had an overall headcount of 226 units as at 31 December 2017. The increase in total resources with respect to 2016 (122 units) can be attributed to the incorporation within the CRO Department (in the Rating Service) of the resources of the locally situated Rating Agencies (124 units), previously allocated to the Credit Division.

Staff had an average age of 46.8 and an average seniority in the banking sector of approximately 13 years. Resources show to have taken professional paths also outside the risk management area with significant experience gained in Group credit, finance, planning and sales functions. In terms of academic background, there is a prevalence of degrees in Economics/Banking/Business subjects (48%), followed by degrees in Mathematics/Statistics (8%), Engineering (3%), Physics and IT (2%), qualifications, diplomas or degrees in other subjects (39%). The majority of resources hold a post-degree qualification (Masters or Phd) or a national or international professional certification (e.g. ABI Risk Manager Certification or Frm certification issued by GarP).

1.5 Credit Risk

The Budgeting, Planning, Capital and Risk Management processes of the Montepaschi Group are based on the "Risk Adjusted Performance Management" (RAPM) logic. In the development of these management processes, the definition of adequate credit policies – under the responsibility of the Parent company's Chief Risk Officer Division– plays a relevant role which finds its operational expression in the implementation of the strategies (i.e. credit portfolio quality objectives), to be applied to the credit processes.

The Montepaschi Group's strategies in risk management mainly aim at limiting the economic impact of default on the loan book, exploiting, in particular, the full potential of the internal rating models and loss given default estimates. Strategies are defined on a yearly basis, together with the definition of Risk Appetite, except as otherwise provided under exceptional circumstances due to external conditions, and are identified for two main areas:

- loan disbursement strategies (definition of quality targets for access to credit);
- credit monitoring strategies (definition of minimum quality targets for maintenance of the loan disbursed).

The definition of customer acceptance policies, based on the analysis of the customer's prospective solvency, plays a major role in loan disbursement strategies. Only after having identified the customer with the required creditworthiness are other credit risk mitigation factors (guarantees) taken into account. Information on client quality and transaction risk is essential in identifying the decision-making body for loan granting.

The follow-up strategies are based on systems used on a daily/monthly basis to detect changes in the customer's risk profile. The identification of events likely to affect credit risk triggers a set of obligations for the distribution network, who is assigned the key task of keeping communication channels with the customer open and obtaining all useful information needed to verify the changes in the credit risk profile. If changes are confirmed, the client account manager is supported by personnel specialised in credit quality management and legal matter to define the credit risk management procedures required.

The quantitative identification of credit risk is mainly applied, at operational level, to the measurement of the risk-adjusted return of each individual operating unit. This process is carried out with operational control instruments. The credit risk identification and quantification instruments allow the Montepaschi Group to define hedging policies mainly consisting in defining "risk-adjusted pricing" which includes risk coverage and planned 'return on capital'.

Risk mitigation policies are defined as part of the Credit Risk Mitigation (CRM) process, whereby the legal, operational and organisational conditions necessary to use collateral guarantees for credit risk-mitigation purposes are identified and met. Three sets of guarantees complying with mitigation requirements are defined in the process: Personal securities, Financial collaterals and mortgage collaterals. Other types of credit protection guarantees do not mitigate credit risk. With specific regard to collaterals, a system has been developed to monitor the value of the collateralised asset, based on the measurement of market value (daily for securities and annual for real estate).

Within the credit-granting process, the Montepaschi Group has adopted a risk adjusted system for borrower identification, which is sensitive to the customer's rating and to the presence of collaterals. Should the value of the collateralised asset be subject to market or foreign exchange rate risk, a "safety margin" is used, i.e. a percentage of the end-of-period value of the collateral pledged, which is a function of the volatility of the collateralised asset. The only portion of the loan covered by the value of the assets net of the differential is considered as guaranteed during the approval phase. In the monitoring stages, an adjustment is required on guarantees for which the market value results as being lower than the authorized value net of the safety margin; notification of this step is channelled into the implementation process of the credit monitoring strategies. For further insight into risk

mitigation Techniques, see Paragraph 5.5 below. Credit Risk Management policies and disbursement processes are governed by specific Group directives. Credit risk analysis is performed internally for operational purposes using the Credit Portfolio Model, developed within the Parent Company, which produces detailed outputs in the form of traditional risk measures such as Expected and Unexpected Loss, both operational (intra-risk diversified with a time horizon of one year and a confidence interval calibrated to the target rating of the Group itself) and regulatory. There are several inputs: probability of default (PD), obtained through validated and non-validated models, LGD rates (operational and regulatory), number and types of guarantees supporting the individual credit facilities, regulatory and operational CCFs on the basis of which regulatory and operational EAD are estimated.

In accordance with the provisions of the Second Pillar of Basel 2, the Montepaschi Group is committed to the continuing development of methodologies and models in order to assess the impact on the loan book of stress conditions produced using sensitivity analyses with respect to individual risk factors or through scenario analyses.

Results from the analyses performed on this category of risk are regularly included in the more general flow of risk reporting produced by the Chief Risk Officer Division and submitted to the Parent Company's Risk Committee, Top Management and Corporate Governing Bodies.

For further information, especially regarding the Internal AIRB Model, please refer to Paragraph 5.3.

1.6 Operational Risk

The Montepaschi Group has adopted an advanced management system for operational risk, with the aim of guaranteeing effective risk prevention and mitigation measures.

The risk management system consists in a structured process which identifies, assesses and monitors operational risks. This process is defined in the Group's Operational Risk Governance and Control Directive.

The operational risk management system adopted by the Group is divided into the following macro-processes:

- identification,
- measurement,
- monitoring,
- management and control,
- maintenance,
- internal validation,
- review.

Each process is clearly documented and is subject to the responsibility of a specific corporate function. The organizational units of the various Group subsidiaries are also involved in the processes.

Corporate policies and procedures assign the task of operational risk control to the Operating Risk Officer Area. As previously illustrated, the Operational risks Service has been set up within this area and is responsible for:

- defining, developing and updating operational risk management and measurement systems;
- coordinating data collection and storage systems;
- the reporting system on operational risks;
- assessing the operational risk profile and measuring the relative capital adequacy requirements at both individual and consolidated levels;
- operational supervision of IT risk.

The management and measurement model designed and implemented by the Montepaschi Group incorporates the following four components:

- internal data on operational loss;
- external data on operational loss;
- factors regarding the operating context and the internal controls system;
- scenario analysis.

Classification of loss data adopts the event and business line model established by the Basel accord and adds further classifications such as, organisational unit, geographical area etc. The bank has defined a loss data collection (LDC) process aimed at collecting and storing operational risk data used to calculate capital requirements and for management purposes.

The loss data collection process has been designed to ensure that data is complete, reliable and up-to-date and, therefore, that the management and measurement system using it is effective.

As far as the external data on operational loss is concerned, the Montepaschi Group has opted for a strongly prudential approach. External data derives from the Italian Operational losses database (Italian: DI PO) consortium to which the Montepaschi Group has belonged since its founding in 2003.

The analysis of contextual and control factors enables the identification of the operational vulnerabilities to which the bank is potentially exposed. In order to provide greater granularity of analysis, which is carried out with the individual process owners through annual self-assessments of operational risk control, the identification of vulnerabilities is a prospective evaluation aimed at highlighting the difficulties inherent in day-to-day operations.

Lastly, the Montepaschi Group carries out scenario analyses for its Top management on a yearly basis: the analyses seek to identify the greatest vulnerabilities to which the Group is exposedon a forward-looking basis and integrate the quantitative information provided by the loss data in order to detect any changes in the organizational and business framework.

To ensure the correct application of this methodology and its compliance with current regulations, the operational risk internal validation process has been allocated to the Validation and Risk System Service. The quality of operational risk management and measurement systems is assessed on an ongoing basis as is their compliance with regulatory provisions, company needs and trends in the market of reference. Within this framework, it is also particularly important not only to verify the reliability of the methodology used in calculating capital adequacy, but also to ascertain the actual use of this system in decision-making processes as well as in the daily operational risk management systems.

Furthermore, the Operating Risk Officer Area is in charge of producing reports on the operational risk measurement and control system, both for internal units and Supervisory authorities.

Each macro-process in which the system is structured produces its own report within a wider reporting framework. By defining a grid of contents, recipients and frequency of updates, the objective of this activity is to ensure timely horizontal and vertical communication of information on operational risks among the different corporate units concerned.

Results from the analyses performed on this category of risk are regularly included in the more general flow of risk reporting produced by the Chief Risk Officer Division and submitted to the Parent Company's Risk Management Committee, Top Management and Corporate Governing Bodies.

Corporate regulations allocate the activity of internal auditing to the Chief Audit Executive Division. This consists in periodic checks on the overall functioning of the Montepaschi Group's operational risk management and control systems, so as to achieve an independent, comprehensive adequacy assessment in terms of efficiency and effectiveness. Once a year, the Chief Audit Executive Division compiles a report updating the various company entities on the auditing activities carried out, specifically highlighting vulnerabilities identified, corrective measures proposed and related findings.

For more insights on operational risk, see also the following Chapter 12.

1.7 Market Risk in the Trading Book

The Montepaschi Group's Regulatory Trading Portfolio (RTP), or Trading book, is made up of all the Trading books managed by the Parent bank (BMPS), MPS Capital Services (MPSCS). The portfolios of the other retail subsidiaries are immune to market risk since they only contain their own bonds held to service retail customers. Trading in derivatives, which are brokered on behalf of the same customers, also calls for risk to be centralised at, and managed by MPSCS.

Market risks in the trading book are monitored in terms of Value-at-Risk (VaR) for operational purposes. Market risk assumption, management and monitoring are governed group-wide by a specific resolution approved by the board of directors. The Group's Finance and liquidity committee is responsible for directing and coordinating the overall process of managing the Group's proprietary finance thereby ensuring that the management strategies of the various business units are consistent.

Operating limits to trading activities are defined and set by the Parent company, in consistency with the Risk Appetite, and are expressed by level of VaR delegated authority, which is diversified by risk factors and portfolios, in terms of monthly and annual Stop loss and stress. The limits are monitored on a daily basis.

In addition to being included in VaR computations and in respective limits for the credit spread risk component, *Trading book* credit risk is also subject to specific operating limits of issuer and bond concentration risk, which specify the maximum notional amounts by type of guarantor and rating class on all investments in debt securities (bonds and *credit derivatives*).

Referring to the Parent Company specifically, the business area entrusted with trading activities is the Finance, Treasury and Capital Management Area (FTCMA). Trading activities for MPSCS are performed by the Global Markets Division.

The Business Units manage a proprietary portfolio which takes trading positions on interest rates, credit, shares, indices, commodities and foreign exchanges. In general, interest rate positions are taken by purchasing or selling bonds, and by creating positions in listed derivatives (futures) and OTCs (IRS, swap options). Trading is carried out exclusively on the Bank's own behalf, with objectives of absolute return, in compliance with the delegated limits of monthly and yearly VaR and Stop Loss.

With regard to credit risk in the trading book, the equity positions are generally managed through the purchase or sale of bonds issued by companies or by creating synthetic positions in derivatives. The activity is oriented to achieving a long or short position on individual issuers, or a long or short exposure on specific commodities. The activity is carried out solely on the Bank's own behalf with objectives of absolute return and in compliance with other specific issuer and concentration risk limits approved by the Board of Directors.

The Montepaschi Group's Trading Book is subject to daily monitoring and reporting by the Parent Company's Financial Risk Officer Area on the basis of proprietary systems. VaR for management purposes is calculated separately from the operating units, using the internal risk measurement model implemented by the Risk Management function in keeping with international best practices. However, the Group uses the standardised methodology in the area of market risks solely for reporting purposes.

Results from the analyses performed on this category of risk are regularly included in the more general flow of risk reporting produced by the Chief Risk Officer Division and submitted to the Parent Company's Risk Management Committee, Top Management and Corporate Governing Bodies.

For further quantitative details on market risk, please refer to Chapter 7.

1.8 Counterparty Risk

Counterparty risk is linked to potential losses due to the default of counterparties in financial transactions prior to settlement and is associated with financial instruments which have a positive value at the time of counterparty's default. The financial instruments

which point to this kind of risk:

- generate an exposure that is equal to their positive fair value;
- have a market value which evolves over time depending on underlying market variables;
- generate an exchange of payments or an exchange of financial instruments or goods against payment.

The prudential treatment of counterparty risk is applied to the following types of financial instruments:

- credit and financial derivative instruments traded;
- Securities Financing Transactions (SFTs), such as: repos and reverse repos on securities or commodities, securities or commodities lending or borrowing transactions and borrowing on margin;
- Long Settlement Transactions (LSTs), such as: forward transactions in which a counterparty commits to delivering (receiving) a security, commodity or foreign currency against receipt (delivery) of cash payment, other financial instruments or goods with settlement upon a pre-established contractual date, later than the one determined by market practice for these types of transaction.

The scope of measurement for counterparty risk includes all banks and subsidiaries belonging to the Group and refers to positions held in the Banking Book and the Trading Book. As referred to in the Supervisory regulations, when measuring exposure to counterparty risk, the Montepaschi Group adopts the regulatory market value method to determine the Exposure at Default (EAD) for OTC and lST transactions and the comprehensive approach to calculate EAD for SFT transactions.

Results from the analyses performed on this category of risk are regularly included in the more general flow of risk reporting produced by the Chief Risk Officer Division and submitted to the Parent Company's Risk Committee, Top Management and Corporate Governing Bodies.

For further quantitative details on counterparty risk and related management processes, please refer

to Chapter 6.

1.9 Interest Rate Risk in the Banking Book

The Banking Book consists of all exposures not included in the Trading Book and, in accordance with international best practices, identifies the set of the Group's commercial trades connected to the transformation of maturities in the assets and liabilities and ALM financial activities (treasury and risk hedging derivatives).
The strategic Banking Book rate risk choices are defined periodically in the IRRBB Strategy document approved by the Board of Directors and made operational within the Group's Finance and Liquidity Committee; these choices are based on interest rate risk measures expressed in terms of changes in economic value as well as interest margin.
For further details on the methodologies developed in relation to the interest rate risk in the banking Book (Banking Book ALM) and related quantitative findings, please refer to Chapter 8.

1.10 Liquidity Risk

The Montepaschi Group structurally addresses liquidity risk with a formal LR management policy in line with the Basel 2, Pillar 2 requirements.
The Group has used a **Liquidity Risk Framework** for many years now, intended as the set of tools, methodologies, organisational and governance setups which ensures both compliance with national and international regulations and adequate liquidity risk governance in the short (Operating Liquidity) and medium/long term(Structural Liquidity), under business-as-usual and stress conditions.
The reference Liquidity Risk model for the Montepaschi Group is "centralised" and calls for the management of short-term liquidity reserves and medium/long-term financial balance at Parent Company level, guaranteeing solvency on a consolidated and individual basis for the Subsidiaries. Management of the Group's Operating Liquidity is intended to ensure the Group is in a position to meet cash payment obligations in the short term. The essential condition for a normal course of business in banking is the maintenance of a sustainable imbalance between cash inflows and outflows in the short term. The benchmark metric in this respect is the difference between net cumulative cash flows and Counterbalancing Capacity, i.e. reserve of liquidity in response to stress conditions over a short time horizon in addition to the Liquidity Coverage Ratio

(LCR) regulatory measure - Delegated Act. From the extremely short-term perspective, the Group adopts a system for the analysis and monitoring of intraday liquidity, with the goal of ensuring normal development during the day of the bank's treasury and its capacity to meet its intraday payment commitments.

Management of the Group's Structural Liquidity is intended to ensure the structural financial balance by maturity buckets over a time horizon of more than one year, both at Group and individual company level. Maintenance of an adequate dynamic ratio between medium/long term assets and liabilities is aimed at preventing current and prospective short-term funding sources from being under pressure. The benchmark metrics include gap ratios which measure both the ratio of total loans over more-than-1-year and more-than-5-year maturity deposits and the ratio of loans to retail/corporate deposits regardless of their maturities in addition to the regulatory measurement of the Net Stable Funding Ratio (NSFR) in accordance with the BCBS definition. The Group defined and formalised the asset encumbrance management and monitoring framework with the goal of analysing:

- the overall degree of encumbrance of total assets;
- the existence of a sufficient quantity of assets that may be encumbered but which are free;
- the Group's capacity to transform bank assets into eligible assets (or in an equivalent manner, to encumber non-eligible assets in bilateral transactions).

The liquidity position is monitored under both business-as-usual conditions and under specific and/or system-wide stress scenarios based on the *Liquidity Stress test Framework*. The exercises have the twofold objective of timely reporting the Group's major vulnerabilities in exposure to liquidity risk and allowing for prudential determination of the required levels to be applied to the Liquidity Risk measurement metrics within the scope of the annual Risk Appetite Statement.

As part of Risk Appetite Framework, the Liquidity Risk Framework identifies the tolerance thresholds for liquidity risk, that is to say the maximum risk exposure deemed sustainable in a business-as-usual scenario and under stress conditions. The short/medium and long-term liquidity risk limits derive from the setting of these risk appetite thresholds.

The system of operating limits, known as Liquidity Risk Limits, is defined so as to make it possible to promptly identify approaches towards the risk *tolerance* threshold defined in the annual *Risk Appetite Statement process.*

In order to immediately identify the emergence of vulnerabilities in the Liquidity position, the Group has developed a range of Early Warnings, classified as generic or specific depending on whether the individual indicator is designed to detect potential vulnerabilities in the overall economic context of reference or in the Group structure.

Operating and structural liquidity management is governed by the Parent Company's Liquidity Management Department, which is responsible for defining and implementing funding strategies in the short and medium/long-term.

With reference to the management of operating liquidity, Liquidity Management manages the Group's "liquidity reserves" so as to guarantee the Bank's capacity to deal with expected and unexpected outflows, to that end making recourse to various interbank market instruments (unsecured deposits, collateralised deposits, repos) as well as transactions with the Central Bank.

With regard to the management of structural liquidity, Liquidity Management pursues the objectives laid out in detail in the annual Funding Plan which outlines the medium/long-term strategies defined on an operational basis in the "Liquidity and Funding Strategy". The Group's Liquidity and Funding Strategy defines the funding activity guidelines of the BMPS Group in terms of risk appetite, with a three-year time horizon, in compliance with the long-term risk tolerance thresholds on operating and structural liquidity indicators, internal and regulatory, defined within the Group's Risk Appetite Statement (RAS).

In addition, to complete the Funding Plan, Liquidity Management prepares the **Contingency Funding Plan**, which represents the operational tool for liquidity risk management intended to define intervention strategies in the case of extreme liquidity tensions, laying out procedures and actions that may be promptly activated to obtain sources of funds in emergencies. The strategies to be applied are defined on a case by case basis by the Management Committee at its Liquidity Stress/Crisis session considering the type, duration and intensity of the crisis and the reference context when the crisis takes place.

Lastly, the overall internal liquidity adequacy assessment process takes place periodically as part of the strategic ILAAP consisting mainly of:

- ILAAP *Outcomes*, or quantitative (inherent risk) and qualitative (risk management and controls) assessments on risk positioning prepared by the Risk Control function for the Board of Directors;

- *Liquidity Adequacy Statement* (LAS), i.e., the summary statement of the Board of Directors which expresses its vision of liquidity adequacy management.

1.11 Equity Investment Portfolio Risk

Equity Investment risk is defined as the risk of incurring potential losses deriving from fluctuations in the value of Equity investments in light of changed macroeconomic and market scenarios and/or the continuation of situations of capital, income and/or financial imbalance.

To calculate Internal Capital against such risk, Montepaschi Group has adopted the standardised approach, in line with the methodological framework for estimating Internal Capital. This approach requires that exposures in equity instruments be assigned a risk weight of 100 % or 150% for particularly high risk positions, unless they are to be deducted from Own Funds.

According to the current supervisory rules (CRD4/CRR), these mechanisms also include non-significant investments in financial sector entities within the scope of deductions (<10%) and including indirect and synthetic investments along with direct investments. The regulations also provide for exemptions from deduction. For non-significant investments in CET1 instruments, AT1 instruments and T2 instruments in other financial sector entities, the amount deducted is calculated by comparing the total aggregate with the exemption, which is then divided in proportion to the weight% of each type of investment on the total class of instruments and the amount of the exemption is weighted at 100% or 150% if high risk. For significant investments (>10%) in other financial sector entities, the regulations provide for a double exemption (together with temporary non-convertible DTAs) in the calculation of the deducted amount and a risk weight of 250% of the amount not deducted.

The Internal Capital is quantified by the Financial Risk Officer Area of the Parent Company.

Results from the analyses performed on this category of risk are regularly included in the more general flow of risk reporting produced by the Chief Risk Officer Division and submitted to the Parent Company's Risk Management Committee, Top Management and Corporate Governing Bodies.

For further accounting details on risk in the Equity Investments Portfolio, please refer to Chapter 9.

1.12 Strategic Risk

Business /Strategic Risk is defined as the current and/or prospective risk of unexpected losses due to high business volatility (business risk), adverse strategic decisions and/or poor responsiveness to changes in the competitive environment (strategic risk)..

A Value/Earnings-at-Risk model is used to determine the internal capital requirement against Business/Strategic Risk, combining an "earnings volatility" with an "expert-layer" evaluation. The requirement is calculated on both a current and forward-looking basis and under business-as-usual and adverse (stressed) conditions, quantifying the profit & loss impact resulting from the possible failure of certain assumptions included in the Business Plan. The model adopted estimates the business margin's historical volatility, or "earnings volatility", calculated for the Group and the main Legal Entities, taking into account the following income statement items: net interest income, net fees & commissions, other administrative expenses, personnel costs.

Internal Capital is quantified by the Financial Risk Officer Area of the Parent company.

Results from the analyses performed on this category of risk are regularly included in the more general flow of risk reporting produced by the Chief Risk Officer Division and submitted to the Parent Company's Risk Management Committee, Top Management and Corporate Governing Bodies.

1.13 Real Estate Risk

Real Estate Risk is defined as the risk of incurring potential losses from unexpected changes in the value of the real estate portfolio as a result of real estate market performance in general. Internal Capital for Real Estate Risk is represented by regulatory capital. The choice not to use internal models is the result of a general principle which the Montepaschi Group has decided to apply to all situations included from a regulatory perspective in Credit and Counterparty Risk.
The Internal Capital is quantified by the Financial Risk Officer Area of the Parent company.

Results from the analyses performed on this category of risk are regularly included in the more general flow of risk reporting produced by the Chief Risk Officer Division and submitted to the Parent Company's Risk Management Committee, Top Management and Corporate Governing Bodies.

1.14 Risk inherent in investment products/services

The risks associated with investment services are directly or indirectly reflective of the risks incurred by customers in the provision of investment services and activities.
Consequently, governance of these risks is aimed at protecting customers while preventing any potential repercussions on the Group in terms of operational and reputational risk.
Organisational responsibility at Group level for supervising financial risk measurement, monitoring and control activities and for mapping investment products/services for the purposes of MiFID adequacy is an integral part of the Group's integrated risk management responsibilities and is centralized to the Wealth Risk Management Service within the Parent Company's Chief Risk Officer Division. This is to ensure centralised governance of the direct and indirect risks which the Group incurs during the course of its operations.
"Wealth risk management" focuses on the comprehensive set of operational and management processes as well as measurement and monitoring tools/methods used to ensure overall consistency between customers' risk profiles and the risk of investment products and portfolios offered to -or in any case held by- customers.
The investment products (of the Group and of third parties), whether or not included in the overall offering to the Group's customers, are mapped for risk on the basis of quantitative measurements of market and credit risk factors; liquidity and complexity assessments are also conducted on these products. Product mapping is one of the

guiding criteria for carrying out investment adequacy checks as part of the consulting service offered.

For the sake of simplicity, investment product risk mapping, performed with reference to individual risk macro-factors, is grouped under specific risk categories.

A special focus is given by the Bank to the monitoring and prevention of potential financial and reputational risks which investment services, particularly within the context of financial crisis, may generate as a consequence of increased market volatility. The fast-moving and not always predictable market trends may result in rapid changes in product risks and generate potential financial losses, as well as prompting a changing attitude by customers towards their own financial investments.

Customers are regularly informed of changes in the risk of financial instruments held, so as to ensure timely informational transparency and facilitate possible decisions aimed at rebalancing the risk profile of their investments.

The strategic choice of the Banca MPS is to combine the placement of financial products with advisory so as to ensure the highest level of protection for the investor and, at the same time, enhance the role played by relationship managers. Again, with a view to protecting customers, the obligation to verify appropriateness has also been extended to the trading activities on the secondary market of the certificates issued by the Group.

Banca MPS offers two types of advisory services:

- "Basic" transactional advisory is aimed at verifying the suitability of the individual investments recommended in relation to the risk of the customer's investment portfolio as a whole. As part of this, the transactional adequacy model adopts a multivariate control logic on the individual risk factors, based on the customer's portfolio risk, including the investment product that is being recommended;
- "Advanced" advisory is instead aimed at verifying the suitability of the overall set of transactions, advising on them based on their impact on a suggested investment portfolio of the customer in order to obtain optimum asset allocation and maximised prospective returns over a certain time horizon, given the customer's risk profile.

Wealth risk management activities cover the entire distribution scope of the branch network of MPS Group and investment services operated by Banca Widiba and MPS Capital Services.

Through its responses to the MiFID profiling questionnaire, the Customer provides the Bank with information on their particular characteristics and needs (including their investment objective, knowledge, experience and time horizon), which helps determine the customer's general risk profile.

1.15 Analysis of the Montepaschi Group's Internal Capital and Risk Integration Model

The Overall Internal Capital (or Overall Absorbed Capital) is the minimum amount of capital resources required to cover economic losses resulting from unforeseen events caused by the simultaneous exposure to different types of risk.

All of the types of risk mentioned above are involved in quantifying the Overall Internal Capital, with the exception of liquidity and reputational risk that, instead, are mitigated through organisational policies and processes.

The Chief Risk Officer Division regularly quantifies the Group's Internal Capital for each type of risk and periodically reports these to the Risk Management Committee and to the Governing Bodies as part of the reporting flows.

The approach used to quantify and supplement the risks-to-capital to which the Group is exposed is known in the literature as Pillar 1 Plus. This approach envisages that the Pillar 1 requirements for Credit and Counterparty Risk, which already include those relating to Issuer Risk on the Banking Book, Equity Investment Risk, Real Estate Risk and Operational Risk, be increased by the requirements from internal models relating to Market Risks, both Trading Book and Banking Book, Banking Book Interest Rate Risk (Financial Risks), Concentration Risk and Business/ Strategic Risk. Overall Internal Capital is calculated without considering inter-risk diversification, therefore by directly adding together the internal capital contributions of the individual risks. This approach aims to incorporate the indications in the SREP (Supervisory Review and Evaluation Process) Guidelines published by the EBA.

1.16 Stress Test Analysis

In compliance with the guidelines set forth by the Basel committee and *best practices*, new prudential supervisory provisions for banks require credit institutions to carry out adequate *stress testing* exercises. *Stress testing* is commonly described as “the set of quantitative and qualitative techniques with which banks assess their vulnerability to exceptional but plausible events”.

The objective is thus to evaluate the impact of a “state of the world” that is considered extreme, but which, despite a low probability of occurrence, may generate significant economic consequences for the Group.

Among the events considered plausible for the definition of tension-inducing scenarios, the following are to be taken into consideration:

- *trend-based scenarios:* assumptions are made of shocks that are due to a combination of risk factors which were historically observed in the past and whose recurrence and plausibility retain a certain degree of likelihood and recurrence;
- *discretionary scenarios:* assumptions are made of shocks due to a combination of risk factors which may emerge in the near future, depending on the foreseeable environmental, social and economic developments.

Under ‘exceptional events’, low-frequency circumstances are considered, whose occurrence would have an extremely serious impact on the banking Group. Within this area, the Montepaschi Group’s methodological approach to *stress-testing* is based upon the identification of main risk factors whose objective is to select events or combinations of events (scenarios) which reveal specific vulnerabilities at Group-level.

To this end, specific *stress test* plans have been put in place for both individual stand-alone risks and joint risks – starting with the macroeconomic scenarios – on all First and Second Pillar Risks, as defined in the ICAAP and Risk Appetite Framework.

With regard to credit risk in particular, the Montepaschi Group has defined a macroeconomic regression model to estimate the variations in the Probability of Default as a function of changes in the main *credit drivers*. *Credit drivers* which significantly describe PD variations are identified beforehand.

On the basis of the regression model, credit driver disturbances are then estimated according to the current and prospective economic situation. The shock applied to the *credit drivers* determines the change in loan book PD, triggering the simulation of a hypothetical counterparty *downgrading*, with consequent risk variations in terms of Expected Loss, Unexpected Loss and Input from new Defaults.

With regard to Operational risk, appropriate historical scenarios are defined, which are relevant in terms of both *severity* and *frequency*. In this way, it is possible to evaluate the Group's vulnerability to exceptional events - in the case of severity -and plausible events, in terms of frequency.

As for market risk, stress tests consist in the definition of historical scenarios (main crises historically observed in international markets), or discretionary, isolating those components towards which the Group is particularly exposed and, therefore, more vulnerable. These stress events are applied and simulated upon Equity, Commodity, Credit Spread, Forex, Inflation and interest rate on a daily basis.

In terms of Counterparty, Concentration and Issuer risk, a stress scenario has been defined that is consistent with the scenario used for credit risk. It is noted that a market stress event for EAD is also applied to counterparty risk based on a discretional scenario of changes in market drivers.

With regard to interest rate risk in the Banking Book, stress scenarios are defined and differentiated shocks are applied to the individual nodes of the curves for the terms of reference. The results from the stress tests are submitted to the Top Management and Board of Directors. They are formally examined by the BoD as part of the ICAAP annual report approval process, with a view to providing a self-assessment of the current and prospective capital adequacy of the Montepaschi Group.

In terms of Liquidity Risk, the Group adopts the **Liquidity Risk Stress Test Framework** (LRSTF), which is the part of the *Liquidity Risk Framework* that analyses vulnerabilities in the liquidity position across the different risk segments.

The *Liquidity Risk Stress Test Framework* consists in a set of methodological approaches and processes that evaluate exposure to liquidity risk in situations of market turmoil or stress.

The *Liquidity Risk Stress Test Framework* has a twofold purpose:

- to evaluate the liquidity position under assumptions of market stress and/or incomplete implementation of the funding strategy;
- to fine-tune operating limits in the short and very short term (Liquidity Risk Tolerance/Risk Appetite) and calculate time-to-survival under stressed conditions.

1.17 The Risk Disclosure Process

The importance of formalising an adequate internal process for the communication of relevant data is explicitly required by national legislation and by the main international bodies for the purpose of increasing the awareness of corporate bodies with regard to risk management at banking group level.

With regard to the Risk Disclosure Process, the Montepaschi Group has, over the years, prepared an overall framework of reference, through the following organisational and governance solutions:

- creation of specialised structures within the Chief Risk Officer Division for the governance of risk disclosure (Reporting and Risk Integration Service);
- regulations governing the operations of the Parent company's Risk Management Committee, and the others Management Committees;
- regulations envisaging adequate risk reporting to be incorporated, for internal and external purposes, in all major Group Policy concerning risk, internal models, Financial accounting and Public disclosure;
- to prepare ad hoc risk reporting flows to the Group's Top Management and Governance bodies (Board of Directors, Risk Committee, Board of Statutory Auditors and Chief Executive Officer)
- These flows were formalised and governed within the Internal Control System Policy and recently also through a dedicated internal Directive on risk reporting. The "Group Directive on Integrated Risk Reporting" defines the Group's Risk Reporting Framework, which is broken down into 4 distinct components: 1) Risk Reporting Governance, which defines the risk reporting governance mechanisms (roles and responsibilities of the Corporate Bodies and Functions); 2) Risk Reporting Model, which establishes the characteristics of the Risk Reporting Model adopted by the Montepaschi Group and the Map of management information flows identified as relevant and describes the characteristics of each (content, addressees, frequency) and maintains the relative specifications over time; 3) Risk Reporting Production, which defines the methods for generating risk reports and 4) Risk Reporting Review, which relates to the periodic audit of the Risk Reporting Framework.

The Chief Risk Officer.division includes the Risk Integration and Reporting Service, who have the task of supervising, developing and coordinating the Group's risk disclosure model, through the identification of all relevant players, systems, processes and reports. The model is structured into two levels. At a first level:

- each Service of the FRO, LRO and ORO area produces and validates its own risk metrics based on its internal management models and autonomously governed procedures;

- each Service of FRO, LRO and ORO area produces its own operating risk reporting for internal operating purposes (i.e. validation report, control of operating limits) and for reconciliation with the BUs.

On a second level, the Risk Integration and Reporting Service starts from results produced by the FRO, LRO and ORO Area and:

- aggregates and summarizes all risk measures produced by other Services and produces the integrated Internal Capital measures;
- summarises Management Risk Reporting and supplements it with "key risk messages" highlighting issues of particular importance or concern to be brought to the attention of the Top Management and Corporate Bodies and interfaces with other units of the Bank and Corporate Board secretariats for risk reporting issues.

For example, the salient characteristics of the two Management Risk Reports are described below.

The overall reporting framework includes at least one Group-wide report ("Risk Management Report") addressed to the Risk Management Committee, with details of the following key items.

As regards **Internal Capital** for management purposes, the analyses conducted relate to the quantification of the Internal and Regulatory RWAs by individual risk factor for the Group and by Bank/BU.

As far as **Credit Risk** is concerned, analyses are mainly conducted on the following:

- trends in the risks of the performing and defaulting loan portfolio by Legal Entity, Client Segment, Master Scale and Industrial Clusters;
- geographical and sectorial concentration analysis into different areas of economic activity.
- the dynamics of credit policy flows;
- monitoring of credit operating limits.

With regard to **Assets & Liabilities Management and Liquidity risk**, the main analyses carried out relate to the following:

- impact on the economic value and on net interest income, by legal Entity, BU, curve bucket, technical form and currency;
- analysis of on demand accounts and related options;
- operational and structural liquidity position with the relative regulatory liquidity indicators;
- Liquidity Stress Test;
- monitoring of operating limits of interest rate and liquidity risks.

As for **Trading Book Market Risk**, analyses are mainly focused on:

- trend in the market risk profile of the Group's Trading Book: VaR for management purposes and P&L analyses with breakdown by Legal Entity and Risk Factor;
- main portfolio exposures; analysis of issuer risk;
- VaR actual backtesting;
- Stress test;
- monitoring of operating limits.

In terms of **Operational Risk**, analyses are mainly conducted on the following:

- loss data records (quantitative information) with an analysis of the causes;
- operational VaR analysis on different regulatory event types.

The Risk Management Report is regularly supplemented with specific monitoring activities on Risk in customer investment products/services (Wealth Risk Management). In particular, this section illustrates the risk profile of -and products held by- customers, according to the internal classification and service model adopted by the Montepaschi Group. Details of volumes under management or custody are provided, with a special focus on products included in MPS' active offerings. As needed, the Risk Management report is integrated with specific points/issues of attention (i.e. "ad hoc" simulations, Scenario analyses / Stress tests, etc.).

On a quarterly basis, a separate "Executive Risk Management Report" addressed specifically at the Board of Directors and based on the specific needs of that Body is then prepared. The Executive Risk Management Report summarises the main results of other detailed reports prepared for the Top Management and the Management Committees, summarising the Risk Appetite Statement and the Recovery Indicators monitoring results. The report also includes a forecast estimate of certain Group risk indicators at the end of the year, in order to test the stability of the KRIs with respect to the RAS targets/threshold from a forward-looking perspective. It also provides a summary of the overall situation of the Group's Risks to Capital and Risks to Liquidity ratios in terms of the SREP and ad hoc topics are addressed on a case by case basis when necessary.

The contents of the Reports allow the Top Management and Corporate Bodies to gain - according to their respective needs and prerogatives - a sufficiently complete, though concise, overview of the Montepaschi Group's main risks, highlighting any possible vulnerabilities in the overall risk profile and its development over time, risk concentration in specific segments or business units, tensions in terms of 'erosion' of the operating limits, exposures to new markets/risk factors. Analysis of the actual Internal capital, in particular, makes it possible to assess the actual and prospective absorption at both cumulative level and with regard to each individual risk factor, even with reference to Second Pillar risks which fall within the assessment of Group capital adequacy for ICAAP purposes and liquidity adequacy for ILAAP purposes.

Risk Reporting is subject to continuous improvement with a view to making it increasingly more in line with control, operating guidance and corporate governance requirements.

1.18 Governance of the 'Pillar 3 (Basel Pillar 3) – Disclosure to the Public' process

Pillar 3 Disclosure to the Public") is internally governed by the Montepaschi Group in regulation no. 1 of the Parent company and a specific Group directive. The Bod, in its capacity as the Group's **Strategic Supervision Body**:

- defines the Public Disclosure process; approves the organisational policies, procedures and units identified, as well as Group guidelines on the definition of the disclosure contents;
- approves periodic updates to the Public Disclosure.

With regard to the Public Disclosure process, the **Managing Body**, represented by the Parent company's MD/CEO:

- defines the objectives, roles and responsibilities of the Group's units involved in the process;
- assesses if the Pillar 3 Disclosure to the Public Disclosure provides market participants with a comprehensive picture of the Group's risk profile.
- issues the statements required by art. 435 of the CRR;
- submits periodic disclosure report updates to the BoD.

The Reputational Risk and Business Model Service, for the Parent Company's Chief Risk Officer Division, is responsible for the overall supervision and general coordination of the above-described process and for the final drafting of the report. To this end, it avails itself of support from the following functions: Balance Sheet, Supervisory Reporting, Capital Adequacy Control and all other designated Group functions which contribute to and validate the information falling within their spheres of competence.

In the Montepaschi Group, a statement of responsibility by the Chief Reporting Officer is envisaged for the "Disclosure to the Public Pillar3" pursuant to paragraph 2 of art. 154-bis of the Consolidated Law on Finance.

The Pillar3 report as a whole is shared by and between the Chief Risk Officer, the CFO and the Chief Reporting Officer. It is then submitted to the CEO who presents it to the BoD for final approval. Once BoD approval is obtained, the report is published on the Group's website, as provided for by supervisory regulations.

The coordination function supports investor relations on Pillar3 related issues and collaborates in dealing with any feedback from the market on these issues.

In accordance with external provisions and with the internal controls system model adopted by the Montepaschi Group, the Chief Audit Executive Division reviews the entire process with a view to verifying its setup and making sure that implementation is appropriate and effective and results are correct.

2. Scope of application

The disclosure contained in this document (disclosure to the Public) refers solely to the Monte dei Paschi di Siena "Banking Group" as defined by Supervisory provisions. The "prudential" scope of consolidation is determined according to prudential regulations and differs from the scope of the consolidated financial statements, determined under IAS/IFRS. For the calculation of regulatory capital and prudential requirements it identifies the prudential scope of consolidation and this can create mismatches between the data disclosed in this document and that included in the Consolidated Financial Statements.

These differences are mainly attributable to:

- consolidation, using the line-by-line method in the IAS/IFRS financial statements of companies not included in the Register of Banking Groups and consolidation with the equity method for prudential supervision;
- consolidation with the equity method in the IAS/IFRS financial statements of the company Integra S.p.A. operating in financial assets and jointly controlled. The company is proportionately consolidated in prudential supervision.

It should be further noted that there are no non-consolidated companies within the Montepaschi Group.

No restrictions or other impediments exist that may prevent a prompt transfer of regulatory capital or funds within the Group.

The following table reports all entities included in the scope of consolidation as at 31 December 2017.

Scope of application at 31.12.2017 (EU LI3)

	Registered Office	Sector	Shareholding %	Type of relationship (a)	Voting rights % (b)	Treatment in the Balance Sheet	Treatment for Supervisory Purposes			
							Full consolidation	Proportional consolidation	Neither consolidated nor deducted	Deducted
BANCA MONTE DEI PASCHI DI SIENA S.p.a.	Siena	Banking				Full	x			
MPS LEASING E FACTORING S.p.a.	Siena	Leasing and factoring	100.00	1	100.00	Full	x			
BANCA MONTE PASCHI BELGIO S.A.	Bruxelles	Banking	100.00	1	100.00	Full	x			
MONTE PASCHI BANQUE S.A.	Parigi	Banking	100.00	1	100.00	Full	x			
MPS CAPITAL SERVICES - BANCA PER LE IMPRESE S.p.a	Firenze	Banking	99.99	1	99.99	Full	x			
WISE DIALOG BANK S.p.a. - WIDIBA	Milano	Banking	100.00	1	100.00	Full	x			
MONTE PASCHI FIDUCIARIA S.p.a	Siena	Trust company	100.00	1	100.00	Full	x			
INTEGRA S.p.a	Firenze	Consumer credit	50.00	7	50.00	Consolidate at Equity		x		
MPS TENIMENTI POGGIO BONELLI e CHIGI SARACINI SOCIETÀ AGRICOLA S.p.a	Siena	Wine industry	100.00	1	100.00	Full			x	
MPS PREFERRED CAPITAL I LLC	Delaware	Financial vehicle	100.00	1	100.00	Full	x			
MPS CAPITAL TRUST I	Delaware	Financial vehicle	-	4	-	Full	x			
MPS PREFERRED CAPITAL II LLC	Delaware	Financial vehicle	100.00	1	100.00	Full	x			
MPS CAPITAL TRUST II	Delaware	Financial vehicle	-	4	-	Full	x			
MONTE PASCHI CONSEIL FRANCE SOCIETE PAR ACTIONS SEMPLIFIEE	Parigi	Financial intermediary	100.00	1	100.00	Full	x			
MONTEPASCHI LUXEMBOURG S.A.	Lussemburgo	Financial vehicle	100.00	1	100.00	Full	x			
ANTONVENETA CAPITAL LLC I	Delaware	Financial vehicle	100.00	1	100.00	Full	x			
ANTONVENETA CAPITAL LLC II	Delaware	Financial vehicle	100.00	1	100.00	Full	x			
ANTONVENETA CAPITAL TRUST I	Delaware	Financial vehicle	100.00	1	100.00	Full	x			
ANTONVENETA CAPITAL TRUST II	Delaware	Financial vehicle	100.00	1	100.00	Full	x			
CIRENE FINANCE S.r.l	Conegliano	Special purpose vehicle	60.00	1	60.00	Full	x			
MAGAZZINI GENERALI FIDUCIARI MANTOVA S.p.a	Mantova	Deposit and custody warehouses (for third parties)	100.00	1	100.00	Full	x			
CONSORZIO OPERATIVO GRUPPO MPS	Siena	IT and Information services	99.91	1	99.91	Full	x			
PERIMETRO GESTIONE PROPRIETÀ IMMOBILIARI S.c.p.a	Siena	Real estate	100.00	1	100.00	Full	x			
MPS COVERED BOND S.r.l	Conegliano	Special purpose vehicle	90.00	1	90.00	Full	x			
MPS COVERED BOND 2 S.r.l	Conegliano	Special purpose vehicle	90.00	1	90.00	Full	x			
G.IMM.ASTOR S.r.l	Lecce	Real estate renting	52.00	1	52.00	Full	x			
IMMOBILIARE VICTOR HUGO S.C.I.	Parigi	Real estate	100.00	1	100.00	Full	x			
AIACE REOCO S.r.l.	Siena	Real estate	100.00	1	100.00	Full	x			
ENEA REOCO S.r.l.	Siena	Real estate	100.00	1	100.00	Full	x			
JULIET S.p.a.	Siena	Management and credit recovery company	100.00	1	100.00	Full			x	
CONSUM.IT SECURITISATION S.r.l.	Conegliano	Special purpose vehicle	100.00	1	100.00	Full	x			
SIENA MORTGAGES 07-5 S.p.a.	Conegliano	Special purpose vehicle	7.00	4	7.00	Full	x			
SIENA MORTGAGES 09-6 S.r.l.	Conegliano	Special purpose vehicle	7.00	4	7.00	Full	x			
SIENA MORTGAGES 10-7 S.r.l.	Conegliano	Special purpose vehicle	7.00	4	7.00	Full	x			
SIENA CONSUMER S.r.l.	Conegliano	Special purpose vehicle	10.00	4	10.00	Full	x			
SIENA CONSUMER 2015 S.r.l.	Conegliano	Special purpose vehicle	10.00	4	10.00	Full	x			
SIENA PMI 2015 S.r.l.	Milano	Special purpose vehicle	10.00	4	10.00	Full	x			
SIENA LEASE 2016 2 S.r.l.	Conegliano	Special purpose vehicle	10.00	4	10.00	Full	x			
SIENA PMI 2016 S.r.l.	Conegliano	Special purpose vehicle	10.00	4	10.00	Full	x			
CASAFORTE S.r.l.	Roma	Special purpose vehicle	-	4	-	Full	x			

(a) *Type of relationship:*
1 majority of voting rights at ordinary shareholders' meetings
2 dominant influence at ordinary shareholders' meetings
3 agreements with other shareholders
4 other forms of control
5 unified management under art. 26.1 of Decree 87/92
6 unified management under art. 26.2 of Decree 87/92
7 joint control
(b) *Actual voting rights in ordinary shareholders' meetings.*

Tab.2.2 -(EU LI1) – Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

	a	b	c	d	e	f	g
			Carrying values of items				
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
Assets							
Cash and cash equivalent	4,092,307	4,092,304	4,092,304	-	-	-	-
Financial assets held for trading	8,717,994	8,717,994		3,331,773	-	8,716,089	1,905
Financial assets available for sale	15,450,436	15,450,436	15,445,122	-	-	-	5,315
Loans to banks	9,966,212	9,966,212	9,966,212	898,734	-	-	-
Loans to customers	86,456,407	86,468,961	86,413,967	4,524,837	-	-	54,994
Hedging derivatives	156,485	156,485	-	156,485	-	-	-
Change in value of macro-hedged financial assets	57,346	57,346	57,346				
Equity investments	1,034,644	1,125,636	1,019,022	-	-	-	106,614
Property, plant and equipment	2,571,012	2,532,678	2,532,678	-	-	-	-
Intangible assets	283,235	283,190	-	-	-	-	283,190
Tax assets	3,815,294	3,814,711	2,518,435	-	-	-	1,296,276
Non-current assets and groups of assets held for sale and discontinued operations	4,595,135	4,595,135	9,611	-	-	-	4,585,524
Other assets	1,957,685	1,951,377	1,951,377	-	-	-	-
Total assets	**139,154,192**	**139,212,467**	**124,006,074**	**8,911,829**	**-**	**8,716,089**	**6,333,818**
Liabilities							
Deposits from banks	21,084,916	21,062,316	-	1,823,607	-	-	19,238,709
Deposits from customers	77,014,177	77,097,469	-	8,572,325	-	-	68,525,144
Debt securities issued	20,461,300	20,461,300	-	-	-	-	20,461,300
Financial liabilities held for trading	4,476,907	4,476,907	-	1,573,689	-	4,476,907	-
Financial liabilities designated at fair value	326,279	326,279	-	-	-	-	326,279
Hedging derivatives	691,368	691,368	-	691,368	-	-	-
Fair value change of financial liabilities in hedged portfolios	-788	-788	-	-	-	-	-788
Tax liabilities	58,633	56,955	56,955	-	-	-	-
Provisions	1,337,990	1,364,880	-	-	-	-	1,364,880
Other liabilities	3,272,036	3,244,406	-	-	-	-	3,244,405
Valuation reserves	51,705	51,705	-	-	-	-	51,705
Reserves	3,864,821	3,864,821	-	-	-	-	3,864,821
Share capital	10,328,618	10,328,618	-	-	-	-	10,328,618
Treasury shares	-313,710	-313,710	-	-	-	-	313,710
Non-controlling interests	2,279	2,279	-	-	-	-	2,279
Profit (loss)	-3,502,339	-3,502,339	-	-	-	-	3,502,339
Total liabilities	**139,154,192**	**139,212,467**	**56,955**	**12,660,989**	**-**	**4,476,907**	**131,223,402**

3. Own Funds

Own funds, an element of Pillar 1, are calculated according to Basel 3 rules implemented in Europe through a comprehensive body of regulations, consisting of the Capital Requirements Regulation (CRR), European Regulation no. 575/2013, and related integrations, by the Capital Requirements Directive (CRD IV), by Regulatory Technical Standards and Implementing Technical Standards issued by the EBA, and by supervisory instructions issued by Bank of Italy (specifically, Circular nos. 285 and 286). The introduction of a new regulatory framework is subject to a transition period that extends the full application of the rules to 2019 (2022 for the phase-out of certain capital instruments) and during which the new rules will be applied in an increasing proportion.

Own funds, calculated according to the transitional arrangements in force, differ from the net equity book value since prudential regulations aim to protect the quality of assets and reduce any potential volatility caused by the application of IAS/IFRS. The items that constitute own funds, therefore, must be fully available to the Group so that they may be used to cover risks and losses without any restrictions. Institutions are, in fact, required to demonstrate the quality and quantity of own funds in compliance with applicable European legislation.

Own funds are made up of Tier 1 capital (T1), in turn consisting of Common equity Tier 1 (CET1) and of Additional Tier 1 (AT1), and of Tier 2 (T2).

For a detailed description of the items included in Own Funds (CET1, AT1, T2) whether relating to transitional or final requirements, please refer to the Annual Financial Report as at 31 December 2017 - Notes to Part F – Information on consolidated shareholders' equity –Section 2.2. It should be noted that, with EU Reg. 2016/445 of 14 March 2016,unrealised profits and losses relating to exposures to central administrations of the European Union classified as AFS are treated in the same way as those deriving from AFS exposures to other types of counterparties, or with the same transition regime, without prejudice to the sterilisation of the portion not calculated in CET 1, for which the previous domestic regulations continue to apply. In particular, current transition requirements provide that unrealised gains on financial instruments classified in the AFS portfolio are calculated in CET1 at 40% starting from 2015, with a subsequent phase-in of 20% per year (60% in 2016, 80% in 2017 and 100% in 2018); unrealized losses on financial instruments classified in the AFS portfolio are calculated in CET1 with a phase-in of 20% per year (60% in 2016, 80% in 2017 and 100% in 2018). Therefore unrealised losses relating to exposures to central administrations classified as AFS amount to €-58.5M and are included in the calculation of own funds in the amount of €-46.8 M.

Below are the main features of the financial instruments which are included in Common Equity Tier 1.

Features of CET 1 instruments

Features of subordinated intruments	Interest rate	Step up	Issue Date	Maturity Date	Early redemptionas of	Currency	Grandfathering	Original amount in currency units	Contribution to capital (€/000)
Ordinary shares	N.A.	NO	N.A.	N.A.	N.A.	EUR	NO	10,328,618,260	10,014,908
Total Equity Instruments (Common Equity Tier 1 - CET1)									**10,014,908**

Below is the quantitative information on Own Funds, reported according to the Transitional Own funds disclosure template provided for in the EBA's instructions. (Attachment VI of the European Commission's (EU) Implementing Regulation No. 1423/2013.

Tab. 3.1.1 - Transitional own funds disclosure template

	Common Equity Tier 1: instruments and reserves	dec-2017 (A) - Amount at Disclosure Date	dec-2017 (C) - Amounts subject to Pre-Regulation (EU) No. 575/2013 or predescribed residual amount of regulation (EU) No. 575/2013	dec-2016 (A) - Amount at Disclosure Date	dec-2016 (C) - Amounts subject to Pre-Regulation (EU) No. 575/2013 or predescribed residual amount of regulation (EU) No. 575/2013
1	Capital instruments and the related share premium accounts	10,328,618	-	7,167,866	-
	of which: Paid up capital instruments	*10,328,618*	-	*7,167,866*	-
2	Retained earnings	1,480,953	-	974,531	-
3	Accumulated other comprehensive income (and other reserves, to include unrealised gain and losses under the applicable accounting standards)	2,435,574	-	1,342,143	-
4	Amount of qualifying items referred to in Article 484 (3) and the related share premiun account subkect to phase out from CET1	-	-	-	-
	Public sector capital injections grandfathered until 1 January 2018	-	-	-	-
5	Minority Interests (amount allowed in consolidated CET1)	-	-	-	-
5a	Independently reviewed interim profits net of any foreseeable change or dividend	-	-	-	-
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**14,245,145**		**9,484,541**	
	Common Equity Tier 1 (CET1) capital: regulatory adjustments				
7	Additional value adjustments (negative amount)	-43,926	-	-59,513	-
8	Intangible assets (net of related tax liability) (negative amount)	-332,347	-	-402,525	-
10	Deferred tax assets that rely on future probability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	-764,514	-191,128	-184,026	-122,684
11	Fair value reserves related to gains or losses on cash flow hedges	222	-	28,401	-
12	Negative amounts resulting from the calculation of expected loss amounts	-	-	-	-
14	Gains or losses on liabilities valued at fair value resullting from changes in own credit standing	-36,533	-	-173,129	-
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	-313,710	-	-	-
17	Holdings of the CET1 instruments of financial sector entitites where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	-	-
18	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negarive amount)	-	-	-	-
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entitites where the institution has a significant investment in those entities (amount above 10% threshold and net the eligible short positions) (negative amount)	-	-	-125,894	-83,929
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in 38 (3) are met) (negative amount)	-	-	-	-
22	Amount exceeding the 15% threshold (negative amount)	-81,327	-197,906	-165,437	-118,677
23	*of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entites where the institution has a significatn investment in those entitites*	*-46,315*	*-110,408*	*-87,811*	*-58,540*
25	*of which: deferred tax assets arising from temporary differences*	*-35,013*	*-87,498*	*-77,626*	*-60,137*
25a	Losses for the current financial year (negative amount)	-2,801,871	-700,468	-1,944,666	-1,296,444
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment	-218,123	-	-290,649	-
26a	Regulatory adjustments realting to unrealised gains and losses pursuant to Articles 467 and 468	-25,209	-	-73,075	-
	of which: filter for unrealised loss on UCITs	-	-	-	-
	of which: filter for unrealised loss on EU securities	*11,704*	-	*26,541*	-
	of which: filter for unrealised gain on debt securities	-	-	-	-
	of which: filter for unrealised gain on investments	-	-	-	-
	of which: filter for unrealised losses	-	-	-	-
	of which: filter for unrealised gains	*-36,914*	-	*-99,616*	-
	of which: others	-	-	-	-
26b	Amount to be deducted from or added to Common Equity Tier 1 capital with regard to additional filters and deductions required pre CRR	29,489	-	52,476	-
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	-706,062	-	-793,104	-
28	**Total regulatory adjustments to Common equity Tier 1 (CET1)**	**-5,293,912**		**-4,131,141**	
29	**Common Equity Tier 1 (CET1) Capital**	**8,951,233**		**5,353,400**	

Tab. 3.1.2 - Own Funds: Additional Tier 1 (AT1) capital

	Additional Tier 1 (AT1) capital: instruments	dec-2017 (A) - Amount at Disclosure Date	dec-2017 (C) - Amounts subject to Pre-Regulation (EU) No. 575/2013 or predescribed residual amount of regulation (EU) No. 575/2013	dec-2016 (A) - Amount at Disclosure Date	dec-2016 (C) - Amounts subject to Pre-Regulation (EU) No. 575/2013 or predescribed residual amount of regulation (EU) No. 575/2013
30	Capital instruments and the related share premium accounts	-	-	209,900	-
31	*of which: classified as equity under applicable accounting standards*	-	-	*181,985*	-
32	*of which: classified as liablilities under applicable accounting standards*	-	-	*27,915*	-
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	-	-	364,503	-
	Public sector capital injections grandfathered until 1 January 2018	-	-	-	-
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	-	-	-	-
35	*of which: instruments issued by subsidiaries subject to phase out*	-	-	-	-
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**-**		**574,403**	
	Additional Tier 1 (AT1) capital: regulatory adjustments				
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	-	-	-	-
38	Holdings of the AT1 instruments of financial sector entities where those entitites have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	-	-
39	Direct and indirect holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-
40	Direct and indirect holdings of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-
41	Regulatory adjustments applied to additional tier 1 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)	-	-	-	-
41a	Residual amounts deducted from Additional Tier 1 caqpital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No. 575/2013	-706,062	-	-1,367,507	-
	of whichi: Losses for the current year	*-700,468*	-	*-1,296,444*	-
	of which: Significant financial instruments	*-5,594*	-	*-71,063*	-
	of which: Not Significant financial instruments	-	-	-	-
	of which: outstanding amount related to the excess of expected losses with respect to adjustments for IRB positions	-	-		
41b	Residual amounts deducted from Additional Tier 1 caqpital with regard to deduction from Tier 2 capital during the transitional period pursuant to article 472 of Regulation (EU) No. 575/2013	-	-	-	-
41c	Amount to be deducted from or added to Additional Tier 1 capital with regard to additional filters and deductions required pre-CRR	706,062	-	793,104	-
42	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	-	-	-	-
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**-**		**-574,403**	
44	**Additional Tier 1 (AT1) capital**	**-**		**-**	
45	**Tier 1 capital (T1 = CET1 + AT1)**	**8,951,233**		**5,353,400**	

Tab. 3.1.3 - Own Funds: Tier 2 (T2) capital

	Tier 2 (T2) capital: instruments and provisions	dec-2017 (A) - Amount at Disclosure Date	dec-2017 (C) - Amounts subject to Pre-Regulation (EU) No. 575/2013 or predescribed residual amount of regulation (EU) No. 575/2013	dec-2016 (A) - Amount at Disclosure Date	dec-2016 (C) - Amounts subject to Pre-Regulation (EU) No. 575/2013 or predescribed residual amount of regulation (EU) No. 575/2013
46	Capital instruments and the realted share premium accounts	-	-	1,481,336	-
47	Amopunt of qualifying items referred to in Articole 484 (5) and the related share premium accounts subject to phase out from T2	-	-	-	-
	Public sector capital injections grandfathered until 1 January 2018	-	-	-	-
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	-	-	-	-
49	*of which: instruments issued by subsidiaries subject to phase out*	-	-	-	-
50	Credit risk adjustments	162,039	-	181,906	-
51	**Tier 2 (T2) capital before regulatory adjustments**	**162,039**		**1,663,242**	
	Tier 2 (T2) capital: regulatory adjustments				
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	-	-	-113,280	-
53	Holdings iof the T2 instruments and subordinated loans of financial sector entitites where those entities have recirpocal cross holdings with the institution designed to inflate artificialli the own funds of the institution (negative amount)	-	-	-	-
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entitites where the institution does not have a significant investment in those entities (amount above 10% threshdol and net of eligible short positions) (negative amount)	-	-	-	-
54a	*of which: new holdings not subjcet to transitional arrangements*	-	-	-	-
54a	*of which: holdings existing before January 2013 and subject to transitional arrangements*	-	-	-	-
55	Direct and indrect holdings by the institution of the T2 instruments and subordinated loans fo financial sector entitites where the institution has a significant investment in those entities (net eligible of short positions)	-62,214	-	-63,173	-
56	Regulaory adjustments applied to tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No. 575/2013 i.e. CRR residual amounts)	-	-	-	-
56a	Residual amounts deducted from Tier 2 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No. 575/2013	-5,594	-	-71,063	-
	of whichi: Losses for the current year	-	-	-	-
	of which: Significant financial instruments	*-5,594*	-	*-71,063*	-
	of which: Not Significant financial instruments	-	-	-	-
	of which: outstanding amount related to the excess of expected losses with respect to adjustments for IRB positions	-	-		
56b	Residual amounts deducted from Tier 2 capital with regard to deduction from Additional Tir 1capital during the transitional period pursuant to article 472 of Regulation (EU) No. 575/2013	-	-	-	-
56c	Amount to be deducted from or added to Tier 2 capital capital with regard to additional filters and deductions required pre-CRR	18,256	-	48,198	-
	of which: unrealised gains	*18,256*	-	*48,198*	-
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**-49,552**		**-199,318**	
58	**Tier 2 (T2) capital**	**112,487**		**1,463,924**	
59	**Total Capital (TC= T1+T2)**	**9,063,720**		**6,817,324**	

Tab. 3.1.4 - Own Funds: Capital ratios and buffers

	Capital ratios and buffer	dec-2017 (A) - Amount at Disclosure Date	dec-2016 (A) - Amount at Disclosure Date
60	**Total Risk Weighted Assets**	**60,562,512**	**65,521,653**
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	14.78%	8.17%
62	Tier 1 (as a percentage of risk exposure amount)	14.78%	8.17%
63	Total capital (as a percentage of risk exposure amount)	14.97%	10.40%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	5.75%	7.00%
65	*of which: capital conservation buffer requirement*	*1.25%*	*2.50%*
66	*of which: countercyclical buffer requirement*	*0.002%*	*0.001%*
67	*of which: systemic risk buffer requirement*	*-*	*-*
67a	*of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer*	*-*	*-*
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount [1]	6.97%	2.17%
	Capital ratios and buffer		
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	641,235	548,851
73	Direct and indirect holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	877,780	643,783
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	686,162	606,006
	Applicable caps on the inclusion of provisions in Tier 2		
76	Credit risk adjustments included in T2 in respect of exposures subject to standardized approach (prior to the application of the cap)	-	-
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	-	-
78	Credit risk adjustments included in T2 in respect of exposures subject to sIRB approach (prior to the application of the cap)	7,119,971	3,174,266
79	Cap on inclusion of credit risk adjustments in T2 under IRB approach	162,039	181,906
	Capital instruments subject to phase-out arrangements (only 1 Jan 2013 and 1 Jan 2022)		
80	Current cap on CET1 instruments subject to phase out arrangements	-	-
81	Amount excluded from CET1 due to cap (excess mover cap after redemptions and maturities)	-	-
82	Current cap on AT1 instruments subject to phase out arrangements	-	364,503
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	285,497
84	Current cap on T2 instruments subject to phase out arrangements	-	-
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	-

[1] Tier 1 capital available for reserves is calculated as the difference between the Common Equity Tier 1 in line 61, the Reserve Requirement referred to in line 64 and the requirement referring to Tier 1 capital for the portion covered by Common Equity Tier 1 Capital components. As already stated in the descriptive section, the Montepaschi Group's CET1 capital does not comply with the CBR for the amount reported.

Tab. 3.2 – Reconciliation of shareholders' equity and the Common Equity Tier 1

Items	dec-2017	dec-2016
Group Equity	10,429,096	6,425,416
Minority Equity	2,279	34,859
Net Assets of the Balance Sheet	**10,431,375**	**6,460,274**
Net Assets after distribution to shareholders	**10,431,375**	**6,460,274**
Adjustments for instruments computable in AT1 o T2		
- Capital share computable in AT1	-	-197,808
- Minority interests computable	-2,279	-34,859
- Own shares included in the regulatory adjustments	-313,710	-
- Other components non computable in regime	222	44,224
Common Equity Tier 1 (CET1) before the regulatory adjustments	**10,429,318**	**6,271,832**
Regulatory adjustments (including adjustments of the transutional period)	-1,478,085	-918,432
Common Equity Tier 1 (CET1) net of regulatory adjustments	**8,951,233**	**5,353,400**

Tab. 3.3 – Full reconciliation of the components of Common Equity Tier 1, Additional Tier 1 and Tier 2 capital, as well as the filters and deductions applied to the institution's own funds and the balance sheet of the financial statements

Items (Euro mln)	Financial Statement	Prudential Statement	Information about differences	Relevant amount for the purpose of Own Funds	See Table "Transitional Disclosure Template"
Assets					
100. Equity investments	1,034,644	1,125,636	90,992	-106,614	8, 18, 19, 23, 41a, 56a
of which: implicit goodwill	*49,112*	*49,112*		*-49,112*	*8*
130. Intangible assets	283,235	283,190	-45	-283,235	8
of which: goodwill	*7,900*	*7,900*		*-7,900*	*8*
of which: other intangible assets	*275,335*	*275,290*	*-45*	*-275,335*	*8*
140. Tax assets	3,815,294	3,814,711	-584	-799,527	10, 21, 25
of which: tax assets that rely on future profitability and do not arise from temporary differences net of the related deferred tax liability	*955,642*	*955,642*		*-764,514*	*10*
Liabilities and Shareholders' Equity					
30. Debt securities issued	20,461,300	20,461,300		-181,985	32, 33, 46, 52
50. Financial liabilities designated at fair value	326,279	326,279		0	33
140. Valuation reserves	51,705	51,705		44,974	3, 11, 26a, 56c
of which: AFS	*123,937*	*123,937*		*-6,953*	*3 (AFS), 26a, 56c*
of which: CFH	*-222*	*-222*		*222*	*3(CFH),11*
of which: legally-required revaluations	*9,053*	*9,053*		*9,053*	*3(reval)*
of which: other	*-81,063*	*-81,063*		*42,652*	*3(others)*
170. Reserves	3,864,821	3,864,821		3,848,998	2, 3
180. Share premium reserve	0	0		0	0
190. Share Capital	10,328,618	10,328,618		10,526,426	1, 2, 31
200. Treasury shares	-313,710	-313,710		-313,710	16
220. Profit/loss for the period	-3,502,339	-3,502,339		-3,502,339	5a, 25a, 41a, 56a
Fair value gains and losses arising from the institution's own credit risk related to derivative liabilities				-36,533	14
Value adjustments due to the requirements for prudent valuation				-43,926	7
IRB Shortfall of credit risk adjustments to expected losses				0	12, 41a, 56a
IRB Excess of provisions over expected losses eligible				162,039	50
Filter on double tax realignment				-218,123	26
Filter for IAS 19				29,489	26b
Direct and indirect holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities				0	39
Direct and indirect holdings of Tier 2 instruments of financial sector entities where the institution has a significant investment				-62,214	54, 55
Indirect investments					
Total Own Funds				**9,063,720**	

The information was summarized according to the methodology described in Annex I of the Implementing Regulation (EU) No. 1423/2013 which establishes technical standards implementation with regard to the disclosure on Own Funds.

4. Capital requirements, liquidity ratios and leverage

The Montepaschi Group pursues strategic objectives focused on quantitative and qualitative strengthening of capital, structuring rebalancing of liquidity and achievement of sustainable levels of profitability. In this perspective, capital management, planning and allocation activities play a crucial role in ensuring compliance over time with the minimum capitalisation requirements set by the regulations and the supervisory authorities, as well as with the risk appetite level approved by the Group's strategic supervision body.

This is the purpose served by the Risk Appetite Framework (RAF) through which the target capitalisation levels are estimated on a yearly basis and capital is allocated to the business units according to expected development and estimated risk levels, making sure that the allocated capital is sufficient to ensure compliance with minimum requirements, under both normal and stress conditions.

In the context of the RAF, prospective capital adequacy assessments are performed over a multiyear period, under both normal and stress conditions.

The achievement of objectives and compliance with regulatory minimum requirements is constantly monitored throughout the year.

The formal corporate processes to which the RAF is applied at least on an annual basis are the budget, the risk appetite and the ICAAP.

The Budgeting, Planning, Capital and Risk Management processes of the Montepaschi Group are based on the "Risk Adjusted Performance Management" (RAPM) logic.

The Montepaschi Group defines its targets on the basis of a Risk Adjusted Performance Measurement (RAPM), which measures profitability net of the cost of capital to be held for regulatory purposes relative to the assumed risk level.

The definitions of equity applied are those used in Supervisory Regulations: Common Equity Tier 1, Tier 1 and Capital; moreover, the RAPM metrics also include Invested Capital, i.e. the amount of Shareholders' equity needed to achieve Common Equity Tier 1 values, whether determined ex ante as target levels or realised ex post. The Capital Risk concepts applied are those in the regulatory requirements, corresponding to the Risk Weighted Assets (RWAs), determined on the basis of the rules set out in the supervisory regulations, and the economic capital corresponding to the maximum losses estimated on measurable risks at a predetermined confidence interval and on the basis of the Group's internal models and rules.

Both measurements are used as part of RAPM metrics.

Following the implementation of the regulatory framework, Pillar 1, which governs the requirements used to reflect the potential risk of activities as well as capital requirements, was strengthened through a more harmonised definition of capital as well as higher capital requirements. Therefore, alongside the minimum levels of capital required to face credit, counterparty, market and operational risks, a definition of higher quality capital has been added to own resources, essentially focused on common equity. Also added are capital reserves which have the function of preserving primary capital, providing counter-cyclical buffers and hedging against greater losses for systemically important financial institutions. These reserves are determined by the Member States (Bank of Italy) in accordance with the framework, and are to be added to Core Equity Tier 1. In addition to the system of minimum capital requirements and reserves, there is now a monitoring plan of leverage caps (including off-balance sheet exposures) as a backstop to capital requirements based on risk and to reduce excessive leverage across the system.

The regulatory framework also introduces liquidity risk monitoring requirements and tools which focus on short-term liquidity resilience (Liquidity Coverage Ratio - LCR) and longer term structural balance (Net Stable Funding Ratio - NSFR) as well as providing standards for liquidity risk management and monitoring at both individual and system-wide level.

Regulatory Capital Adequacy Requirements

Under the prudential regulation (art. 92 CRR), the minimum equity requirements for 2017 are as follows:

- CET1 ratio of at least 4.5% of the Group's total risk exposure;
- AT1 ratio of at least 6% of the Group's total risk exposure;
- Total Capital ratio of at least 8% of the Group's total risk exposure.

In addition to maintaining these minimum requirements against Pillar 1 risk, there is a further Core Equity Tier 1 component against Pillar 2 risk, established following the annual SREP, as well as the following buffers also made up of CET1:

- *capital conservation buffer* - aimed at preserving the minimum level of regulatory capital during difficult periods in the market, through the allocation of high quality capital in periods in which there are no market tensions. This reserve is mandatory and must be 1.25% of the Bank's total risk exposure for 2017; 1.875% from 1 January 2018 to 31 December 2018; 2.5% as of 1 January 2019;
- *countercyclical capital buffer* - aimed at protecting the banking sector in phases of excessive growth in loans. The buffer provides for the accumulation of CET1 capital during phases of rapid growth in the credit cycle, which can then be used to absorb losses in the downward phase of the cycle. As opposed to the capital conservation buffer, the countercyclical buffer is imposed only during periods of loan growth and is calculated according to CRD IV provisions by the competent national authorities; in the fourth quarter

of 2017, the countercyclical buffer for Italy was kept at 0%. For the other credit exposures, the Group uses the countercyclical buffers established by the counterparty's Member State authorities in accordance with applicable regulations.

- the systemic risk buffer, aimed at dealing with with long-term non-cyclical systemic risk in the financial sector, is to be established by the Member States and, currently, has not yet been determined by the Bank of Italy;
- G-SII buffer for global systemically important banks and O-SII buffer for other systemically important institutions - impose higher capital requirements on those entities based on their systemic relevance, at a global or national level, which pose greater risks for the financial system and for which a crisis could have impacts on contributors. The Group is not a Global Systemically Important Institute (G-SII) but is classed as an Other Systematically Important Insitution (O-SII), as defined by the Bank of Italy. For each bank or banking group, this identification took into consideration the four characteristics (size, relevance for the Italian economy, complexity and interconnection with the financial system) specified in the EBA guidelines to establish the systematic relevance of each entity at the level of individual jurisdiction. The Bank of Italy's decision established an O-SII buffer of zero percent for 2016 and 2017, 0.06% for 2018, 0.13% for 2019, 0.19% for 2020 and 0.25% starting from 2021.

The combination of these buffers determines the Combined Buffer Requirement (CBR).

Capital adequacy

As regards the SREP (Supervisory Review and Evaluation Process), until 31 December 2017, the CET1 threshold to be observed remains 10.75%, announced in November 2015 with the previous SREP letter. On 19 June 2017 the ECB ordered the Parent Company to maintain a Total SREP Capital Requirement ratio of 11% at consolidated level as of 1 January 2018, which includes:

- a minimum Pillar 1 requirement of 8% and
- an additional Pillar 2 requirement of 3% (P2R), entirely in terms of Common Equity Tier 1 capital.

As a result, BMPS must meet the following requirements at consolidated level as of 1 January 2018:

- CET1 Ratio of 9.44% on a transitional basis,
- Total Capital Ratio of 12.94% on a transitional basis including, aside from the P2R, 1.875% for the Capital Conservation Buffer and 0.06% for the O-SII Buffer (Other Systemically Important Institutions Buffer).

The target ratios required by the EBC must be complied with at all times when the Authority's Decision is in force; similarly, at those times the Parent Company may not distribute dividends to shareholders or pay cash flows to holders of AT1 instruments.

For the sake of completeness, note that, subsequent to the credit deterioration events that occurred in 2017, the Group has largely implemented the residual differences from the credit file review that emerged following ECB's on-site inspection 1238.

As at 31 December 2017, the Bank had a CET 1 ratio of 14.78%, higher than the minimum requirements set forth in Article 92 of the CRR and higher than the target SREP ratio set by the ECB and the Combined Buffer Requirement established by prudential regulations. Likewise, the Tier 1 ratio and the Total Capital Ratio equal to 14.78% and 14.97%, respectively, are higher than the requirements established by Article 92 of the CRR.

The table reports on the Group's capital adequacy according to the disclosure templates provided by the current regulatory framework.

Quantitative information

As to the definition of regulatory capital requirements, in June 2008 the Montepaschi Group was authorised to use the Advanced Internal Rating Based (AIRB) models for the measurement of capital requirements against credit risk in the retail and corporate portfolios and the Advanced Measurement Approach (AMA) for operational risk.

The Montepaschi Group uses the standard approach ratios for Exposure at default (EAD) pending validation by the Supervisory Authorities,

the Group is instead authorised to use:

- Internal Probability of Default (PD) estimates, for the portfolio of exposures to corporates and retail exposures;
- internal Loss Given Default (LGD) estimates for the portfolio of exposures to corporates and retail exposures. For portfolios other than those mentioned above, the standard approach will be used and applied according to the roll-out plan submitted to the Supervisory authorities.

The AIRB model's scope of application currently includes the Parent Company Banca MPS, MPS Capital Services Banca per le Imprese and MPS Leasing & Factoring, for the regulatory portfolios "Retail Exposures" and "Exposures to corporates". For the remaining portfolios and Group entities, capital requirements against Credit risk are calculated using the standard approach. Capital requirements against Counterparty risk are calculated independently of the portfolio. More specifically, the Market value method is applied for OTC derviatives and the comprehensive approach for the treatment of financial collateral is used for repos, sell-buy backs and security lending.

Capital requirements against CVA risk are calculated according to the standard approach. Capital ratios for Operational Risk are calculated almost completely according to the AMA – Advanced Measurement Approach. The standardized approach is used for the remaining part of the scope.

Capital requirements in relation to market risk are instead calculated for all Group entities by adopting the standardized approach. The tables below provide details on the Group's different capital requirements as at 31 December 2017.

Tab. 4a – Capital requirements and Regulatory capital ratios

Regulatory Capital Requirements	dec-17	dec-16
Credit and Counterparty Risk	**3,817,017**	**4,281,664**
Standard Approach	1,655,880	1,855,698
Advanced IRB Approach	2,161,137	2,425,966
Market Risks	**199,411**	**243,645**
Standardised Approach	199,411	243,645
Internal Models	-	-
Operational Risk	**800,923**	**678,061**
Foundation Approach	11,936	15,234
Standardised Approach	-	-
Advanced Approach	788,987	662,827
CVA Risk	**27,650**	**38,362**
Originary Exposure Method (OEM)	-	-
Standardised Approach	27,650	38,362
Advanced Approach	-	-
Concentration Risk	-	-
Settlement Risk	-	-
Regulatory Capital Requirements	**4,845,001**	**5,241,732**
Risk-weighted assets	**60,562,512**	**65,521,653**
CET1 Capital Ratio	**14.78%**	**8.17%**
Tier1 Capital Ratio	**14.78%**	**8.17%**
Total Capital Ratio	**14.97%**	**10.40%**

The following table provides a general overview of the total RWAs and capital requirements.

Tab. 4b (EU OV1) – Overview of RWAs

			RWAs		Minimum capital requirements	
			dec-17	sep-17	dec-17	sep-17
	1	**Credit risk (excluding CCR)**	**44,802,865**	**46,891,625**	**3,584,229**	**3,751,330**
Article 438 (c) (d)	2	Of which the standardised approach	18,153,295	18,554,968	1,452,264	1,484,397
Article 438, (c) (d)	3	Of which the foundation IRB (FIRB) approach	-	-	-	-
Article 438 (c) (d)	4	Of which the advanced IRB (AIRB) approach	26,649,570	28,336,657	2,131,965	2,266,933
Article 438, d)	5	Of which equity IRB under the simple risk-weighted approach or the IMA	-	-	-	-
Article 107, Article 438 (c) (d)	6	**CCR**	**1,786,918**	**1,978,741**	**142,953**	**158,299**
Article 438(c) (d)	7	Of which mark to market	857,155	908,195	68,572	72,656
Article 438, lettere c) e d)	8	Of which original exposure	-	-	-	-
	9	Of which the standardised approach	-	-	-	-
	10	Of which internal model method (IMM)	-	-	-	-
Article 438(c) (d)	11	Of which risk exposure amount for contributions to the default fund of a CCP	12,782	6,872	1,023	550
Article 438 (c) (d)	12	Of which CVA	345,620	351,071	27,650	28,086
Article 438 (e)	13	**Settlement risk**	-	-	-	-
Article 449 (o) (i)	14	**Seecuritisation exposures in the banking book (after the cap)**	**7,760**	**7,182**	**621**	**575**
	15	Of which IRB approach	7,760	7,182	621	575
	16	Of which IRB supervisory formula approach (SFA)	-	-	-	-
	17	Of which internal assessment approach (IAA)	-	-	-	-
	18	Of which standardised approach	-	-	-	-
Article 438 (e)	19	**Market risk**	**2,492,636**	**3,593,653**	**199,411**	**287,492**
	20	Of which the standardised approach	2,492,636	3,593,653	199,411	287,492
	21	Of which IMA	-	-	-	-
Article 438 (e)	22	**Large exposures**	-	-	-	-
Article 438 (f)	23	**Operational risk**	**10,011,539**	**9,320,495**	**800,923**	**745,640**
	24	Of which basic indicator approach	149,202	190,426	11,936	15,234
	25	Of which standardised approach	-	-	-	-
	26	Of which advanced measurement approach	9,862,337	9,130,069	788,987	730,406
Article 437(2), Article 48 and 60	27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**1,460,793**	**1,498,001**	**116,863**	**119,840**
Article 500	28	Floor adjustment	-	-	-	-
	29	**Total**	**60,562,512**	**63,289,701**	**4,845,001**	**5,063,176**

The sum of rows 1,6 (excluding row 12), 14 and 27 is consistent with the item of total credit and counterparty risk of tables 4.1 and 4.2. Row 6 (consistent with table 6.1.7 - EU CCR1), in addition to rows 7,8,9,10,11 and 12, includes the amount related to the financial collateral comprehensive method (for SFTs) equal to 571,361 of RWA, at 31/12/2017.

Further information on exposures (non-weighted amounts) and RWAs (weighted amounts), are reported:

- for exposures subject to the standard approach – credit risk in Section 5.2 (which also contains the amounts of off-balance sheet transactions after weighting by credit conversion factors – CCF);
- for exposures subject to internal credit risk models in section 5.3;
- for exposures in securitisation positions subject to the standard approach and AIRB approach in section 11.

Tab. 4.1 – Capital requirements for Credit and Counterparty Risk

	dec-17	dec-16
	Requirements	Requirements
Standard Approach		
Standard Approach Total	**1,655,880**	**1,855,698**
of which: Counterparty Risk	*85,731*	*150,832*
IRB Approach		
IRB Approach Total	**2,161,137**	**2,425,966**
of which: Counterparty Risk	*28,551*	*31,977*
Total	**3,817,017**	**4,281,664**
of which: Counterparty Risk	***114,281***	***182,809***

The Capital Requirement for Counterparty Risk amounts to 114,281€/thousand and has been calculated on both the Trading Portfolio and the Banking Book. The requirement, summarised by methodology in table 4.1, is reported in the individual regulatory portfolios of the Standard Apporach and the AIRB Approach in talbe 4.2.

Tab. 4.2 – Capital requirements for Credit and Counterparty Risk

Standard Approach	dec-2017	dec-2016
Exposures to central governments and central banks	217,601	284,200
Exposures to regional governments and local authorities	31,705	32,619
Exposures to public sector entities	34,592	35,749
Exposures to Multi-lateral development banks	-	-
Exposures to International Organisations	-	-
Exposures to Supervised institutions	176,025	220,292
Exposures to Corporates	407,640	494,629
Retail Exposures	75,457	95,339
Exposures secured by mortgages on immovable property	43,176	36,182
Exposures in Default	90,247	121,780
Exposures associated with high-risk	11,232	11,801
Exposures in the form of covered bonds	11,024	11,850
Exposures to institutions and corporates with a short-term credit assessment	-	-
Exposures to UCITs	36,593	49,073
Equity Exposures	242,245	174,306
Other Exposures	277,321	286,767
Securitization positions	-	-
Exposures to Central Counterparties in the form of pre-funded contributions to the guarantee fund	1,023	1,110
Standard Approach Total	**1,655,880**	**1,855,698**
AIRB Approach		
Exposures to or secured by corporates:	1,474,882	1,665,984
- SMEs	686,016	817,991
- Other companies	666,005	721,571
- Specialized lending	122,861	126,422
Retail exposures:	685,634	759,430
- secured by real estate: SMEs	153,857	182,205
- secured by real estate: Individuals	242,241	254,605
- Qualifying revolving	741	816
- Other retail exposures: SMEs	258,486	288,468
- Other retail exposures: Individuals	30,309	33,335
Securitization positions	621	553
AIRB Approach Total	**2,161,137**	**2,425,966**
Credit and Counterparty Risk Total	**3,817,017**	**4,281,664**

Below is a breakdown of capital requirements for Credit and Counterparty Risk (IRB method) – Specialised Lending - slotting criteria, for Market Risk and Operational Risk. The details are provided below relating to the impact on RWAs in terms of the authorisation granted to entities not to deduct instruments of own funds held in a financial entity in which the entities hold a significant investment.

Tab. 4.3 – Capital requirements for Credit and Counterparty Risk (IRB methods) – Specialised lending - slotting criteria

Risk weight	dec-2017	dec-2016
Category 1 - 50%	50	-
Category 1 - 70% equal to or greater than 2.5 years	2,048	1,232
Category 2 -70% less than 2.5 years	5,201	6,725
Category 2 - 90%	68,015	80,296
Category 3 - 115%	33,634	30,039
Category 4 - 250%	13,914	8,130
Category 5 - 0%	-	-
Total	**122,861**	**126,422**

Tab. 4.4 – Capital Requirements for Market Risk

Standardised Approach	dec-2017	dec-2016
Position risk on debt instruments	126,299	143,361
Position risk on equity	41,428	44,236
Foreign exchange risk	16,676	37,728
Commodities risk	13,190	10,516
CIU Risk	1,817	7,804
Total Standardised Approach	**199,411**	**243,645**
Internal models		
Total Internal models	**-**	**-**
Total Market Risks	**199,411**	**243,645**

The capital requirement included in Marekt Risk for securitisaiton positions in the Regulatory Trading Portfolio amount 11,778 (expressed in thousands of Euros) for 2016.

Tab. 4.5 – Capital requirements for Operational Risk

Requirements by Approach	dec-2017	dec-2016
Foundation Approach	11,936	15,234
Standardised Approach	-	-
Advanced Measurement Approach	788,987	662,827
Total Operational Risk	**800,923**	**678,061**

Tab. 4.6 (EU INS1) – Non-deducted participations in insurance undertakings

	dec-2017
Holdings of own funds instruments of a financial sector entity where the institution has a significant investment not deducted from own funds (before risk-weighting)	877,780
Total RWAs	**2,050,107**

Countercyclical Capital Buffer

As of 31 December 2017, the Montepaschi Group is required to hold a countercyclical capital buffer of EUR 1,211,300. This buffer, as established by Article 130 of the CRD IV, is equal to the total risk exposure amount (expressed in terms of risk-weighted assets) multiplied by the institution's specific countercyclical rate, which, for the Montepaschi Group, stands at 0.002%. The latter is equal to the weighted average of the countercyclical rates applicable in the countries where the Institution has exposures. Each Member State, in accordance with article 130, paragraph 1 of Directive 2013/36/UE of the European Parliament and Council (CRD), shall require institutions to maintain an institution-specific countercyclical capital buffer against exposures to their own Country and establish the related countercyclical buffer rate. In particular, the Bank of Italy has set the countercyclical buffer rate for exposures to Italian counterparties at 0% for 2017 and the first quarter of 2018. As far as the other credit exposures are concerned, the Group uses the rates established by the competent authorities of the State in order to calculate its own indicator. As of 31 December 2017, only the competent authorities of Hong Kong, Sweden, Norway, Czech Republic, Slovak Republic and Iceland among the Countries to which the Group has relevant exposures for the purpose of calculating the countercyclical buffer, have established a non-zero countercyclical capital buffer rate. As shown in the following tables, the Montepaschi Group holds 93.95% of relevant exposures to Italy, which has a 0% rate, for the purpose of calculating the countercyclical buffer. Reported below are the main items of calculation of the countercyclical capital buffer, presented in the standard format shown in table 2, Attachment I of Commission Delegated Regulation (EU) 1555/2015.

Tab. 4.6.1 – Amount of institution-specific countercyclical capital buffer

		dec-2017 010
010	Total risk exposure amount	60,562,512
020	Institution specific countercyclical buffer rate	0.002%
030	**Institution specific countercyclical buffer requirement**	**1,211.3**

Summarized below are the exposures contributing to the total requirement for the Group's countercyclical capital buffer.

Tab. 4.6.2 – Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

	General credit exposures		Trading book exposure		Securitisation exposure		Own funds requirements				Own funds requirement weights	Countercyclical capital buffer
	Exposure value for SA	Exposure value for IRB	Sum of long and short position of trading book	Value of trading book exposure for internal models	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	**Total**		
	10	20	30	40	50	60	70	80	90	**100**	110	120
010 Breakdown by country												
Italy	14,440,970	106,034,368	720,209	-	-	79,573	3,113,104	1,002,950	621	4,116,675	93.95%	0.00%
Hong Kong	53,639	577	-	-	-	-	4,242	-	-	4,242	0.10%	1.25%
Norge	276	362	-	-	-	-	14	-	-	14	0.00%	2.00%
Sverige	602	727	8,923	-	-	-	40	714	-	754	0.02%	2.00%
Czech Republic	1,283	197	-	-	-	-	83	-	-	83	0.00%	0.50%
Slovak Republic	1,015	275	-	-	-	-	76	-	-	76	0.00%	0.50%
Iceland	827	0	-	-	-	-	66	-	-	66	0.00%	1.25%
Other Countries	4,136,688	119,652	1,588,096	-	-	-	240,233	19,725	-	259,958	5.93%	0.00%
020 Total	**18,635,300**	**106,156,157**	**2,317,228**	**-**	**-**	**79,573**	**3,357,858**	**1,023,390**	**621**	**4,381,869**	**100%**	

The following table, presented in the standard format set out in table 1, Attachment I of Commission Delegated Regultaion (EU) 1555/2015, shows the geographical distribution of exposures with their related capital requirements, relevance within total Group exposures (weighting factors of own funds requirements) and the countercyclical rate.

Tab. 4.6.3.1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer (1/4)

	General credit exposures		Trading book exposure		Securitisation exposure		Own funds requirements				Own funds requirement weights	Counter-cyclical capital buffer
	Exposure value for SA	Exposure value for IRB	Sum of long and short position of trading book	Value of trading book exposure for internal models	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total		
Breakdown by country												
ITALY	14,440,970	106,034,368	720,209	-	-	79,573	3,113,104	1,002,950	621	4,116,675	93.95%	0.00%
UNITED KINGDOM	117,599	21,519	1,369,786	-	-	-	9,354	183	-	9,537	0.22%	0.00%
FRANCE	1,145,701	9,771	4,331	-	-	-	59,990	666	-	60,656	1.38%	0.00%
BELGIUM	644,378	1,983	145	-	-	-	40,788	12	-	40,800	0.93%	0.00%
SPAIN	560,305	3,316	10,170	-	-	-	10,542	1,842	-	12,384	0.28%	0.00%
UNITED STATES	353,828	11,561	81,322	-	-	-	25,551	6,530	-	32,081	0.73%	0.00%
IRELAND	271,397	17,515	38,665	-	-	-	22,924	917	-	23,841	0.54%	0.00%
LUXEMBOURG	317,374	722	6,036	-	-	-	18,219	1,210	-	19,429	0.44%	0.00%
NETHERLANDS	104,113	2,736	1,523	-	-	-	7,924	1,288	-	9,211	0.21%	0.00%
GERMANY	71,816	6,666	10,564	-	-	-	5,498	858	-	6,356	0.15%	0.00%
TURKEY	77,100	184	-	-	-	-	5,733	-	-	5,733	0.13%	0.00%
PORTUGAL	9,581	130	51,126	-	-	-	264	5,019	-	5,284	0.12%	0.00%
HONG KONG (China)	53,639	577	-	-	-	-	4,242	-	-	4,242	0.10%	1.25%
BELARUS	45,173	1	-	-	-	-	5,420	-	-	5,420	0.12%	0.00%
ALGERIA	40,501	9	-	-	-	-	3,237	-	-	3,237	0.07%	0.00%
SWITZERLAND	10,216	14,436	864	-	-	-	845	34	-	879	0.02%	0.00%
INDONESIA	21,865	77	-	-	-	-	1,749	-	-	1,749	0.04%	0.00%
QATAR	19,020	271	-	-	-	-	1,510	-	-	1,510	0.03%	0.00%
CUBA	19,109	6	-	-	-	-	1,529	-	-	1,529	0.04%	0.00%
IRAQ	21,856	3	-	-	-	-	-	-	-	-	0.00%	0.00%
CHINA (People Republic of)	17,831	876	-	-	-	-	1,289	-	-	1,289	0.03%	0.00%
ABU DHABI	15,760	3,454	183	-	-	-	548	15	-	563	0.01%	0.00%
RUSSIAN FEDERATION	16,907	1,024	-	-	-	-	1,153	-	-	1,153	0.03%	0.00%
SINGAPORE	16,207	238	-	-	-	-	1,299	-	-	1,299	0.03%	0.00%
BRAZIL	16,025	1,004	0	-	-	-	985	0	-	985	0.02%	0.00%
CAYMAN (Islands)	15,604	0	0	-	-	-	1,248	-	-	1,248	0.03%	0.00%
BERMUDA	14,984	-	0	-	-	-	1,199	-	-	1,199	0.03%	0.00%
KOREA (Republic of)	3,351	22	9,941	-	-	-	134	795	-	929	0.02%	0.00%
MEXICO	11,657	898	-	-	-	-	626	-	-	626	0.01%	0.00%
TUNISIA	11,258	443	-	-	-	-	902	-	-	902	0.02%	0.00%
MONACO	10,760	1,657	-	-	-	-	494	-	-	494	0.01%	0.00%
EGYPT	10,145	870	-	-	-	-	938	-	-	938	0.02%	0.00%
VIRGIN ISLANDS, BRITISH	10,525	-	0	-	-	-	842	-	-	842	0.02%	0.00%
SWEDEN	602	727	8,923	-	-	-	40	714	-	754	0.02%	2.00%
KAZAKHSTAN	7,831	1	-	-	-	-	588	-	-	588	0.01%	0.00%
MAURITIUS	7,703	-	-	-	-	-	616	-	-	616	0.01%	0.00%
MALDIVES	7,288	-	-	-	-	-	390	-	-	390	0.01%	0.00%
FINLAND	4,761	260	1,578	-	-	-	369	126	-	495	0.01%	0.00%
ISLE OF MAN	5,785	-	0	-	-	-	463	0	-	463	0.01%	0.00%
LEBANON	5,596	5	-	-	-	-	453	-	-	453	0.01%	0.00%
CANADA	5,250	186	172	-	-	-	209	17	-	227	0.01%	0.00%

Tab. 4.6.3.2 – Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer (2/4)

	General credit exposures		Trading book exposure		Securitisation exposure		Own funds requirements				Own funds requirement weights	Counter-cyclical capital buffer
	Exposure value for SA	Exposure value for IRB	Sum of long and short position of trading book	Value of trading book exposure for internal models	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	**Total**		
Breakdown by country												
POLAND	4,079	998	-	-	-	-	237	-	-	237	0.01%	0.00%
GREECE	588	3,943	77	-	-	-	17	6	-	23	0.00%	0.00%
VIETNAM	3,812	0	-	-	-	-	318	-	-	318	0.01%	0.00%
CHILE	3,705	-	-	-	-	-	225	-	-	225	0.01%	0.00%
AUSTRIA	2,507	1,204	0	-	-	-	133	0	-	133	0.00%	0.00%
HUNGARY	3,248	2	-	-	-	-	240	-	-	240	0.01%	0.00%
JORDAN	3,080	0	-	-	-	-	246	-	-	246	0.01%	0.00%
PANAMA	2,994	92	-	-	-	-	241	-	-	241	0.01%	0.00%
ROMANIA	2,868	383	-	-	-	-	155	-	-	155	0.00%	0.00%
ARMENIA	64	3,344	-	-	-	-	19	-	-	19	0.00%	0.00%
PERU	2,925	0	-	-	-	-	228	-	-	228	0.01%	0.00%
MOROCCO	2,814	18	-	-	-	-	177	-	-	177	0.00%	0.00%
MALAYSIA	2,439	227	-	-	-	-	92	-	-	92	0.00%	0.00%
OMAN	2,122	218	-	-	-	-	170	-	-	170	0.00%	0.00%
UZBEKISTAN	2,254	0	-	-	-	-	180	-	-	180	0.00%	0.00%
CONGO (Democratic Republic of)	1,645	786	-	-	-	-	80	-	-	80	0.00%	0.00%
BENIN	2,315	-	-	-	-	-	27	-	-	27	0.00%	0.00%
SAUDI ARABIA	1,862	2	176	-	-	-	96	35	-	131	0.00%	0.00%
PARAGUAY	1,949	0	-	-	-	-	52	-	-	52	0.00%	0.00%
PAKISTAN	1,579	1	-	-	-	-	126	-	-	126	0.00%	0.00%
BANGLADESH	1,510	7	-	-	-	-	90	-	-	90	0.00%	0.00%
ARGENTINA	1,364	129	2	-	-	-	84	0	-	84	0.00%	0.00%
CZECH REPUBLIC	1,283	197	-	-	-	-	83	-	-	83	0.00%	0.50%
THAILAND	1,366	1	-	-	-	-	109	-	-	109	0.00%	0.00%
ISRAEL	637	849	-	-	-	-	33	-	-	33	0.00%	0.00%
SLOVAK REPUBLIC	1,015	275	-	-	-	-	76	-	-	76	0.00%	0.50%
COLOMBIA	1,143	33	-	-	-	-	92	-	-	92	0.00%	0.00%
SAN MARINO	404	721	-	-	-	-	31	-	-	31	0.00%	0.00%
KUWAIT	1,021	0	-	-	-	-	66	-	-	66	0.00%	0.00%
CYPRUS	890	127	-	-	-	-	52	-	-	52	0.00%	0.00%
KENYA	1,101	10	-	-	-	-	2	-	-	2	0.00%	0.00%
NIGERIA	791	120	-	-	-	-	85	-	-	85	0.00%	0.00%
DENMARK	208	822	-	-	-	-	23	-	-	23	0.00%	0.00%
LITHUANIA	856	133	-	-	-	-	25	-	-	25	0.00%	0.00%
JAPAN	782	85	56	-	-	-	28	5	-	33	0.00%	0.00%

Tab. 4.6.3.3 – Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer (3/4)

	General credit exposures		Trading book exposure		Securitisation exposure		Own funds requirements				Own funds requirement weights	Counter-cyclical capital buffer
	Exposure value for SA	Exposure value for IRB	Sum of long and short position of trading book	Value of trading book exposure for internal models	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	**Total**		
Breakdown by country												
COTE D IVOIRE	844	-	-	-	-	-	70	-	-	70	0.00%	0.00%
SOUTH AFRICA	103	158	604	-	-	-	9	48	-	57	0.00%	0.00%
BULGARIA	624	274	-	-	-	-	34	-	-	34	0.00%	0.00%
ICELAND	827	0	-	-	-	-	66	-	-	66	0.00%	1.25%
AUSTRALIA	252	570	0	-	-	-	18	0	-	18	0.00%	0.00%
NEW ZEALAND	162	626	-	-	-	-	11	-	-	11	0.00%	0.00%
VENEZUELA	248	517	-	-	-	-	18	-	-	18	0.00%	0.00%
MACEDONIA (form. Yugoslav Rep)	676	1	-	-	-	-	54	-	-	54	0.00%	0.00%
GHANA	576	26	-	-	-	-	50	-	-	50	0.00%	0.00%
NORWAY	276	362	-	-	-	-	14	-	-	14	0.00%	2.00%
COSTA RICA	484	0	-	-	-	-	32	-	-	32	0.00%	0.00%
MONTENEGRO	462	5	-	-	-	-	36	-	-	36	0.00%	0.00%
CURACAO	-	-	381	-	-	-	-	76	-	76	0.00%	0.00%
URUGUAY	464	2	-	-	-	-	26	-	-	26	0.00%	0.00%
MALTA	372	99	-	-	-	-	23	-	-	23	0.00%	0.00%
INDIA	368	66	-	-	-	-	22	-	-	22	0.00%	0.00%
SENEGAL	463	1	-	-	-	-	2	-	-	2	0.00%	0.00%
SLOVENIA	300	107	-	-	-	-	19	-	-	19	0.00%	0.00%
BOSNIA and HERZEGOVINA	342	0	-	-	-	-	27	-	-	27	0.00%	0.00%
CROATIA	283	47	-	-	-	-	14	-	-	14	0.00%	0.00%
UKRAINE	292	19	-	-	-	-	23	-	-	23	0.00%	0.00%
GUERNSEY, C.I.	-	-	276	-	-	-	-	34	-	34	0.00%	0.00%
MADAGASCAR	323	-	-	-	-	-	9	-	-	9	0.00%	0.00%
PHILIPPINES	237	88	-	-	-	-	7	-	-	7	0.00%	0.00%
TAIWAN	283	4	-	-	-	-	23	-	-	23	0.00%	0.00%
LATVIA	257	0	-	-	-	-	20	-	-	20	0.00%	0.00%
JERSEY, C.I.	121	-	121	-	-	-	10	10	-	19	0.00%	0.00%
OTHER COUNTRIES	180	61	-	-	-	-	15	-	-	15	0.00%	0.00%
TOGO	215	0	-	-	-	-	17	-	-	17	0.00%	0.00%
BRUNEI DARUSSALAM	-	186	-	-	-	-	3	-	-	3	0.00%	0.00%
TAJIKISTAN	172	0	-	-	-	-	5	-	-	5	0.00%	0.00%
MACAU	-	173	-	-	-	-	1	-	-	1	0.00%	0.00%
SERBIA	26	135	-	-	-	-	4	-	-	4	0.00%	0.00%
AFGHANISTAN (Islamic State of)	146	0	-	-	-	-	4	-	-	4	0.00%	0.00%
LIBERIA	93	-	-	-	-	-	3	-	-	3	0.00%	0.00%
SRI LANKA	74	1	-	-	-	-	6	-	-	6	0.00%	0.00%
ALBANIA	26	50	-	-	-	-	2	-	-	2	0.00%	0.00%
MOLDOVA	4	59	-	-	-	-	0	-	-	0	0.00%	0.00%
ESTONIA	44	0	-	-	-	-	3	-	-	3	0.00%	0.00%
IRAN (Islamic Republic of)	3	45	-	-	-	-	1	-	-	1	0.00%	0.00%
CHAD	-	40	-	-	-	-	1	-	-	1	0.00%	0.00%

Tab. 4.6.3.4 – Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer (4/4)

	General credit exposures		Trading book exposure		Securitisation exposure		Own funds requirements				Own funds requirement weights	Counter-cyclical capital buffer
	Exposure value for SA	Exposure value for IRB	Sum of long and short position of trading book	Value of trading book exposure for internal models	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total		
Breakdown by country												
ANTIGUA AND BARBUDA	-	38	-	-	-	-	0	-	-	0	0.00%	0.00%
LIECHTENSTEIN	-	34	-	-	-	-	0	-	-	0	0.00%	0.00%
BAHRAIN	-	35	-	-	-	-	0	-	-	0	0.00%	0.00%
CAMEROON	1	32	-	-	-	-	0	-	-	0	0.00%	0.00%
UGANDA	25	-	-	-	-	-	2	-	-	2	0.00%	0.00%
ZAMBIA	0	26	-	-	-	-	0	-	-	0	0.00%	0.00%
EL SALVADOR	21	0	-	-	-	-	2	-	-	2	0.00%	0.00%
HOLY SEE (VATICAN CITY STATE)	11	-	-	-	-	-	1	-	-	1	0.00%	0.00%
LIBYAN ARAB JAMAHIRIYA	2	9	-	-	-	-	0	-	-	0	0.00%	0.00%
AZERBAIJAN	8	0	-	-	-	-	1	-	-	1	0.00%	0.00%
DOMINICAN REPUBLIC	1	3	-	-	-	-	0	-	-	0	0.00%	0.00%
SOMALIA	3	0	-	-	-	-	0	-	-	0	0.00%	0.00%
SEYCHELLES	-	3	-	-	-	-	-	-	-	-	0.00%	0.00%
ECUADOR	3	0	-	-	-	-	0	-	-	0	0.00%	0.00%
HONDURAS	2	-	-	-	-	-	0	-	-	0	0.00%	0.00%
ANGOLA	0	2	-	-	-	-	0	-	-	0	0.00%	0.00%
TURKMENISTAN	1	-	-	-	-	-	0	-	-	0	0.00%	0.00%
MOZAMBIQUE	1	0	-	-	-	-	0	-	-	0	0.00%	0.00%
MYANMAR	1	0	-	-	-	-	0	-	-	0	0.00%	0.00%
GABON	1	1	-	-	-	-	0	-	-	0	0.00%	0.00%
YEMEN	-	1	-	-	-	-	-	-	-	-	0.00%	0.00%
NEPAL	-	1	-	-	-	-	-	-	-	-	0.00%	0.00%
BOLIVIA	-	1	-	-	-	-	-	-	-	-	0.00%	0.00%
TANZANIA	-	1	-	-	-	-	0	-	-	0	0.00%	0.00%
BELIZE	1	-	-	-	-	-	0	-	-	0	0.00%	0.00%
ETHIOPIA	0	0	-	-	-	-	0	-	-	0	0.00%	0.00%
CONGO (Republic of)	-	1	-	-	-	-	-	-	-	-	0.00%	0.00%
SYRIAN ARAB REPUBLIC	0	0	-	-	-	-	0	-	-	0	0.00%	0.00%
MAURITANIA	-	0	-	-	-	-	-	-	-	-	0.00%	0.00%
GUATEMALA	0	0	-	-	-	-	0	-	-	0	0.00%	0.00%
MONGOLIA	-	0	-	-	-	-	-	-	-	-	0.00%	0.00%
PALESTINIAN TERRITORY, OCCUPIED"	-	0	-	-	-	-	-	-	-	-	0.00%	0.00%
RWANDA	-	0	-	-	-	-	0	-	-	0	0.00%	0.00%
GEORGIA	-	0	-	-	-	-	-	-	-	-	0.00%	0.00%
MALI	0	0	-	-	-	-	0	-	-	0	0.00%	0.00%
NICARAGUA	0	-	-	-	-	-	0	-	-	0	0.00%	0.00%
SUDAN	0	0	-	-	-	-	0	-	-	0	0.00%	0.00%
HAITI	-	0	-	-	-	-	-	-	-	-	0.00%	0.00%
ERITREA	-	0	-	-	-	-	0	-	-	0	0.00%	0.00%
GAMBIA (The)	-	0	-	-	-	-	-	-	-	-	0.00%	0.00%
ST. LUCIA	-	0	-	-	-	-	0	-	-	0	0.00%	0.00%
MARSHALL ISLANDS	-	-	0	-	-	-	-	0	-	0	0.00%	0.00%
BURUNDI	-	0	-	-	-	-	0	-	-	0	0.00%	0.00%
ARUBA	0	-	-	-	-	-	-	-	-	-	0.00%	0.00%
PUERTO RICO	-	-	0	-	-	-	-	-	-	-	0.00%	0.00%
Total	**18,635,300**	**106,156,157**	**2,317,228**	**-**	**-**	**79,573**	**3,357,858**	**1,023,390**	**621**	**4,381,869**	**100.00%**	

Liquidity Ratios and Leverage Ratio

With reference to the liquidity indicators, Liquidity Coverage Ratio and the Net Stable Funding Ratio, the observation period by the Supervisory Authorities began in March 2014. As of October 2015, the minimum obligatory requirement for the Liquidity Coverage Ratio came into force, with a level that gradually increases over the years: 60% in 2015; 70% in 2016; 80% in 2017; and 100% in 2018. The Liquidity Cover Ratio was 199.51% as at 31 December 2016, well above the minimum of 80% required for the year 2017. The following table provides quantitative information on the LCR on the basis of the EBA Guidelines on liquidity coverage ratio disclosure, to supplement the liquidity risk management disclosure pursuant to article 435 of EU regulation no. 575/2013 (EBA/GL/2017/01). The values are calculated as the simple average of the end-of-month observations in the previous twelve months, when available, at the end of each quarter.

Tab. 4.7 – Liquidity Coverage Ratio (EU LIQ1)

	Scope of consolidation (consolidated) Currency and units (EUR million)	Total unweighted value (average)				Total weighted value (average)			
	Quarter ending on (DD Month YYY)	**31/03/17**	**30/06/17**	**30/09/17**	**31/12/17**	**31/03/17**	**30/06/17**	**30/09/17**	**31/12/17**
	Number of data points used in the calculation of averages	**7**	**10**	**12**	**12**	**7**	**10**	**12**	**12**
High-Quality Liquid Assets									
1	Total high-quality liquid assets (HQLA)					10,768	11,896	13,319	15,816
Cash-Outflows									
2	Retail deposits and deposits from small business customers, of which:	42,488	42,569	42,638	42,825	2,577	2,586	2,598	2,637
3	*Stable deposits*	*35,631*	*35,687*	*35,679*	*35,645*	*1,782*	*1,784*	*1,784*	*1,782*
4	*Less stable deposits*	*6,857*	*6,882*	*6,958*	*7,180*	*796*	*801*	*814*	*854*
5	Unsecured wholesale funding	15,181	16,137	17,145	18,521	5,102	5,234	5,498	5,891
6	*Operational deposits (all counterparties) and deposits in networks of cooperative banks*	*10,789*	*11,906*	*12,847*	*14,069*	*2,508*	*2,787*	*3,020*	*3,319*
7	*Non-operational deposits (all counterparties)*	*3,895*	*3,856*	*3,928*	*4,111*	*2,098*	*2,073*	*2,108*	*2,231*
8	*Unsecured debt*	*496*	*374*	*369*	*341*	*496*	*374*	*369*	*341*
9	Secured wholesale funding					1,077	1,042	921	790
10	Additional requirements	3,698	3,694	3,722	3,675	882	878	838	775
11	*Outflows related to derivative exposures and other collateral requirements*	*790*	*796*	*760*	*713*	*556*	*552*	*510*	*451*
12	*Outflows related to loss of funding on debt products*	*73*	*72*	*67*	*56*	*73*	*72*	*67*	*56*
13	*Credit and liquidity facilities*	*2,834*	*2,826*	*2,896*	*2,907*	*252*	*254*	*262*	*264*
14	Other contractual funding obligations	2,499	2,383	2,273	2,358	1,657	1,572	1,491	1,627
15	Other contingent funding obligations	2,356	2,233	2,138	1,992	472	473	474	475
16	**TOTAL CASH OUTFLOWS**					**11,766**	**11,785**	**11,820**	**12,195**
Cash-Inflows									
17	Secured lending (eg reverse repos)	5,472	5,600	5,185	8,696	71	73	125	156
18	Inflows from fully performing exposures	3,190	3,393	3,465	3,467	1,763	1,911	2,018	2,086
19	Other cash inflows	10,272	10,095	9,689	9,188	2,096	2,069	1,986	1,882
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					-	-	-	-
EU-19b	(Excess inflows from a related specialised credit institution)					-	-	-	-
20	**TOTAL CASH INFLOWS**	**18,934**	**19,089**	**18,338**	**21,351**	**3,930**	**4,054**	**4,129**	**4,124**
EU-20a	*Fully exempt inflows*	-	-	-	-	-	-	-	-
EU-20b	*Inflows Subject to 90% Cap*	-	-	-	-	-	-	-	-
EU-20c	*Inflows Subject to 75% Cap*	*18,718*	*18,902*	*18,183*	*21,210*	*3,930*	*4,054*	*4,129*	*4,124*
						Total Adjusted Value			
21	**Liquidity Buffer**					**10,591**	**11,772**	**13,215**	**15,816**
22	**Total Net Cash Outflows**					**7,836**	**7,731**	**7,691**	**8,070**
23	**Liquidity Coverage Ratio (%)**					**134%**	**153%**	**172%**	**197%**

Concentration of sources of liquidity and funding

On a monthly basis, the Group monitors the risk of concentration of sources of financial and commercial funding, with a particular focus on the details of the main non-retail counterparties. Concentration risk of the MPS Group's sources of funding is present and is linked to a significant depositor whose average balance is impacted by seasonal factors, with a considerable reduction expected for the end of the year. At the end of December 2017, in accordance with what is monitored through the Additional Liquidity Monitoring Metrics (ALMM) regulatory reporting, funding through unsecured channels amounts to roughly 70% of the total, of which 13% relating to financial non-retail counterparties and 16% relating to non-financial non-retail counterparties. In this last category, the main counterparty is "CSEA Cassa per i Servizi Energetici e Ambientali", with an overall exposure equal to 22% of the total of non-financial non-retail counterparties (corresponding to 5% of the total funding obtained through unsecured channels).

Currency misalignment in the LCR

The liquidity reserves in currencies other than the Euro, as well as the outflows and inflows, are marginal for the MPS Group and do not provoke currency misalignments in the LCR.

As regards the Net Stable Funding Ratio, EU legislation does not currently contemplate a regulatory limit.

Leverage Ratio

In addition to the system of capital requirements aimed at covering credit, counterparty, market, operational, CVA and regulatory risks, it is expected

that the current regulatory framework will monitor a limit on leverage with a twofold purpose to limit the accumulation of debt within the banking industry so as to avoid destabilizing deleveraging process which may harm the financial system and the economy in general, and to strengthen the system of capital requirements associated with risk with a simple backstop measure that is not based on risk profile.

To this end, Circular no. 285 of 17 December 2013 of the Bank of Italy, "supervisory Provisions for banks" requires banks to calculates their leverage ratio.

As required by the Regulation EU 62/2015, the Leverage Ratio is calculated as a ratio between Tier1 and a denominator that is based on the non-risk weighted assets (including off-balance sheet exposures) calculated at the end of the quarter. The exposures must be reported net of the regulatory adjustments included in the calculation of T1 in order to avoid any double counting. At present, the minimum thresholds for the Leverage Ratio have not yet been established by the Supervisory Authorities. However, as of 1 January 2015, quarterly disclosure has become obligatory in addition to the disclosure requirement already in force. Moreover, as provided for by Commission Implementing Regulation (EU) 2016/200 of 15 February 2016, banks publish this disclosure as of 16 February 2016, the date following this regulation's publication in the Official Journal of the European Union.

The Group's leverage ratio was 5.97% as at 31 December 2017. Using regulatory capital calculated by applying the rules established for full implementation, the ratio stands at 5.73%.

In accordance with public disclosure requirements, the data necessary for its calculation is provided below.

The templates used to report the information are those provided for by the ITS on Disclosure (*see* "EBA FINAL draft Implementing Technical Standards on disclosure of the leverage ratio under Article 451(2) of Regulation (EU) No 575/2013 (Capital Requirements Regulation – CRR) - Second submission following the EC's Delegated Act specifying the LR" - *link*) published by the EBA on 15/06/2015 and included in the Commission Implementing Regulation (EU) 2016/200 of 15 February 2016.

The tables below show the financial leverage ratio as at 31 December 2017 as well as a breakdown of the total exposure measure in the main categories, as required by articles 451(1)(a), 451(1)(b) and 451(1)(c). The figures shown relate to the calculation of the leverage ratio according to applicable transitional provisions for reporting purposes.

Tab. 4.8.1 – Financial leverage: LR Sum (Summary reconciliation of accounting assets and leverage ratio exposure)

		dec-17	dec-16
1	Total assets as per published financial statements	139,154,192	153,178,466
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	58,274	-109,239
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR")	-	-
4	Adjustments for derivative financial instruments	1,357,825	1,930,530
5	Adjustments for securities financing transactions "SFTs"	1,079,023	2,583,115
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	9,609,121	11,998,152
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)	-	-
EU-6b	(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013)	-	-
7	Other adjustments	-1,427,287	-556,626
8	**Total leverage ratio exposure**	**149,831,148**	**169,024,398**

Other adjustments" includes 1,791,573 €/thousand of "Deductions from the Capital Class 1 related to balance sheet assets", present at the row 2 of Table 4.8.2.

Tab. 4.8.2 – Financial leverage: LR Com (Leverage ratio common disclosure)

		dec-17	dec-16
	On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	131,331,350	140,221,558
2	(Asset amounts deducted in determining Tier 1 capital)	-1,791,573	-1,464,434
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)**	**131,331,350**	**138,757,124**
	Derivative exposures		
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	1,359,705	2,183,901
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	1,655,898	2,089,216
EU-5a	Exposure determined under Original Exposure Method	-	65
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-655,012	-
8	(Exempted CCP leg of client-cleared trade exposures)	-	-
9	Adjusted effective notional amount of written credit derivatives	2,276,322	3,031,902
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-457,256	-890,474
11	**Total derivative exposures (sum of lines 4 to 10)**	**4,179,656**	**6,414,610**
	Securities financing transaction exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	5,461,646	9,354,728
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	-
14	Counterparty credit risk exposure for SFT assets	1,040,948	2,499,784
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	-	-
15	Agent transaction exposures	-	-
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	-	-
16	**Total securities financing transaction exposures (sum of lines 12 to 15a)**	**6,502,595**	**11,854,513**
	Other off-balance sheet exposures	**-**	**-**
17	Off-balance sheet exposures at gross notional amount	43,569,486	49,936,892
18	(Adjustments for conversion to credit equivalent amounts)	-33,960,365	-37,938,741
19	**Other off-balance sheet exposures (sum of lines 17 to 18)**	**9,609,121**	**11,998,152**
	Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet)		
EU-19a	(Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	-	-
EU-19b	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	-	-
	Capital and total exposures		
20	Tier 1 capital	8,951,233	5,353,400
21	**Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)**	**149,831,148**	**169,024,398**
	Leverage ratio		
22	Leverage ratio	5.97%	3.17%
	Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Transitional disposition	Transitional disposition
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) NO 575/2013	-	-

Tab. 4.8.3 – Financial leverage: LR Spl (Split-up of on balance sheet exposures, excluding derivatives, SFTs and exempted exposures)

		dec-17	dec-16
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:**	**131,331,350**	**140,221,558**
EU-2	Trading book exposures	7,087,501	6,527,411
EU-3	Banking book exposures, of which:	124,243,849	133,694,147
EU-4	*Covered bonds*	*805,294*	*766,348*
EU-5	*Exposures treated as sovereigns*	*24,520,120*	*23,704,509*
EU-6	*Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns*	*2,146,434*	*2,338,361*
EU-7	*Institutions*	*5,295,358*	*5,499,505*
EU-8	*Secured by mortgages of immovable properties*	*36,213,060*	*38,478,707*
EU-9	*Retail exposures*	*10,263,057*	*11,307,500*
EU-10	*Corporate*	*20,665,318*	*22,765,520*
EU-11	*Exposures in default*	*14,965,386*	*20,416,837*
EU-12	*Other exposures (eg equity, securitisations, and other non-credit obligation assets)*	*8,714,809*	*8,416,860*

Process used to manage the risk of excessive leverage

(in accordance with article 451(1) letter d) of the CRR)

The Group's Risk Appetite Framework (RAF) constitutes the basic risk management framework in the Montepaschi Group. The RAF is governed at Group level by a regulatory framework that establishes a system of governance, processes, tools and procedures for fully managing the Group's risk. Leverage risk is included in the RAF and is therefore subject to the control procedures contained therein. The Leverage Ratio is one of the Key Risk Indicators monitored within the RAF for 2017. In the course of the second half of 2017, the Group recorded an improvement in the financial leverage indicator linked to the significant increase in Tier 1 and the asset reduction actions currently being carried out by the Group in line with the objectives of the Restructuring Plan.

5. Credit Risk

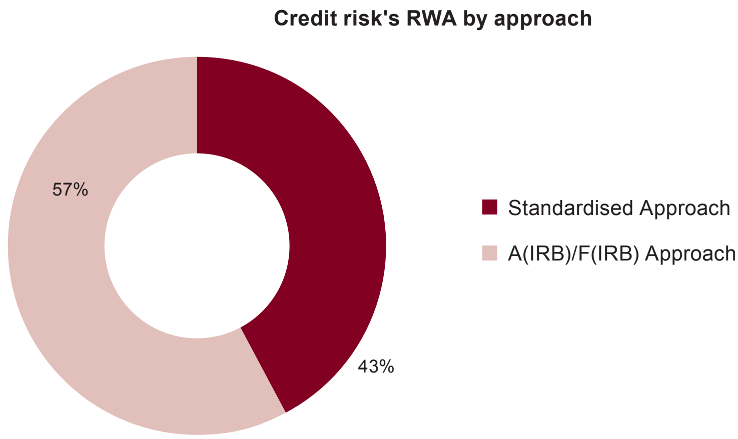
5.1 Credit Risk: general disclosure

The MPS group gives special attention to the management and the measurement of Credit Risk, which represents the greatest risk to which the Group is exposed, accounting for approximately 79% of total capital requirements. The main objective of the Credit Risk Management function is to promote a culture of "responsible lending" within the Group and pursue a sustainable growth in lending transactions that is in line with risk appetite and value creation. The Group's strategies in the area of risk management are aimed at limiting the economic impact from defaulting loans and containing the cost of credit. The credit risk management function is involved in defining credit policy guidelines by identifying the customer segments with greater opportunities from risk-return perspective, promoting risk diversification, limiting the concentration of risk exposure in single business groups/sectors and geographical areas. The function also defines the supports available to Credit disbursement strategies. The use and allocation of ratings is crucial, since they are the synthetic measurement of a customer's creditworthiness both during the loan disbursement and monitoring processes. This forms the basis of the preliminary procedure that is followed as a loan proposal is processed and then subsequently monitored. The assignment of a rating to each borrower means that borrowers can be classified into actual levels of risk and that both an overall or broken-down objective assessment of risk components may be made; this system, therefore, provides the basis of information for supporting both strategic decisions and the ordinary management of risk positions. Credit policy guidelines are thus provided by the sales network according to customer segments, rating categories, business sector, Regional Area, loan type and types of collateral used.

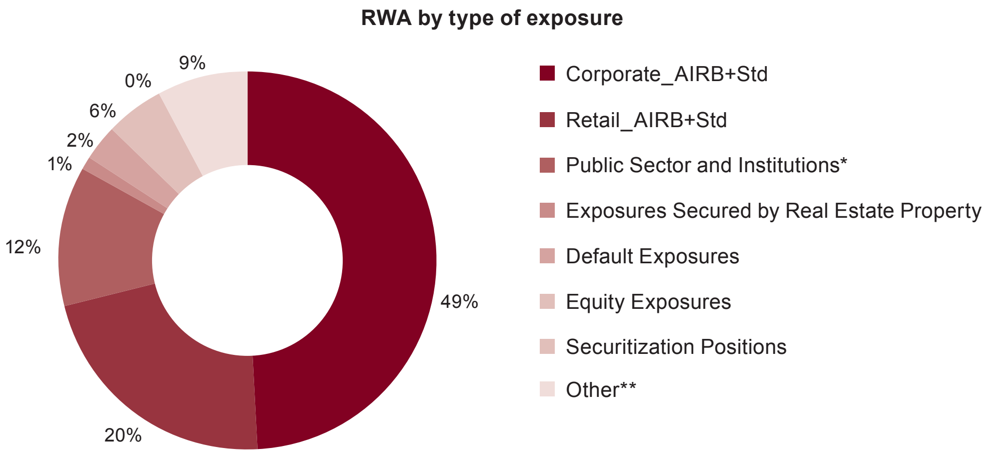
In addition, operational guidelines are structured into quantitative and qualitative objectives to develop and reclassify the loan portfolio, according to business sector and regional units. The Credit Risk Management function is also involved in the monitoring phase and verifies that the Network Structures achieve their goals of credit quality and alignment with established benchmarks, identifying the appropriate remedial actions to be implemented, reviewing objectives and, on a more general level, analysing trends in the quality of the loan portfolio in terms of market/product/customer segment and related causes. For a detailed description of the tasks of the Credit Risk function, *see* Chapter 1.

As concerns capital requirements, for credit risks the Group uses the Advanced Internal Rating Based (AIRB) method with reference to the "Credit Exposures to Retail" and "Credit Exposures to Entities" regulatory portfolios. The scope of application of the AIRB method currently includes the Parent Company Banca MPS, MPS Capital Services Banca per le Imprese and MPS Leasing & Factoring. For the remaining portfolios and Group entities, capital requirements relative to credit risks are calculated according to the standard method.

RWAs by credit risk show a prevalence of exposures treated under the advanced approach (57% over those subject to the Standardised Approach (43%).



An analysis by type of exposure reveals that 69% of Credit Risk refers to the Corporate and Retail portfolios. The remaining 31% is mainly concentrated in the Public Sector and Institutions (12%).



* *Includes the following portfolios: Central Governments and Central Banks, Regional Governments and Local Authorities, Public sector entities, Multi-lataral Development Banks, International Organisations, Supervised institutions.*

** *Includes the following portfolios: Exposures associated with high-risk, Exposures in the form of covered bonds, Exposures to institutions and corporates with a short-term credit assesment, Exposures UCITS, Exposures to Central/Counterparties in the form of pre-funded contributions the guarantee fund, Other exposures.*

The following table shows a breakdown of exposures and RWAs by approach (Standard/ AIRB) and by regulatory portfolio. In compliance with regulatory standards, in the case of the standard approach, the EAD value corresponds to the value of the exposure, which takes account of the prudential filters, risk mitigation techniques and credit conversion factors. In the case of the internal ratings- based approach, the EAD value reported corresponds to the "Exposure At Default" calculated according to the rules of prudential supervision and therefore expressed gross of value adjustments and without the impacts from risk mitigation techniques which, in the case of exposures subject to an internal models-based approach, are directly included in the weighting factor applied. Instead, the EAD value takes into account the credit conversion factors for guarantees issued and commitments to disburse funds.

Tab. 5.1.1 – EAD and RWA overview between Credit Risk and Counterparty Risk

	dec-17		dec-16			
	EAD	RWA	EAD	RWA	Δ EAD	Δ RWA
Standard Approach						
Standard Approach Total	**54,711,232**	**20,698,503**	**57,785,767**	**23,196,227**	**-3,074,534**	**-2,497,724**
of which: Counterparty Risk	*3,362,646*	*1,071,633*	*6,419,649*	*1,885,401*	*-3,057,003*	*-813,768*
IRB Approach						
IRB Approach Total	**106,235,730**	**27,014,214**	**112,212,322**	**30,324,577**	**-5,976,592**	**-3,310,363**
of which: Counterparty Risk	*482,461*	*356,884*	*458,528*	*399,717*	*23,933*	*-42,833*
Total	**160,946,962**	**47,712,717**	**169,998,088**	**53,520,804**	**-9,051,126**	**-5,808,087**
of which: Counterparty Risk	*3,845,107*	*1,428,516*	*6,878,177*	*2,285,118*	*-3,033,071*	*-856,602*

The following table shows a breakdown of exposures and RWAs by approach (Standard/ AIRB) and by regulatory portfolio.

Tab. 5.1.2 – Exposure and RWA Distribution of Credit and Counterparty Risk

Standard Approach	dec-17		dec-16	
Regulatory portfolios	EAD	RWA	EAD	RWA
Exposures to central governments and central banks	25,769,693	2,720,008	25,071,278	3,552,504
Exposures to regional governments and local authorities	1,982,601	396,316	2,039,455	407,737
Exposures to public sector entities	484,413	432,403	483,315	446,861
Exposures to Multi-lateral development banks	42,524	-	43,818	-
Exposures to International Organisations	-	-	-	-
Exposures to Supervised institutions	9,131,917	2,200,306	11,249,901	2,753,644
Exposures to Corporates	5,194,555	5,095,502	6,629,950	6,182,858
Retail Exposures	1,344,616	943,210	1,672,701	1,191,738
Exposures secured by mortgages on immovable property	1,395,558	539,700	1,119,758	452,281
Exposures in Default	1,032,498	1,128,087	1,296,263	1,522,252
Exposures associated with high-risk	93,602	140,403	98,341	147,511
Exposures in the form of covered bonds	695,967	137,802	769,243	148,131
Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-
Exposures to UCITs	457,412	457,412	613,415	613,415
Equity Exposures	1,798,231	3,028,061	1,432,680	2,178,828
Other Exposures	5,287,646	3,466,510	5,265,650	3,584,594
Securitization positions	-	-	-	-
Exposures to Central Counterparties in the form of pre-funded contributions to the guarantee fund	-	12,782	-	13,875
Standard Approach Total	**54,711,232**	**20,698,503**	**57,785,767**	**23,196,227**
AIRB Approach				
Exposures to or secured by corporates:	48,947,046	18,436,024	52,935,598	20,824,799
- SMEs	32,444,612	8,575,194	34,493,201	10,224,887
- Other companies	14,222,965	8,325,061	15,566,879	9,019,637
- Specialized lending	2,279,469	1,535,769	2,875,518	1,580,275
Retail exposures:	57,209,111	8,570,430	59,239,335	9,492,871
- secured by real estate: SMEs	6,383,214	1,923,208	7,368,382	2,277,567
- secured by real estate: Individuals	26,377,007	3,028,018	28,047,917	3,182,563
- Qualifying revolving	93,801	9,266	95,458	10,201
- Other retail exposures: SMEs	18,269,107	3,231,074	18,189,505	3,605,850
- Other retail exposures: Individuals	6,085,983	378,864	5,538,073	416,689
- Securitization positions	79,573	7,760	37,390	6,907
AIRB Approach Total	**106,235,730**	**27,014,214**	**112,212,322**	**30,324,577**
Credit and Counterparty Risk Total	**160,946,962**	**47,712,717**	**169,998,089**	**53,520,804**

The following table shows the main changes in RWA and capital requirements for credit risk under the IRB approach.

Tab. 5.1.3 (EU CR8) – RWA flow statements of credit risk exposures under the IRB approach

		a	b
		RWA amounts	Capital Requirements
1	RWAs as at the end of the previous reporting period	28,343,844	2,267,508
9	**RWAs as at the end of the reporting periodo**	**26,657,330**	**2,132,586**

The reduction of 1.7 billion of the RWA of credit risk exposures under the IRB approach is mainly due to a reduction in exposure in terms of asset size and, secondly, to the default flow. The amounts are net of the counterparty risk component.

The following table shows the total and the average amount of net exposures over the period by exposure class.

Tabella 5.1.4 (EU CRB-B) – Total and average net amount of exposures

		a	b
		Net value of exposures at the end of the period	Average net exposures over the period
3	Exposures to or secured by corporates:	48,947,046	51,087,669
4	*of which Specialized lending-Slotting criteria*	*2,279,469*	*2,577,956*
5	*of which SME*	*32,444,612*	*33,139,239*
	of which Other companies	*14,222,965*	*19,729,872*
6	Retail exposures:	57,209,111	57,923,621
7	- secured by real estate	32,760,221	33,628,480
8	*secured by real estate: SMEs*	*6,383,214*	*6,665,656*
9	*secured by real estate: Individuals*	*26,377,007*	*26,962,824*
10	- Qualifying revolving	93,801	85,353
11	- Other retail exposures	24,355,090	24,209,788
12	*Other retail exposures: SMEs*	*18,269,107*	*18,212,667*
13	*Other retail exposures: Individuals*	*6,085,983*	*5,997,121*
	Securitization positions	79,573	74,185
15	**AIRB Approach Total**	**106,235,730**	**109,085,475**
16	Exposures to central governments and central banks	25,769,693	25,305,092
17	Exposures to regional governments and local authorities	1,982,601	2,038,108
18	Exposures to public sector entities	484,413	523,366
19	Exposures to Multi-lateral development banks	42,524	42,656
20	Exposures to International Organisations	-	-
21	Exposures to Corporates	9,131,917	10,066,363
22	Retail Exposures	5,194,555	5,676,711
24	Exposures secured by mortgages on immovable property	1,344,616	1,451,842
26	Exposures in Default	1,395,558	1,240,044
28	Exposures associated with particularly high-risk	1,032,498	1,104,943
29	Exposures in the form of covered bonds	93,602	94,315
30	Exposures to institutions and corporates with a short-term credit assessment	695,967	727,492
31	Exposures to UCITs	-	-
32	Equity Exposures	457,412	537,616
33	Other Exposures	1,798,231	1,388,974
34	Exposures to Supervised institutions	5,287,646	5,239,516
35	**Standard Approach Total**	**54,711,232**	**55,437,035**
36	**Total**	**160,946,962**	**164,522,511**

Column b shows the average net exposure in the observation period, i.e. the average of the values observed at the end of each quarter during the observation period

The tables provided below show the breakdown of exposures, with the IRB and the standard method, by geographical area, duration and exposure class.

Tab.5.1.5 (EU CRB-C) - Geographical breakdown of exposure

		a	b	c	d
		Net Value			
		Italy	Other European Countries	Non european Conuntries	Total
1	Central governments or central banks	-	-	-	-
2	Institutions	-	-	-	-
3	Corporates	46,667,520	57		46,667,577
4	Retail	57,209,099	-	13	57,209,111
5	Equity	-	-	-	-
6	**Total IRB approach**	**103,876,619**	**57**	**13**	**103,876,688**
7	Central governments or central banks	24,910,418	143,782	85,113	25,139,313
8	Regional governments or local authorities	1,982,601	-	-	1,982,601
9	Public sector entities	455,119	11	26,661	481,792
10	Multi-lateral development banks	42,524	-	-	42,524
11	International Organisations	-	-	-	-
12	Institutions	8,770,480	36,402	105,547	8,912,429
13	Corporates	3,799,209	119,012	314,967	4,233,188
14	Retail	1,125,032	6	27	1,125,065
15	Secured by mortgages on immovable property	834,349	-	-	834,349
16	Exposures in Default	954,985	697	19,888	975,570
17	Items associated with particularly high-risk	93,602	-	-	93,602
18	Covered bonds	688,200	-	-	688,200
19	Claims on institutions and corporates with a short-term credit assessment	-	-	-	-
20	Collective investments undertakings	457,412	-	-	457,412
21	Equity Exposures	1,418,347	18,413	-	1,436,760
22	Other Exposures	3,809,702	4,822	1,536	3,816,060
23	**Total standardised approach**	**49,341,979**	**323,145**	**553,739**	**50,218,862**
24	**Total**	**153,218,597**	**323,202**	**553,751**	**154,095,550**

The total exposures under IRB approach are net of specialized lending exposures and securitization positions. The total exposures under standardised approach do not contain off-balance –sheet exposures.

Tab. 5.1.6 – (EU CRB-E) - Maturity of exposures

		a	b	c	d	e	f
				Net exposure value			
		On demand	< = 1 year	> 1 year < = 5 years	> 5 years	No stated maturity	Total
1	Central governments or central banks	-	-	-	-	-	-
2	Institutions	-	-	-	-	-	-
3	Corporates	-	-	49,267,408	-	-	49,267,408
4	Retail	-	239,858	52,623,134	-	-	52,862,992
5	Equity	-	-	-	-	-	-
6	**Total IRB approach**	**-**	**239,858**	**101,890,541**	**-**	**-**	**102,130,400**
7	Central governments or central banks	-	-	-	-	24,501,872	24,501,872
8	Regional governments or local authorities	-	-	-	-	3,086,384	3,086,384
9	Public sector entities	-	-	-	-	1,118,973	1,118,973
10	Multi-lateral development banks	-	-	-	-	87,524	87,524
11	International Organisations	-	-	-	-	-	-
12	Institutions	-	-	-	-	34,303,430	34,303,430
13	Corporates	-	-	-	-	9,247,961	9,247,961
14	Retail	-	-	-	-	2,618,474	2,618,474
15	Secured by mortgages on immovable property	-	-	-	-	1,423,354	1,423,354
16	Esposures in Default	-	-	-	-	1,323,611	1,323,611
17	Items associated with particularly high-risk	-	-	-	-	93,602	93,602
18	Covered bonds	-	-	-	-	695,967	695,967
19	Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
20	Collective investments undertakings	-	-	-	-	522,608	522,608
21	Equity exposures	-	-	-	-	1,798,231	1,798,231
22	Other exposures	-	-	-	-	5,253,085	5,253,085
23	**Total standardised approach**	**-**	**-**	**-**	**-**	**86,075,075**	**86,075,075**
24	**Total**	**-**	**239,858**	**101,890,541**	**-**	**86,075,075**	**190,021,456**

The following tables provide a comprehensive picture of the credit quality of the Group, an ageing analysis of accounting on-balance-sheet past-due exposures regardless of their impairment status, an overview of non-performing and forborne exposures and the changes in an institution's stock of general and specific credit risk adjustment held against loans and debt securities that are defaulted or impaired.

Tab. 5.1.7 (EU CR1-A) – Credit quality of exposures by exposure class and instrument

		a	b	c	d	e	f	g
		Gross carrying values of:		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
		Defaulted exposures	Non-defaulted exposures					
1	Central governments or central banks	-	-	-	-	-	-	-
2	Institutions	-	-	-	-	-	-	-
3	Corporates	25,170,529	40,327,102	16,230,224	-	-	-	49,267,408
4	*of which: SMEs*	*20,160,345*	*18,906,247*	*13,240,152*	-	-	-	*25,826,441*
5	*of which: Other companies*	*5,010,184*	*21,420,855*	*2,990,072*	-	-	-	*23,440,967*
6	Retail	18,477,615	46,824,026	12,438,649	-	-	-	52,862,992
7	Secured by real estate property	2,832,438	30,249,856	1,016,316	-	-	-	32,065,978
8	*SMEs*	*1,712,063*	*4,709,070*	*750,655*	-	-	-	*5,670,478*
9	*Non SMEs*	*1,117,673*	*25,303,132*	*265,164*	-	-	-	*26,155,641*
10	Qualifying revolving	2,702	237,654	497	-	-	-	239,858
11	Other retail	15,645,177	16,574,170	11,422,333	-	-	-	20,797,014
12	*SMEs*	*11,032,367*	*13,835,547*	*8,484,957*	-	-	-	*16,382,957*
13	*Non SMEs*	*4,612,810*	*2,738,623*	*2,937,375*	-	-	-	*4,414,058*
14	Equity	-	-	-	-	-	-	-
15	**Total IRB Approach**	**43,648,144**	**87,151,128**	**28,668,873**	**-**	**-**	**-**	**102,130,400**
16	Central governments or central banks	-	24,568,457	-	66,585	-	-	24,501,872
17	Regional dovernments or local authorities	-	3,089,618	-	3,233	-	-	3,086,384
18	Public sector entities	-	1,119,357	-	385	-	-	1,118,973
19	Multilateral development banks	-	87,524	-	-	-	-	87,524
20	International organisations	-	-	-	-	-	-	-
21	Institutions	-	34,321,408	-	17,978	-	-	34,303,430
22	Corporates	-	9,305,847	-	57,887	-	-	9,247,961
23	*of which: SMEs*	-	-	-	-	-	-	-
24	Retail	-	2,630,655	-	12,181	-	-	2,618,474
25	*of which: SMEs*	-	-	-	-	-	-	-
26	Secured by mortgages on immovable property	-	1,430,261	-	-	-	-	1,430,261
27	*of which: SMEs*	-	-	-	-	-	-	-
28	Exposures in default	2,971,834	-	-	1,648,223	-	-	1,323,611
29	Items associated with particularly high risk	-	1,798,272	-	-	-	-	1,798,272
30	Covered bonds	-	695,967	-	-	-	-	695,967
31	Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-
32	Collective investments undertakings	-	524,009	-	1,402	-	-	522,608
33	Equity exposures	-	1,798,272	-	41	-	-	1,798,231
34	Other exposures	-	5,263,595	-	10,511	-	-	5,253,085
35	**Total standardised approach**	**2,971,834**	**86,633,244**	**-**	**1,818,426**	**-**	**-**	**87,786,652**
36	**Total**	**46,619,978**	**173,784,372**	**28,668,873**	**1,818,426**	**-**	**-**	**189,917,052**
37	*of which: Loans*	*153,537,063*		*28,983,092*	*1,815,068*			*122,738,904*
38	*of which: Debt securities*	*23,805,215*		*153,574*	*2,503*			*23,649,139*
39	*of which: Off-balance-sheet exposures*	*43,693,150*		*51,975*	*7,761*			*43,633,414*

Tab. 5.1.8 (EU CR1-D) – Ageing of past-due exposures

		Gross carrying values:						
		a	b	c		d	e	f
		≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	Unlikely to pay that are not past-due or past due < = 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year
1	Loans	87,267,837	191,885	503,277	5,015,186	418,139	1,173,652	14,319,971
2	Debt securities	16,789,778	-	-	9,839	-	-	20,857
3	**Total exposures**	**104,057,615**	**191,885**	**503,277**	**5,025,025**	**418,139**	**1,173,652**	**14,340,827**

Tab. 5.1.9 (EU CR1-E) - Non-performing and forborne exposures

		a	b	c	d	e	f	g	h	i	j	k	l	m
		Gross carrying values of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
			Of which performing but past due > 30 days e < = 90 days	Of which performing forborne	Of which non-performing				On performing exposures		On non-performing exposures		On nonperforming exposures	Of which forborne exposures
						Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne		
010	Debt securities	16,820,474	-	2,783	30,696	30,696	30,696	9,688	-2,330	-	-22,339	-1,331	-	-
020	Loans and advances	108,889,947	695,162	2,465,836	20,926,948	20,926,948	20,926,948	7,624,641	-561,941	-95,306	-10,570,896	-3,083,449	1,232,870	509,438
030	Off-balance-sheet exposures	47,891,617	-	91,145	2,185,062	2,185,062	-	314,839	89,474	-	136,914	-	479,471	39,858

Tab.5.1.10 (EU CR2-A) – Changes in the stock of general and specific credit risk adjustments

		dec-17	
		a	b
		Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	**Opening balance**	**-21,576,190**	**-4,568,528**
2	Increases due to amounts set aside for estimated loan losses during the period	-1,871,296	-1,167,537
3	Decreases due to amounts reversed for estimated loan losses during the period	1,013,432	809,436
4	Decreases due to amounts taken against accumulated credit risk adjustments	730,003	65,571
5	Transfers between credit risk adjustments	26,361	-26,432
6	Impact of exchange rate differences	-	-
7	Business combinations, including acquisitions and disposals of subsidiaries	-	-
8	Other adjustments	12,491,131	2,896,656
9	**Closing balance**	**-9,186,559**	**-1,990,834**
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	1,513,572	202,967
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	-139,932	-54

5.2 Credit Risk: Standard approach

The Montepaschi Group uses the following official rating agencies for legal entities not subject to airb validation as well as for statutory portfolios, for which the advanced internal rating system to calculate capital absorption on credit risk is not used, to measure the level of reliability of different borrowers:

- Standard & Poor's;
- Moody's Investor Service;
- Fitch Rating.

When determining capital requirements, it should be noted that if there are two evaluations of the same customer, the more conservative one is adopted. In the case of three evaluations, the intermediate is used.

At present the standard approach is applied to all portfolios and entities of the Group with the exception of the portfolios, Exposures to corporates and retail exposures, belonging to the following entities:

- *Banca Monte dei Paschi di Siena*
- *MPS Capital Services Banca per le Imprese*
- *MPS Leasing & Factoring*

for which the advanced IRB model is adopted, details of which are described in paragrapf 5.3.

The table below summarises the list of ECAIs (External Credit Assessment Institutions) and ECAs (Export Credit Agencies) used in the standardised approach as well as the portfolios of exposures in which the ratings of the exposures themselves have been applied.

Portfolios	ECA/ECAI	Rating characteristics (a)
Exposures to governments and central banks	✓ Standard & Poor's Moody's Investor Service Fitch Ratings	Solicited/Unsolicited
Exposures to multilateral development bank		
Exposures to International organisations	✓ Standard & Poor's Moody's Investor Service Fitch Ratings	Solicited
Exposures to corporates and other persons		
Exposures to undertakings for collective investment in transferable securities (UCITS)		

(a) • ***solicited rating:*** *a rating assigned for a fee following a request from the entity evaluated. Ratings assigned without such a request shall be treated as equivalent to solicited ratings if the entity had previously obtained a solicited rating from the same ECAI;*

• ***unsolicited rating:*** *a rating assigned without a request from the entity evaluated and without payment of a fee.*

Extension of issuer and issue credit assessment to comparable assets not included in the regulatory trading portfolio

In accordance with EU Regulation 575/2013 (CRR), a set of criteria – as summarised below – has been established for the use of issue and issuer credit when assessing the risk of exposures and the mitigation of guarantees. In order to assess the risk weight to be assigned to the exposures (in general for all regulatory portfolios), the rules provide for the priority use of the issue rating. Where the issue rating does not exist and where the conditions laid down by the Regulation are met, the issuer rating is used.

Quantitative disclosure

The table below shows the details of the banking Group's exposures subject to credit risk – standard approach, determined according to the rules of Prudential Supervision and including the effects from risk mitigation techniques (netting agreements, guarantees, etc.).

The quantitative disclosures in this Section complement those provided in the section on Risk mitigation techniques. In fact, each regulatory portfolio provided for by regulations under the standard approach is broken down as follows:

– amount of on- and off-balance exposures, "without" the risk mitigation (Exposure before CRM), which does not take into account the decrease in exposure arising from application of collateral and guarantees; in the case of guarantees, which transfer risk in respect of the guaranteed portion, reference is made to the guarantor's regulatory portfolios and weightings, while as to the residual exposure, reference is made to the guaranteed party's information;

– amount of the same exposures "with" the risk mitigation effect (Exposure after CRM) , i.e. net of the guarantees mentioned in the previous point, thus the difference between exposures "with" and "without" credit risk mitigation represents the amount of approved collateral, disclosed also in the section on Risk mitigation techniques.

Tab. 5.2.1 – Standard approach: Ante and Post CRM Exposure Value

Regulatory Portfolio (Standard Approach)	Ante CRM Exposure	Post CRM Exposure	Credit Risk Mitigation Techniques
Exposures to central governments and central banks	25,847,341	25,847,341	-
Exposures to regional governments and local authorities	3,116,398	3,116,398	-
Exposures to public sector entities	1,095,203	1,080,236	14,967
Exposures to Multi-lateral development banks	87,524	87,524	-
Exposures to International Organisations	-	-	-
Exposures to Supervised institutions	34,889,043	14,387,562	20,501,481
Exposures to Corporates	9,098,129	8,268,392	829,738
Retail Exposures	2,560,054	2,545,292	14,762
Exposures secured by mortgages on immovable property	1,406,469	1,405,811	658
Exposures in Default	1,311,779	1,304,504	7,274
Exposures associated with high-risk	93,602	93,602	-
Exposures in the form of covered bonds	695,967	695,967	-
Exposures to institutions and corporates with a short-term credit assessment	-	-	-
Exposures to UCITs	522,608	519,617	2,991
Equity Exposures	1,798,231	1,798,231	-
Other Exposures	5,289,559	5,289,559	-
Securitization positions	-	-	-
Total 31/12/2017	**87,811,906**	**66,440,035**	**21,371,871**
Total 31/12/2016	**114,804,087**	**69,964,534**	**44,839,554**

The Table shows the Banking Group's exposures reported by regulatory exposure classes and also contains off-balance sheet exposures relating to guarantees and commitments before the application of credit conversion factors (CCF).

As at 31 December 2017, the total amount of exposures deducted from Funds came to EUR 919.2 million. The exposures reported in the table 5.2.2 also include the off balance-sheet exposures relating to guarantees and commitments (including undrawn credit lines) subsequent to the application of the Credit Conversion Factors (CFFs) required by prudential regualtions. The off-balance sheet exposures in relation to guarantees and commitments are disclosed side by side with the counterparty weighting factor. The exposure value shown in the tables of this section is stated net of adjustments in accordance with the prudential regulations.

Reported below are the Post CRM exposures broken down by weighting factor.

Tab. 5.2.2 – Standard approach: Distribution in classes of creditworthiness (post CRM)

Regulatory Portfolio (Standard Approach)	Classes of credit worthiness (Weighting Factors)								Total dec-17
	0%	Until 20%	35%	50%	70%-100%	150%	225%-250%	1250%	
Exposures to central governments and central banks	23,993,847	17	-	34,249	1,100,673	-	640,907	-	25,769,693
Exposures to regional governments and local authorities	-	1,982,601	-	-	-	-	-	-	1,982,601
Exposures to public sector entities	2,621	61,751	-	-	420,015	26	-	-	484,413
Exposures to Multi-lateral development banks	42,524	-	-	-	-	-	-	-	42,524
Exposures to International Organisations	-	-	-	-	-	-	-	-	-
Exposures to Institutions	78,624	6,976,174	-	1,875,770	200,800	549	-	-	9,131,917
Exposures to Corporates	-	43,696	-	187,012	4,875,176	88,670	-	-	5,194,555
Retail Exposures	-	-	-	-	1,344,616	-	-	-	1,344,616
Exposures secured by mortgages on immovable property	-	-	883,018	512,540	-	-	-	-	1,395,558
Exposures in Default	-	-	-	-	841,318	191,180	-	-	1,032,498
Exposures associated with particularly high-risk	-	-	-	-	-	93,602	-	-	93,602
Exposures in the form of covered bonds	-	695,967	-	-	-	-	-	-	695,967
Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-
Exposures to UCITs	-	-	-	-	457,412	-	-	-	457,412
Equity Exposures	-	-	-	-	978,345	-	819,887	-	1,798,231
Other Exposures	1,018,584	1,005,641	-	442	3,258,617	4,363	-	-	5,287,646
Items representing securitization positions	-	-	-	-	-	-	-	-	-
Exposures to Central Counter-parties in the form of pre-funded contributions to the guarantee fund	-	-	-	-	-	-	-	-	-
Total as at 31/12/2017	**25,136,200**	**10,765,847**	**883,018**	**2,610,013**	**13,476,971**	**378,389**	**1,460,793**	**-**	**54,711,232**
Total as at 31/12/2016	**23,243,722**	**12,294,153**	**574,155**	**3,697,817**	**16,342,408**	**667,835**	**965,675**	**-**	**57,785,767**

The Table shows the Banking Group's exposures reported by regulatory exposure classes and also contains off-balance sheet exposures relating to guarantees and commitments post application of credit conversion factors (CCF).

Tab.5.2.3 (EU CR5) – Standardised approach

	Exposure classes	Risk weight												Total
		0%	2%	4%	10%	20%	35%	50%	75%	100%	150%	225-250%	Deducted	
1	Exposures to central governments and central banks	23,346,665	-	-	-	17	-	32,664	-	1,100,673	-	640,907	799,527	25,120,926
2	Exposures to regional governments and local authorities	-	-	-	-	1,970,099	-	-	-	-	-	-		1,970,099
3	Exposures to public sector entities	2,621	-	-	-	61,751	-	-	-	412,823	-	-		477,196
4	Exposures to Multi-lateral development banks	42,524	-	-	-	-	-	-	-	-	-	-		42,524
5	Exposures to International Organisations	-	-	-	-	-	-	-	-	-	-	-		-
6	Exposures to Institutions	78,624	252,035	451,562	-	4,475,775	-	587,147	-	139,007	549	-		5,984,698
7	Exposures to Corporates	-	-	-	-	43,696	-	185,993	-	3,991,002	88,670	-		4,309,361
8	Retail Exposures	-	-	-	-	-	-	-	1,333,154	-	-	-		1,333,154
9	Exposures secured by mortgages on immovable property	-	-	-	-	-	630,130	499,250	-	-	-	-		1,129,380
10	Exposures in Default	-	-	-	-	-	-	-	-	828,272	179,463	-		1,007,735
11	Exposures associa-ted with particu-larly high-risk	-	-	-	-	-	-	-	-	-	93,602	-		93,602
12	Exposures in the form of covered bonds	-	-	-	13,912	682,055	-	-	-	-	-	-		695,967
13	Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-		-
14	Exposures to UCITs	-	-	-	-	-	-	-	-	454,748	-	-		454,748
15	Equity Exposures	-	-	-	-	-	-	-	-	978,345	-	819,887	57,893	1,798,231
16	Other Exposures	1,003,031	-	-	-	1,005,641	-	442	-	3,257,489	4,363	-		5,270,966
17	**Total as at 31/12/2017**	**24,473,466**	**252,035**	**451,562**	**13,912**	**8,239,033**	**630,130**	**1,305,495**	**1,333,154**	**11,162,359**	**366,647**	**1,460,793**	**857,420**	**49,688,587**

The exposure shown in the table does not include the counterparty credit risk (CCR). The deducted items include exposures required to be deducted in accordance with Part Two of the CRR.

5.3 Credit Risk: use of the AIRB approach

AIRB Authorization

With decree no. 647555 of 12 June 2008, the bank of Italy authorised the Montepaschi Group to use advanced internal rating based (AIRB) systems to calculate the capital requirements for credit and operational risk. In particular, whereas the Montepaschi Group uses the standard approach ratios for Exposure at default (EAD) pending validation by the Supervisory Authorities, the Group is instead authorised to use:

- Internal Probability of Default (PD) estimates, for the portfolio of exposures to corporates and retail exposures;
- internal Loss Given Default (LGD) estimates for the portfolio of exposures to corporates and retail exposures.

For portfolios other than those mentioned above, the standard approach is used As for legal entities, the scope of application of the authorised approaches shall be the following:

- AIRB: Banca Monte dei Paschi di Siena, MPS Capital Services, Banca Antonveneta, MPS Leasing & Factoring;
- the remaining legal entities of the Montepaschi Group use the standard approach.

Internal rating system architecture

The Montepaschi Group began using internal rating systems for the measurement of credit risk in 2002. The first Probability of default (PD) models were developed for the small and medium-sized enterprises (SMEs) and Small businesses (SB) portfolios which still remain the "core business" of the Group; subsequently, rating models were also estimated for other types of exposure and a loss Given default (LGD) estimation model was implemented.

Finally, an Exposure at Default (EAD) estimation model was implemented and subsequently updated, as with other internal models pending validation by the Supervisory Authorities. The rating system has thus become, over time, one of the main elements of assessment for all units involved in the credit industry, both at Head Office level (risk management, chief Financial Officer, General management, Risk Management committee, board of directors) and at outer level (credit management area, rating units and relationship managers).

Thanks to the experience accumulated, the Montepaschi Group has decided to further invest in internal rating systems, starting, at the beginning of 2006, with the Basel II Project aimed at improving the existing internal procedures by adjusting them to the new prudential supervisory regulations for banks which came into force on January 1, 2007 with legislative decree no. 297 dated 27 December 2006. This project ended in 2008 with the authorisation from the bank of Italy to use advanced internal rating systems (AIRB) for PD and LGD with a view to calculating capital requirements for portfolios of "non-financial companies" and "retail exposures" for Banca Monte dei Paschi di Siena and MPS Capital Services. Over the following years, in line with an internal overall 'advancement plan', the MPS Group continued the process of refinement/ revision of its rating models for Corporate and Retail clients, leading it to obtain authorization by the Supervisory body (with decree of 25/08/2010) to use advanced internal rating based systems for the Group's new entity, "Banca Antonveneta" (acquired in 2008 and merged into Banca MPS in April 2013) and for Montepaschi Leasing & Factoring and BiverBanca by ruling of 06.07.2012. The latter was subsequently sold by the Group to Cassa di Risparmio di Asti and as of the end of 2012 is no longer part of the MPS Group.

Internal rating system description

The development of the internal rating systems involved the adoption of strict and advanced statistical methodologies in compliance with the requirements set out in the regulations; at the same time, models were selected in such a way as to make results consistent with the historical experience of the bank in credit management. Lastly, in order to optimise the proper use of these new instruments, the rating models were shared with a top-down approach – from risk management down to individual client managers by means of intense training.

Estimation of the LGD model was based on internal data relative to capital flows, recoveries and expenses actually incurred on positions transferred to the non-performing portfolio. Results obtained from model application were then compared with data observed by the Area dedicated to the management and recovery of non-performing loans. The introduction of advanced rating systems in the credit process was an important cultural step forward which is now becoming a well-established practice for all business units of the Group. The main characteristics of the advanced rating systems are as follows:

- for all regulatory portfolios subject to validation, the rating is calculated with a counterparty-based approach for each individual borrower, in line with the accepted management practice which provides for the assessment of credit risk, both in the disbursement and monitoring phases;
- ratings are based upon a Group logic: each individual counterparty is assigned a single rating at banking Group level, based on the data set pertaining to all lending banks within the AIRB scope; there is one LGD reference definition for retail banks while there are different reference definitions for product companies;
- LGD reflects the economic (and not only the accounting) loss incurred; for this reason, LGD estimates must also include the costs incurred for the

recovery process and a time factor;

- the rating model segmentation is defined in such a way as to make the individual model clusters consistent with business objectives, credit process logics and regulatory portfolios set out in the regulations;
- loss given default is differentiated by type of loans and an LGD value is assigned at the level of each individual transaction;
- customer segmentation for LGD estimation and assignment follows the same logics as with the rating models; for clusters to acquire significance, segments were aggregated together under "retail" for retail exposures and "corporate" for exposures to non-financial corporates;
- the loss rate is differentiated by geographical area since historical and current recovery rates are different among Northern Italy, central Italy and Southern Italy and islands;
- loss on defaulted positions other than non-performing loans is estimated with a cure rate approach. With regard to counterparties whose exposures are administratively classified as Unilikely to Pay and Past due impaired exposures, the percentage of exposures reverting back to a performing status was calculated and used to adjust LGD estimated from NPL positions;
- changes in exposure after the first transition to default are included in the cure rate estimate;
- calculation of the final rating is differentiated by type of counterparty. The credit process envisages a level of in-depth analysis proportional to counterparty risk: the assessment of loan disbursements is based on a complex multi-level structure for medium-large Corporate counterparties (SME and Large Corporate (LC) segments), whose exposure and concentration risks are higher, and a simplified structure for Small SMEs (companies with a turnover of up to EUR 10M) and retail clients;
- in line with this process, the final rating for SMEs and LC is the result of a number of different factors: statistical rating, qualitative rating, overrides and valuation of the 'economic group' which businesses belong to; for Small SMEs, SB and retail counterparties the rating is calculated only on the basis of statistical factors;
- the rating has a 12-month internal validity period and is usually reviewed on a yearly basis, except for rating reviews following well-structured codified practices or that are brought forward on client managers' request or following serious counterparty deterioration.

The Montepaschi Group has adopted one master Scale for all types of exposures: this enables all units involved in credit management to immediately compare the risk level associated with different counterparties or portfolios; furthermore, the probabilities of default of internal rating classes were mapped against Standard & Poor's external rating scale so as to make internal risk measurements comparable to those available on the financial market.

Rating Class	PD	PD Class
AAA	0.01%	1
AA1	0.03%	2
AA2	0.05%	3
AA3	0.09%	4
A1	0.13%	5
A2	0.20%	6
A3	0.30%	7
B1	0.46%	8
B2	0.69%	9
B3	1.05%	10
C1	1.59%	11
C2	2.42%	12
C3	3.99%	13
D1	6.31%	14
D2	9.95%	15
D3	16.03%	16
E1	22.12%	17
E2	31.63%	18
E3	45.00%	19
Default	100.00%	20

The table shows a breakdown by PD band - with related central PDs - identified by the MPS Group in order to allow for a significant differentiation of credit risk.

Under prudential standards, the PD for the Corporate segment cannot be below 0.03% whilst for Retail, the MPS Group has decided to assign a PD of at least 0.13% for prudential purposes.

The rating system development and monitoring activities are functionally assigned to risk management. The estimation procedure is carried out according to an internal development protocol to make sure that estimation activities are transparent and visible for the internal controls and auditing departments.

Risk Management and Internal Validation Function periodically carry out monitoring/ backtesting analyses on the internal models to verify their performance stability over time. Should significant vulnerabilities emerge from the analyses, model fine-tuning or 'reestimation' procedures are put in place.

The Montepaschi Group currently has 16 rating models (14 validated and two pending validation) and one LGD model (differentiated by geographical area, type of loan, type of guarantee, guarantee coverage ratio and exposure at default) for the measurement of risk in validated regulatory portfolios.

For the calculation of capital absorption against credit risk, the Montepaschi Group uses **internal rating systems** for the following regulatory classes:

- corporates,
- retail exposures.

Internal rating model for Corporates

PD models

For the estimation of PD models, the Montepaschi Group adopted a default-based methodology. Among the statistical techniques used in the estimation of models with dichotomous bad/good target variables, a logistic regression was selected, characterized by the optimal trade-off between statistical soundness and interpretability of results.

The "non-financial businesses" portfolio includes all balance-sheet and unsecured exposures to companies relating to the banks, Monte dei Paschi, MPS Capital Services and MPS Leasing and Factoring.

The data source observation period for Corporate is 7 years (2009-2015).

Model segmentation

Corporate customers were segmented beforehand in order to obtain consistent clusters by risk profile. To this end, a size logic was used (based on the legal form of a company and its turnover) which appears to be consistent from both the statistical and operational point of view. Any information on turnover is obtained from the company balance sheet prepared in accordance with the Fourth EEC directive in relation to the last available annual report. The segment of Small businesses (one-man businesses and partnerships) consists of companies which are not subject to the obligation of preparing balance sheets for legal purposes; tax data are not currently used in the segmentation.

Definition of default

During the stage of development of the PD models, the following definition of default was used: defaulting counterparties are a sub-group of customers with an exposure (credit line granted or drawn) which, in an ordinary condition in a specific month of the year, shows at least one impairment anomaly within the following twelve months.

The anomalies contained in the definition of default include past due for a period of 90 days, Unlikely to pay, doubtful loans. For past-due positions a decision was taken to use an internal definition of past due, so called "technical", to identify instances not representative of a state of financial difficulty that is liable to generate an economic loss (option granted to banks by the regulations at issue), in line with client managers' actual business-based expectations of economic loss. The rules applied, and subjected to review in the course of last year, allowed a sub-set of alerts to be identified, involving vulnerabilities similar to other impairment states (particularly watchlist); the rationale adopted was aimed at integrating defaulting positions with positions which show no temporary anomaly but are characterised by aspects featuring in other states of impairment. The definition of 'technical past due loans' was used consistently for PD and LGD estimates. Defaulting positions are identified at MPS banking Group level.

Development stages of the rating models

Two main stages of development are envisaged for each rating model: score model estimate and calibration.

- **Score model estimate**

All information sources available are taken into account for the estimate of each rating model. A modular approach was adopted to maximise the prediction power of each information source, i.e. a (financial, internal trend, industry trend) standard module was estimated for each information source with the following determination of the final model as a combination of all modules. The information sources used for Corporate models are the following:

– balance sheet reports,
– internal trend data,
– industry data (Central Credit Registers of the Bank of Italy).

As far as the balance sheet is concerned, a set of indicators covering all areas of inquiry contemplated by corporate financial analysis was determined, including: debt coverage, financial structure, liquidity, profitability, productivity, development. With reference to lending trend components, the variables normally used by the account managers for risk valuation were restated: types of use of loan forms, account movements, number of irregularities found. The variables are calculated for each type of loan (callable, self-liquidating, upon maturity etc.) and are determined at the Group level over a time horizon of 12/6/3 months. As for the internal practice, the stage of development follows all procedures contemplated by a statistical inquiry: determination of a development sample (70%) and a test sample (30%), fact-finding analyses and preliminary data treatment, univariate analyses, correlation analyses and short list determination, multivariate analyses, model selection and review of out of sample performances.

- **Calibration**

Calibration is a process for estimating the function which transforms the score models output into default probability, i.e. the probability that a counterparty is in default within one year. The approach used by the MPS Group was based on two main steps:

- Estimate of the anchor point. The *anchor point* determines the average PD used by the model;
- Calculation of the calibration function for adjustment of the scoring model parameters.

The calibration function essentially defines how expected PD will vary according to the model score. Calibration in fact envisages a new default rate (anchor point) and is therefore inseparable from the need to adjust the parameters of the scoring algorithm so as to enable this latter value to be calculated instead of the estimated value. The default rate of the sample should therefore be adjusted in order to take account of the preset target rate (anchor point).

To this end, the MPS Group has identified a methodology, substantially based on the use of a ‘calibration’ function, whose final output is an intercept and slope value to be applied to the initial algorithm.

The anchor point represents the level of risk traditionally associated with the specific segment which the model is calibrated on.
It is calculated on the basis of the long term default rate and qualitative considerations the analyst deems appropriate to introduce. The estimated calibration function is used to calculate the point-in-time PD which is subsequently mapped on the Montepaschi Group Master Scale; each counterparty is assigned a PD level corresponding to its rating class.

LGD models

As required by regulations, the loss rate estimate is the long term average of realised losses, weighted by the number of counterparties and not by exposure. The Group uses a work-out model based on historical evidence of sets of defaulting transactions with similar characteristics. The database used to estimate the parameter includes all balance-sheet and unsecured exposures relating to the banks within the scope of validation, that were classed as “non-performing” from 01/01/1999 to 31/12/2015, for which either the recovery process has terminated or, if still active, whose balance is zero or seniority exceeds 15 years. The relevant clusters for the estimates include the geographic area, type of customers, loans, exposures transitioning to a default state, guarantees and their percentage of coverage.

• **Definition of default**

During the stage of development of the LGD model, the definition of default used was the same as the one for rating models: defaulting counterparties are a sub-group of customers with an exposure (credit line granted or drawn) which, in an ordinary condition in a specific month of the year, show at least one impairment anomaly within the following twelve months.

• **Development stages of the LGD model**

The LGD estimate includes three main stages: (i) the measurement of the loss rate actually registered in the history of each individual legal entity in relation to the nonperforming customers, (ii) the calculation of the LGD downturn, i.e. an indicator which takes account of the adverse phases of the economic cycle; (iii) the calculation of the LGD for all loan statuses other than non-performing loans.

• **Loss Rate for non-Performing Positions**

Realised collections minus the costs incurred with respect to defaulting exposures are compared to calculate the LGD rate actually observed on non-performing positions. Considering that reference is made to the registered economic loss, and not only to the accounting loss, all movements are discounted as of the date the loan is classified as non-performing. The interest rate used for discounting is the risk free rate plus an appropriate spread which remunerates the opportunity cost of each bank resulting from the non-use of the capital not repaid by the customer. As provided for by the regulations, a lower limit of 0% is set since the average LGD cannot be negative.

• LGD Downturn

The relation between collection rates and default rates was analysed to determine the adjustment to be made to the LGD estimates in case of a possible downturn of the economic cycle; once a negative relation between the two series was ascertained, a regression model was clearly formulated between collection rates and macroeconomic variables. Once the collection rates of expansionary and recessive cycles are determined, the downturn LGD is calculated as long-term default-weighted average, suitable for the recessive phases of the economic cycle.

• Total LGD

The estimated loss rates on defaulting positions other than non-performing loans starts from the estimated cure rate, i.e. the percentage of Watchlist loans, restructured loans, or Past due loans reverting to performing loan status. All positions included in the rating model calibration population that became defaulted within the analysis period were selected for this purpose. A weighted average of the downturn LGD was calculated, using the cure rates multiplied by the probabilities of default as weights, to determine the LGD rates for the different statuses of default. The LGD to be applied to all loan transactions of performing customers was determined by using the calibration clusters of the rating models.

Internal rating model for Retail exposures

PD models

A default-based methodology has also been adopted for "retail exposures". The portfolio includes all balance-sheet and unsecured exposures relating to loans granted by the banks, Monte dei Paschi, MPS Capital Services and MPS Leasing & Factoring to retail customers (natural persons or joint co-obligations of natural persons). The data source observation period for the estimation of PD is 5 years (2011-2015).

• Model segmentation

The retail portfolio was segmented drawing a distinction between jointly liable individuals and individual natural persons. The criteria were selected on the basis of the risk profile associated to the cluster and internal historical records.

• Definition of default

The Group used the definition of default adopted for the corporate models also in relation to the PD models applied to the portfolio of retail exposures.

• **Development stages of the rating models**
Following on from what was previously reported, only the specific features are shown for Retail models, which have been developed and calibrated using the same methods applied for Corporate models.
For the Retail segment, the main sets of information regarding developments are those relating to loans granted by the Group (overdraft facilities, mortgages and small loans) and to the personal data available on the Customer and related parties.

LGD models
The LGD model for retail exposures includes the stages contemplated for the corporate model. The comments on the estimate data base are only in relation to the retail segment and the cure rate estimate population was the calibration population of rating models.

Main changes to the internal rating system in recent years

Following are the main actions implemented over recent years to the MPS Group's internal rating system.
In 2012, the MPS Group performed a full re-assessment of its corporate and retail models with a view to developing the segmentation of corporate models and aligning all models with the new regulatory definition of default which, as of 1 January 2012, provides for the application of a 90-day limit in place of the prior 180-day limit for the reporting of "non-performing" past due and/ or overdue exposures on loans to businesses and retail loans.
In accordance with the roll-out plan, in 2013 the Montepaschi Group carried out an estimation of Rating models for the Non-Banking Financial Institution (NBFI) segment. Furthermore, the Corporate and Retail models were calibrated by including data from the last few years (most representative of the current economic recession) in the time series.

In 2014, the MPS Group continued to update and revise its internal rating system in order to implement the several events which marked 2014 and which, either directly or indirectly, impacted the loan portfolio's risk parameters:

- Firstly, regulatory provisions profoundly changed the framework of prudential supervision in order to strengthen capital requirements and incorporate the new Basel III standards;
- The economic cycle continued to be very severe, with further significant impacts on the level of risk at both system-wide level and on the MPS portfolio. The impact affected risk in the performing portfolio which continued to show very high default rates and a decline in its ability to recover non-performing

positions;

- The regulatory exercise known as the «Comprehensive Assessment» and, in particular, the Asset Quality Review (AQR) revealed a significant impact for the Montepaschi Group;
- Finally, there was a reduction in the closure of non-performing positions, which contributed to increasing the vintage of loans.

The combination of these events led to the need for maintenance actions to be implemented on risk parameters to incorporate a fuller and more up-to-date set of information, as per regulatory requirements.

In the light of these events, the MPS Group decided to adjust all its rating models so that the first AQR results (from the Credit File Review – CFR) could already be included in the 2014 estimates and the LGD model could be re-estimated in line with internal protocol and Group practice which, over the last few years, have always provided for the annual re-estimation/calibration of all models as a result of the persisting economic cycle.

As for LGD, in order to incorporate the most recent findings, a stock of significant positions not yet closed – but for which the recovery process can essentially be considered as closed - was included in the estimation sample (so-called incomplete work-outs). To this end, the percentage of adjustments of operational positions was identified, assuming that the recovery process was essentially concluded for over a certain percentage of coverage. In this connection, a level of coverage in excess of or equal to 99% was identified as significant.

In 2015, as soon as the default detection actions were concluded, the MPS Group recalibrated all of its Corporate and Retail rating models and re-estimated all LGD models in order to fully incorporate the AQR impacts. In particular, the time series used for PD and LGD estimations were shifted by one year so as to include the actual data relating to 2014; given the timing of activities (first quarter), it was not necessary to assess prospective TDs as it was for calibrations in the second half of the year, where they were not available.

The operation at the end of 2014 (incorporated in the recalibration of PD models and re-estimation of LGD models) involved the reclassification of a high number of counterparties from performing to non-performing status and within the non-performing cateogires, which significantly affected the default rate for 2014 as well as the cure rates. The shift in the time series meant that the effects of the operation were fully included in the new calibration.

Moreover, in the course of 2015, the supervisory slotting criteria approach was used to determine capital requirements for Specialized Lending transactions of more than 5 €/mln. Finally, as provided for in the roll-out plan, the Montepaschi Group went ahead with the estimation of Rating models for the "Banks" segment.

In 2016, in line with the provisions of the regulatory framework (in particular with CRR regulation no. 575/2013, art. 179) on the basis of which 'institutions review their estimates whenever new information becomes available and in any case basis', the MPS Group continued to update and revise its internal rating system in order to reflect the events of 2015 and, in particular, it fully recalibrated all PD models, updating the Anchor Points (AP) and implementing the 2015 default rates. Finally, it should be noted that regulatory legislation is profoundly changing the framework of prudential supervisory rules in order to reinforce capital requirements and implement the new Basel III standards. In particular, in addition to the RTSs published by the EBA in 2016 relating to the definition of default to be adopted within estimates, in 2017 the 'Guidelines on PD estimation, LGD estimation and treatment of defaulted assets' were published, which call for a number of changes in the previously authorised AIRB models. In order to launch AIRB model updating activities in due time and clearly understand the compliance objectives scheduled by the supervisory authority for the coming years, the MPS Group has already begun its dialogue with the supervisory authority, proposing the initial model changes relating to the new definition of default and the definition of a framework for the calculation of RWAs on defaulted assets. In addition, in the course of 2017, the MPS Group, along with the other large European banks authorised to use internal models to calculate the capital requirement for credit risk, continued its activities concerning the TRIM (Targeted Review of Internal Models).

The TRIM is a 3-year project launched by the ECB in 2016, which is currently expected to be completed in 2018 and is meant to evaluate the compliance with regulatory requirements of the internal models currently used by banks, as well as their reliability and comparability. It can be expected that the final result of the TRIM will likely result in further methodological changes in the current internal models.

Use of Internal Models

Prior to authorisation from the bank of Italy enabling the Montepaschi Group to calculate capital absorptions according to the rules set out for the advanced internal rating systems, the Group used the parameters underlying the calculation of risk Weighted assets also for other operational and internal management purposes. The basic principle called for the use of Basel 2 input factors –as much in line with operating requirements as possible-even though, for obvious reasons, operational practices naturally diverge from supervisory standards, with some methodological fine-tunings and adjustments required for internal purposes and calculation systems. in particular, “across-the board” parameters used for both ”supervisory reporting” and “operational” practices are in relation to the Probabilities of default (PD) resulting from internal rating systems and the loss rates on the “impaired” portfolio (LGD). The latter provide the basis of calculation for different systems of measurement and monitoring, and specifically for:

- **Measurement of economic capital for credit risk.** Among the inputs used for the credit model and related VaR output to be operational, the same PD and LGD variables are applied as those that are also used for regulatory purposes. it is clear that certain adjustments have been necessary, such as the use of probabilities of default “not subject” to validation for portfolios other than “corporate” and “retail”, resulting from internal rating systems not yet subject to validation or from main rating agencies, appropriately re-mapped to the internal master scale. With regard to LGD, the Group uses parameters estimated on the basis of portfolios subject to validation according to provisions set out by supervisory authorities, although excluding the economic downturn effect that is contemplated only for regulatory purposes; out-of-validation portfolios use parameters estimated on the basis of medium-long term recovery rates, if any, or LGD rates in line with those set out by internal provisions under the FIRB approach. Although EAD for supervisory purposes follows the standard approach as it is pending validation, it is calculated as the sum of drawn amounts plus undrawn balance (committed amount – drawn amount) multiplied by a Credit Conversion Factor (CCF) if this margin is higher than 5% of the committed amount, whilst for margins below this threshold, the EAD is determined as the drawn amount multiplied by a factor (K). Both types of ratios distinguish between Legal Entity, Segment, Type of Exposure, size class and rating class. For Financial and Commercial Signature loans, the EAD is multiplied by a factor (RC), which expresses the probability that the committed amount does not become a balance sheet exposure upon default of the counterparty.

- For **the calculation of risk-adjusted performance and measurement of value creation**, the Group follows the same calculation logic as used in the loan portfolio model both for legal entities subject to validation and for those that are excluded from the scope. Furthermore, whenever new estimates or re-adjustments are made to the internal rating systems subject to validation, adjustment results are incorporated in the Vbm procedures which ensure continuous output alignment with the latest updates.

- The parameters which feed the calculation model for the **risk-adjusted pricing process** are the same as those used for the loan portfolio model, even though with some extensions implicit in the pricing model. The pricing model which price-marks different types of loans with different maturities, requires input not only from the annual Probability of default but also from marginal, forward and multi-period Pds. For these reasons, the Montepaschi Group has developed specific calculation methodologies for these default probabilities, all in compliance with the annual Pd resulting from the validated rating systems. Similarly, lGd calculation is based on the same criteria as those used and mentioned above for the loan Portfolio model, though not taking account of economic downturns.

- In relation to **credit process monitoring**, the following should be noted:
    - processes of loan disbursement to customers included in the airb scope of application have been completely 'reengineered' with the Electronic Credit Facility record software. The Montepaschi Group's counterparty rating is the result of a process which evaluates - in a transparent, structured and consistent manner -all the economic financial, 'behavioural' and qualitative information relative to customers who generate credit risk exposures. The Official rating thus determined has ordinary validity up to the twelfth following month and shall be reviewed by the end of that month. However, the rating review in the monitoring process may be prompted at an earlier date during the validity period if ongoing, major monthly statistical Pd variations – exceeding specific cut-offs -are intercepted. The loan disbursement system is organised into several 'paths', depending on the type of customer and transaction requested, which envisage the possibility of executing the process of assigning a rating to each counterparty and do not allow for any decision-making powers to be exercised in the absence of a valid rating;
    - credit is monitored by using a synthetic Performance Risk Indicator (it. *Indicatore di Rischio Andamentale*), which is based on internal and external information regarding the customer's trends and behaviours. When given PRI thresholds are exceeded, the position is intercepted within a process whereby the operator is required to comply with certain activities in order to address the

irregularities identified;

- the Simplified renewal process is used for low-risk situations and lower amounts. This process is applied to all counterparties with credit facilities subject to revision, which have matured or will mature in the month of reference;
- the principle underlying decision-making powers provides for levels to be assigned on the basis of individual counterparty ratings, the amount of the credit facility requested, the level of risk measured for the Group to which the counterparty belongs, the type of the type of credit facility requested or guarantees required and, finally, the nature of the borrower;
- on the basis of these levels, the system for assigning powers identifies a nominal amount for each risk aggregate: power of approval is assigned to the decision-making bodies, making reference to the combination of rating class and type of loan granted according to the principle of delegating the decision-making powers for the worst ratings to the uppermost levels. Exception to this rule is made for the board of directors, which has the highest level of decision-making powers, and for the levels of approval assigned to corporate decision-making bodies.

The importance of internal ratings for management purposes made it necessary to create a unit to control and validate the rating systems within the Montepaschi Group. This unit has an independent organizational structure and separate management reporting flows from the unit responsible for developing, updating and reviewing the systems themselves. This structure meets the requirements of a "Credit Risk Control Unit" set by regulatory legislation to carry out validation controls.

The policies for recognition of credit risk mitigation guarantees are implemented through a dedicated IT process which is applied for reporting purposes and does not overlap with the rules for managing guarantees and collaterals applicable to the loan disbursement process.

The IT application manages all rules for the admissibility of guarantees. The process is based on a first step registry of all guarantees, which outlines the Group operational framework. at a later stage, the data of each individual guarantee is assessed through an analysis of its specific characteristics. In particular, the following general requirements are verified:

- legal certainty;
- enforceability of Guarantee against third parties;
- timely liquidation;
- compliance with organisational requirements.

Control Management model on Internal Rating System

An advanced internal rating system, according to current regulations in force should provide for appropriate forms of review and inspection at all levels of control activities.

The AIRB system used by the Montepaschi Group provides for the execution of automatic controls, i.e. controls regulated by specific operational protocols (e.g. hierarchical controls), within the operating units involved in the process of rating assignment. These controls are aimed at making sure that activities preliminary to rating assignment are properly performed (i.e. selection of a model suitable for customer or transaction assessment, identification of economic or legal relations between customers, compliance with internal procedures oriented to obtaining the information necessary for the assignment and updating of the rating).

The first set of Data Quality controls relating to the Internal Rating System was created in 2008, with the definition and set-up of the AIRB models.

In 2016, the Group launched a specific long-term Business Plan project - the Data Governance project - under the responsibility of the Chief Data Officer, within the scope of which it:

- Selected a Distributed type Target organisational model which, under the guidance of a central function, calls for the significant involvement of the Business and IT functions
- Defined and published the reference regulations
- Made the Business functions (Data Owners) for the scope identified accountable for the identification of the Data Dictionary components and the definition of controls over the monitoring phase;
- Prepared a complete operating machine for the Montepaschi Group for the management of the Business Glossary, Data Quality and remediation; for data quality, the application is capable of managing the execution of controls, their monitoring (up to the level of individual counterparty) and directing the anomaly remediation process.

In 2017, the Rating Service, which merged into the Lending Risk Officer Area, participated in the Data Governance project as a “pilot” on the Rating System, migrating the set of existing controls, recording new controls on the new official Data Governance platform and taking responsibility for first-level control maintenance and monitoring.

The Validation and Risk System Service (Function Internal Validation) within the Credit Risk Officer Division, shall be responsible for the following levels of review contemplated by the regulations. The Validation and Risk Systems Service Unit steadily evaluates whether the estimates of all important risk components are accurate in relation to internal models. Starting in 2016 this unit was assigned the operational validation activities outsourced to the Parent Company by the Subsidiary Companies MPS Capital Services and MPS Leasing & Factoring. The Internal Validation Function prepares the Monpeaschi Group's "Annual internal rating System (hereinafter IRS) Validation report" on a yearly basis, expressing an opinion on the regular operations, prediction power and overall performance of the IRB system adopted. The opinion expressed by the Internal Validation Function is then examined by the Corporate Control Functions Coordination Committee, also for the purpose of sharing and agreeing on any remedial actions required. The "Annual Validation Report" is subsequently submitted for approval by the Parent Company's Board of Directors once all the other internal steps have been taken. Moreover, the Chief Audit Executive Division (hereinafter also CAED) is assigned with the task of assessing the efficiency of the overall structure of controls for the rating system (responsible for review controls).

The methods adopted by the above operating units in relation to the operational procedures of validation and review are briefly illustrated below.

PInternal Rating System Validation Process

Responsibility for validating the SRI is assigned to the head of the Internal Validation Function identified as of 31 July 2017 as the head pro tempore of the Validation and Risk Systems Service (VRSS) in carrying out operational activities that are required for validation. Key findings which emerge from the validation controls carried out during the year by the Staff unit are included in the "Annual Validation Report".

The Validation and Risk System Service (was set up in February 2014 with the specific task of validating certain risk measurement models – regulatory and non-regulatory – by constantly verifying the reliability of results obtained and maintaining alignment with regulatory requirements.

The results of these controls are documented, formalised and transmitted directly to the structures concerned as well as to the Chief Audit Executive Division. Once a year these results are included in the "annual internal rating System Validation report" which expresses an overall opinion on the position of the IRS with respect to the supervisory requirements. The validation process, within which the abovementioned controls are carried out with a view to finally validating the rating System, consists of the following formal validations:

- validation of processes: checks compliance of the internal rating assignment process with the minimum organisational requirements of CRR and circular no. 285 of the Bank of Italy, with a specific focus on the following aspects:

- design of rating allocation processes and regulatory assessments concerning Specialized Lending transactions and, where possible, the backtesting of process results while checks on the efficiency of the processes themselves are performed by the Internal Audit Function;
- analysis of consistency between the changes in ratings made by an operator and the guidelines issued by the units responsible for the assignment of ratings;
- verifying the actual use of the rating system within the company, identifying the players and processes involved with a particular focus on the loan disbursement and renewal process;

- validation of **models**: checks that the statistical models for the production of the risk parameters used by the Group MPS maintain specific performance levels and comply with the minimum organisational and quantitative requirements provided for by the rules; and in particular the following is verified:
  - representativeness: checks the consistency between the application population's characteristics in the production of models and the sample used for the estimation;
  - concentration: assesses the level of concentration of counterparties and exposures within the individual rating class, determined by the application of models;
  - performance: assessment of the prediction power of the model and therefore its power to separate highly solvent customers from potentially hazardous customers;
  - calibration: check the risk preliminarily assigned for each class of rating and at overall level vs. the observed historical risk;
  - stability: assessment of the stability of the assigned ratings over time;
  - stress testing: review of stress testing activities carried out on the models by the model development unit;
  - benchmarking: check consistency of ratings assigned internally with those assigned by outside structures on portfolios having a low number of counterparties;

- **data** validation: monitoring of the process of identifying and resolving data quality anomalies identified by the controls conducted by the Business Functions concerning the quality of the data used by the SRI.

The process of validation involves the preparation of questionnaires for each scope of action identified, with the objective of checking compliance of each aspect of the IRS with regulatory requirements. The detailed positions on each requirement are collated in an overarching opinion of validation through a system of scoring replies and weighting questions, which is part of the framework that has been established and formalized.

The methods chosen meet the requirement of making the process of validation transparent and objective, not only with respect to the Supervisory authorities but especially to each operating unit which develops the IRS and is informed of any faults in the system, for correction. This ensures easier action on the gaps and consequently a better control of the proper operations of the IRS by VRSS.

Process of Internal Review of the Internal Rating System

In line with the existing regulations, the Internal Audit Division of the Montepaschi Group adopts the professional Standards and guidelines of the main domestic and international entities, through an independent and objective activity of assurance and advice aimed at controlling, also through on site inspections, the regular operations and risk trend and assessing the functional efficiency and compliance of the Internal Control Systems in order to improve the effectiveness and efficiency of the organisation. The introduction of advanced systems of risk measurement and management determined an extension of activities mandated to the internal audit unit and related responsibilities. The overall review approach focuses on the objective of providing a coherent assessment of adequacy, in terms of both effectiveness and efficiency, of the control systems of the rating-based process of governance and management of credit risk. In particular, the responsibilities assigned to the internal audit unit by the above-mentioned circular, with reference to the review of the advanced models for credit risk assessment and management can be summarised in three following points:

1) assessment of the overall functional efficiency of the control system of the AIRB approach;
2) assessment of the functional efficiency and regularity of the internal validation process;
3) review of system compliance with the requirements for regulatory use of risk estimates.

However, the main operating components attributable to the adoption of an internal rating system require that the review of that process be considered as part of a larger analysis and assessment of the whole loan management process. The objective is to ensure the materialisation of important synergies from the point of view of the actual cost of implementation and, above all, the overall and coherent observation of the events analysed which share different audit findings on the rating process stemming from the reviews carried out in the distribution network and Group companies. The audit controls to be carried out for an assessment of the above-mentioned aspects are guided by efficiency and compliance checks. As a result of the different kinds of control, the internal audit unit performs its responsibilities which consist in reviewing the validity of the whole IRS and the validation process, as well as compliance of the system with regulatory requirements.

Quantitative information

The following table reports the Group's exposure to credit risk – AIRB , as at 31 December 2017 divided by classes of regulatory activities. The exposure values reported are determined according to prudential supervisory requirements and as such are inclusive of value adjustments and do not factor in the effects of risk mitigation techniques which, in the case of exposures subject to an internal models-based approach, are directly included in the risk-weighting factor applied. As for guarantees issued and commitments to disburse funds, the values reported take into account credit conversion factors. The exposure value reported in the table, therefore, shows the credit equivalent- .Following are the values of risk weighted assets (RWAs), expected loss (EL) and actual losses (AL) as at the end of 2017. It is noted that the amount of value adjustments on general-purpose and special-purpose receivables relating to securitisation exposures are not included in the calculation of the Expected Loss Delta, as required by the CRR.

The nominal value in table 5.3.3 and following shows the exposure value before applying the credit conversion factor.

Tab. 5.3.1 – IRB Approach: Summary of Exposures, RWAs, expected and actual losses

	dec-17			
Regulatory Portfolio	EAD	RWA	EL	AL
Exposures to or secured by corporates:	48,947,046	18,436,024	12,591,500	16,749,991
- SMEs	32,444,612	8,575,194	9,645,329	13,240,152
- Other companies	14,222,965	8,325,061	2,516,051	2,990,072
- Specialized lending	2,279,469	1,535,769	430,120	519,767
Retail exposures:	57,209,111	8,570,430	9,477,169	12,438,649
- Secured by real estate: SMEs	6,383,214	1,923,208	524,159	750,655
- Secured by real estate: Individuals	26,377,007	3,028,018	213,612	265,164
- Qualifying revolving	93,801	9,266	543	497
- Other retail exposures: SMEs	18,269,107	3,231,074	6,715,503	8,484,957
- Other retail exposures: Individuals	6,085,983	378,864	2,023,353	2,937,375
Securitization positions	79,573	7,760	-	1,576
Total as at 31/12/2017	**106,235,730**	**27,014,214**	**22,068,669**	**29,190,216**
Total as at 31/12/2016	**112,212,322**	**30,324,577**	**21,566,670**	**24,741,329**

Reported below is the breakdown by PD class, identified by the MPS Group to allow for a significant distinction to be made for credit risk (*see* para. 5.3) by Group exposures and regulatory portfolio.

Tab. 5.3.2 – IRB Approach: Exposures, expected and actual losses distribution by regulatory portfolio and PD classes (except for Specialized lending)

	dec-17				
Classes of creditworthiness	Corporates Exposure	Retail Exposure	AIRB Total Exposures	AIRB Total EL	AIRB Total AL
Class 01	-	-	-	-	-
Class 02	52,972	13,409	66,381	8	8
Class 03	245,177	55,449	300,626	62	77
Class 04	440,474	91,994	532,467	193	201
Class 05	529,748	6,461,183	6,990,931	1,428	1,712
Class 06	911,118	4,659,989	5,571,106	2,143	3,258
Class 07	1,975,538	3,815,898	5,791,436	4,335	5,153
Class 08	2,229,599	3,146,529	5,376,128	6,938	8,439
Class 09	2,787,383	4,514,792	7,302,174	12,996	14,123
Class 10	3,082,625	5,270,291	8,352,916	22,663	29,673
Class 11	2,916,910	2,934,660	5,851,570	29,454	30,817
Class 12	2,382,825	2,657,501	5,040,326	38,811	39,937
Class 13	1,955,216	2,459,589	4,414,805	53,892	65,315
Class 14	1,521,595	1,269,865	2,791,460	54,934	72,497
Class 15	920,300	714,796	1,635,096	48,352	51,682
Class 16	457,062	473,292	930,354	43,200	40,338
Class 17	150,748	233,417	384,165	23,083	21,176
Class 18	83,751	186,095	269,846	21,293	20,436
Class 19	79,367	112,975	192,343	20,613	19,306
Class 20	23,945,169	18,137,386	42,082,556	21,254,150	28,244,725
Total as at 31/12/2017	**46,667,577**	**57,209,111**	**103,876,688**	**21,638,549**	**28,668,873**
Total as at 31/12/2016	**50,060,080**	**59,239,335**	**109,299,415**	**20,904,433**	**24,160,425**

The following table shows a breakdown by PD band with quantitative details for the advanced IRB approach of the Portfolio "Exposures to or guaranteed by businesses" divided by regulatory asset class:

- *Specialized lending – slotting criteria.*
- *SMEs,*
- *Other companies.*

Tab. 5.3.3 – EU CR10 - IRB (Specialized lending and equities)

	Specialised Lending - slotting criteria					
Regulatory categories	On-Balance amount	Exposure amount	Off-Balance amount	RWA	Value adjustments	Expected Loss
Category 1 - 50%	1,640	1,251	778	626	9	-
Category 1 - 70% equal to or greater than 2.5 years	38,672	36,575	4,195	25,603	302	146
Category 2 - 70% less than 2.5 years	95,396	92,874	19,122	65,012	2,528	371
Category 2 - 90%	969,113	944,648	120,465	850,183	14,603	7,557
Category 3 - 115%	374,043	365,586	32,599	420,424	15,590	10,236
Category 4 - 250%	71,593	69,568	4,050	173,921	1,655	5,565
Category 5 - 0%	785,292	768,966	32,653	-	485,080	406,243
Total as at 31/12/2017	**2,335,749**	**2,279,469**	**213,863**	**1,535,769**	**519,767**	**430,120**
Total as at 31/12/2016	**3,082,443**	**2,875,518**	**541,944**	**1,580,275**	**580,511**	**662,237**

Tab. 5.3.4 – (EU CR6) - IRB approach: Exposures to or secured by corporates - SMEs

	a	b	c	d	e	f	g	h	i	j	k	l
Rating Class	On-balance-sheet gross exposures	Nominal Value	CCF% (Average)	Exposure Value	Weighted Average PD (%)	Number of obligors	Weighted Average LGD (%)	Average maturity	RWA	Average Risk Weight % RWA	Value adjustments	Expected Loss
Class 01	-	-	-	-	-	-	-	-	-	-	-	-
Class 02	214,876	214,837	5.78%	39,831	0.03%	0.136	40.44%	2,56	5,088	12.77%	5	5
Class 03	278,502	276,207	3.30%	76,665	0.05%	0.228	36.29%	2,56	10,186	13.29%	14	14
Class 04	596,952	587,529	7.26%	196,080	0.09%	0.539	40.21%	2,56	38,080	19.42%	71	70
Class 05	654,067	640,553	9.70%	295,284	0.13%	0.497	37.68%	2,56	69,878	23.66%	145	137
Class 06	988,894	961,082	9.90%	440,051	0.20%	0.773	38.24%	2,56	128,054	29.10%	337	343
Class 07	1,739,766	1,708,463	10.16%	926,087	0.30%	1.236	37.34%	2,56	343,668	37.11%	1,037	1,019
Class 08	1,791,776	1,745,061	17.72%	1,082,487	0.46%	1.386	37.87%	2,56	486,699	44.96%	1,885	1,851
Class 09	2,021,969	1,969,868	12.56%	1,308,875	0.69%	1.516	33.83%	2,56	662,898	50.65%	3,055	2,929
Class 10	2,322,356	2,249,281	11.12%	1,678,684	1.05%	1.827	33.84%	2,56	1,027,888	61.23%	5,965	11,451
Class 11	2,055,943	1,986,909	11.20%	1,555,289	1.59%	1.935	33.72%	2,56	1,057,871	68.02%	8,339	8,881
Class 12	1,952,485	1,888,119	13.81%	1,551,238	2.42%	1.856	32.65%	2,56	1,136,811	73.28%	12,257	12,616
Class 13	1,651,808	1,614,177	13.52%	1,371,849	3.99%	1.559	31.62%	2,56	1,115,321	81.30%	17,310	17,677
Class 14	1,301,928	1,277,568	24.54%	1,154,464	6.31%	0.981	29.42%	2,56	1,035,952	89.73%	21,432	39,651
Class 15	694,802	676,018	19.33%	583,667	9.95%	0.547	32.16%	2,56	677,161	116.02%	18,675	17,880
Class 16	343,111	338,269	20.70%	320,156	16.03%	0.309	28.23%	2,56	384,599	120.13%	14,490	13,763
Class 17	133,489	132,474	28.62%	126,480	22.12%	0.130	30.50%	2,56	177,671	140.47%	8,533	7,977
Class 18	81,275	80,551	20.27%	73,502	31.63%	0.077	33.44%	2,56	121,708	165.58%	7,775	7,791
Class 19	82,248	81,504	45.03%	74,025	45.00%	0.064	27.30%	2,56	95,660	129.23%	9,095	8,585
Class 20	20,160,345	20,095,668	26.04%	19,589,896	100.00%	11.030	46.39%	2,56	-	-	9,514,908	13,087,514
Total as at 31/12/2017	**39,066,593**	**38,524,139**	**12.05%**	**32,444,612**	**3.26%**	**26.626**	**33.72%**	**2,56**	**8,575,194**		**9,645,329**	**13,240,152**
Total as at 31/12/2016	**44,025,582**	**41,190,896**	**12.99%**	**34,493,201**	**3.69%**	**40.358**	**33.22%**	**2,76**	**10,224,887**		**9,398,080**	**10,224,887**

(a) For reporting purposes, Unused Margin refer to issued guarantees and revocable and irrevocable commitments to disburse funds

(b) The weighted average PD (%) and weighted average LDG (%) under Total does not include class 20

Tab. 5.3.5 – (EU CR6) – IRB approach: Exposures to or secured by corporates - Other companies

	a	b	c	d	e	f	g	h	i	j	k	l
Rating Class	On-balance-sheet gross exposures	Nominal Value	CCF% (Average)	Exposure Value	Weighted Average PD (%)	Number of obligors	Weighted Average LGD (%)	Average maturity	RWA	Average Risk Weight % RWA	Value adjustments	Expected Loss
Class 01	-	-	-	-	-		-	-	-	-		-
Class 02	202,400	202,400	3.17%	13,141	0.03%	0,040	41.41%	1,61	1,381	10.51%	2	2
Class 03	607,215	606,415	23.22%	168,512	0.05%	0,059	43.90%	1,61	36,223	21.50%	37	52
Class 04	719,096	719,096	9.87%	244,394	0.09%	0,143	41.10%	1,61	58,291	23.85%	90	99
Class 05	781,970	779,821	9.04%	234,464	0.13%	0,153	39.69%	1,61	70,206	29.94%	121	117
Class 06	1,591,469	1,589,482	15.86%	471,066	0.20%	0,232	43.84%	1,61	188,651	40.05%	413	459
Class 07	3,311,735	3,308,757	8.25%	1,049,451	0.30%	0,456	42.62%	1,61	526,146	50.14%	1,342	1,348
Class 08	2,599,869	2,595,936	19.21%	1,147,112	0.46%	0,420	44.13%	1,61	777,312	67.76%	2,329	2,852
Class 09	3,791,381	3,786,030	9.98%	1,478,508	0.69%	0,470	42.19%	1,61	1,110,141	75.09%	4,304	4,254
Class 10	2,571,039	2,564,359	21.33%	1,403,941	1.05%	0,458	43.15%	1,61	1,216,656	86.66%	6,360	6,335
Class 11	2,074,511	2,063,788	22.75%	1,361,620	1.59%	0,397	41.32%	1,61	1,315,988	96.65%	8,946	8,915
Class 12	1,293,903	1,288,421	26.64%	831,587	2.42%	0,261	39.64%	1,61	869,399	104.55%	7,978	8,330
Class 13	841,045	836,923	14.01%	583,367	3.99%	0,215	41.04%	1,61	779,046	133.54%	9,552	14,931
Class 14	450,233	449,854	19.23%	367,131	6.31%	0,120	41.94%	1,61	587,222	159.95%	9,717	9,266
Class 15	377,707	377,707	33.10%	336,633	9.95%	0,070	28.61%	1,61	401,641	119.31%	9,583	14,876
Class 16	160,958	159,646	12.64%	136,906	16.03%	0,048	40.44%	1,61	287,307	209.86%	8,876	7,876
Class 17	28,225	28,225	1.47%	24,268	22.12%	0,017	42.16%	1,61	60,702	250.14%	2,263	1,401
Class 18	12,748	11,377	0.11%	10,249	31.63%	0,006	44.47%	1,61	28,323	276.35%	1,442	1,503
Class 19	5,351	5,351	-	5,343	45.00%	0,007	37.07%	1,61	10,425	195.14%	891	861
Class 20	5,010,184	4,998,488	20.12%	4,355,273	100.00%	1,019	55.43%	1,61	-	-	2,441,806	2,906,594
Total as at 31/12/2017	**26,431,039**	**26,372,076**	**15.00%**	**14,222,965**	**1.92%**	**4,591**	**41.72%**	**1,61**	**8,325,061**		**2,516,051**	**2,990,072**
Total as at 31/12/2016	**31,041,590**	**30,148,836**	**14.91%**	**15,566,879**	**2.11%**	**7,547**	**41.32%**	**1,68**	**9,019,637**		**2,743,987**	**3,057,558**

(a) For reporting purposes, Unused Margin refer to issued guarantees and revocable and irrevocable commitments to disburse funds
(b) The weighted average PD (%) and weighted average LDG (%) under Total does not include class 20

The following table shows a breakdown by PD band with quantitative details for the advanced IRB approach of the Portfolio "Retail Exposures" divided by regulatory asset class:

- *Secured by real estate - SMEs,*
- *Secured by real estate - Individuals,*
- *Qualifying revolving,*
- *Other retail exposures - SMEs,*
- *Other retail exposures - Individuals.*

Tab. 5.3.6 – (EU CR6) - IRB approach: Retail Exposures Secured by real estate - SMEs

	a	b	c	d	e	f	g	h	i	j	k	l
Rating Class	On-balance-sheet gross exposures	Nominal Value	CCF% (Average)	Exposure Value	Weighted Average PD (%)	Number of obligors	Weighted Average LGD (%)	Average maturity	RWA	Average Risk Weight % RWA	Value adjustments	Expected Loss
Class 01	-	-	-	-	-	-	-	-	-	-	-	-
Class 02	1,161	1,161	-	1,161	0.03%	0,005	15.47%	3,83	15	1.33%	0	0
Class 03	5,351	5,351	-	5,351	0.05%	0,037	18.73%	3,83	120	2.24%	1	0
Class 04	20,689	20,689	46.17%	19,172	0.09%	0,137	18.83%	3,83	692	3.61%	3	3
Class 05	38,747	38,747	50.00%	38,732	0.13%	0,247	19.88%	3,83	2,033	5.25%	10	9
Class 06	90,360	90,161	50.00%	89,582	0.20%	0,587	19.65%	3,83	6,454	7.20%	35	32
Class 07	160,455	160,455	24.94%	159,013	0.30%	1,140	19.87%	3,83	16,055	10.10%	95	86
Class 08	300,830	300,599	20.73%	299,936	0.46%	2,048	19.77%	3,83	41,504	13.84%	273	350
Class 09	444,150	444,006	49.77%	440,402	0.69%	3,064	19.81%	3,83	82,076	18.64%	602	653
Class 10	672,075	672,075	42.73%	668,014	1.05%	4,629	20.30%	3,83	167,896	25.13%	1,424	1,375
Class 11	741,117	741,117	27.63%	737,747	1.59%	5,176	20.09%	3,83	236,505	32.06%	2,357	2,212
Class 12	799,786	799,786	43.50%	798,811	2.42%	5,091	20.22%	3,83	336,510	42.13%	3,908	4,018
Class 13	637,611	637,611	42.96%	636,178	3.99%	3,351	20.18%	3,83	350,997	55.17%	5,124	5,553
Class 14	330,517	330,517	37.04%	329,594	6.31%	1,772	20.43%	3,83	233,631	70.88%	4,249	4,066
Class 15	192,831	192,826	42.14%	192,467	9.95%	0,875	20.00%	3,83	162,770	84.57%	3,831	3,585
Class 16	136,123	136,123	50.00%	134,725	16.03%	0,678	20.58%	3,83	136,438	101.27%	4,443	4,013
Class 17	69,207	69,207	50.00%	67,947	22.12%	0,350	20.56%	3,83	74,217	109.23%	3,091	2,985
Class 18	40,782	40,782	12.47%	40,352	31.63%	0,227	21.00%	3,83	46,573	115.41%	2,680	2,448
Class 19	27,278	27,278	20.25%	27,278	45.00%	0,130	19.91%	3,83	28,722	105.29%	2,443	2,373
Class 20	1,712,063	1,712,063	22.61%	1,696,752	100.00%	5,396	26.70%	3,83	-	-	489,591	716,894
Total as at 31/12/2017	**6,421,133**	**6,420,554**	**41.75%**	**6,383,214**	**3.63%**	**34,940**	**20.13%**	**3,83**	**1,923,208**		**524,159**	**750,655**
Total as at 31/12/2016	**7,516,661**	**7,516,502**	**46.22%**	**7,368,382**	**4.31%**	**39,366**	**20.21%**	**4,30**	**2,277,567**		**662,655**	**772,358**

(a) For reporting purposes, Unused Margin refer to issued guarantees and revocable and irrevocable commitments to disburse funds

(b) The weighted average PD (%) and weighted average LDG (%) under Total does not include class 20

Tab. 5.3.7 – (EU CR6) – IRB approach: Retail Exposures Secured by real estate - Individuals

	a	b	c	d	e	f	g	h	i	j	k	l
Rating Class	On-balance-sheet gross exposures	Nominal Value	CCF% (Average)	Exposure Value	Weighted Average PD (%)	Number of obligors	Weighted Average LGD (%)	Average maturity	RWA	Average Risk Weight % RWA	Value adjustments	Expected Loss
Class 01		-	-	-	-	-	-	-	-	-	-	-
Class 02		-	-	-	-	-	-	-	-	-	-	-
Class 03		-	-	-	-	-	-	-	-	-	-	-
Class 04		-	-	-	-	-	-	-	-	-	-	-
Class 05	6,214,797	6,214,797	38.97%	6,210,928	0.13%	74,804	13.11%	4,73	250,505	4.03%	1,058	1,354
Class 06	4,272,469	4,272,469	41.80%	4,270,934	0.20%	50,829	13.28%	4,73	241,185	5.65%	1,134	2,197
Class 07	3,069,717	3,069,717	30.46%	3,068,280	0.30%	36,954	13.06%	4,73	229,653	7.48%	1,202	2,046
Class 08	2,206,272	2,206,272	39.02%	2,204,032	0.46%	28,271	13.03%	4,73	223,768	10.15%	1,321	2,265
Class 09	3,231,808	3,231,808	35.50%	3,229,878	0.69%	42,050	12.50%	4,73	417,181	12.92%	2,785	4,000
Class 10	3,517,995	3,517,995	38.19%	3,515,485	1.05%	43,967	12.27%	4,73	591,626	16.83%	4,527	6,053
Class 11	898,674	898,674	36.31%	897,619	1.59%	12,507	12.75%	4,73	205,444	22.89%	1,820	2,770
Class 12	491,755	491,755	42.82%	490,877	2.42%	6,204	12.92%	4,73	147,445	30.04%	1,535	1,920
Class 13	658,039	658,039	5.66%	654,101	3.99%	7,540	12.88%	4,73	260,870	39.88%	3,362	8,924
Class 14	226,068	226,068	29.65%	224,857	6.31%	2,739	12.70%	4,73	112,049	49.83%	1,802	2,438
Class 15	150,574	150,574	34.24%	150,298	9.95%	1,681	12.58%	4,73	90,885	60.47%	1,882	2,170
Class 16	132,025	132,025	3.83%	131,410	16.03%	1,505	12.02%	4,73	89,379	68.02%	2,532	2,955
Class 17	80,223	80,223	9.79%	80,057	22.12%	0,945	11.94%	4,73	58,000	72.45%	2,115	2,448
Class 18	98,082	98,082	-	97,454	31.63%	1,077	12.17%	4,73	73,180	75.09%	3,750	3,680
Class 19	54,634	54,634	1.00%	54,114	45.00%	0,681	12.03%	4,73	36,847	68.09%	2,928	2,833
Class 20	1,117,673	1,117,673	4.75%	1,096,683	100.00%	10,780	15.95%	4,73	-	-	179,860	217,113
Total as at 31/12/2017	**26,420,805**	**26,420,805**	**31.41%**	**26,377,007**	**1.07%**	**322,534**	**12.84%**	**4,73**	**3,028,018**		**213,612**	**265,164**
Total as at 31/12/2016	**28,156,634**	**28,156,634**	**45.51%**	**28,047,917**	**1.18%**	**336,707**	**12.84%**	**4,91**	**3,182,563**		**306,355**	**435,576**

(a) For reporting purposes, Unused Margin refer to issued guarantees and revocable and irrevocable commitments to disburse funds

(b) The weighted average PD (%) and weighted average LDG (%) under Total does not include class 20

Tab. 5.3.8 – (EU CR6) - IRB approach: Qualifying revolving Retail Exposures

	a	b	c	d	e	f	g	h	i	j	k	l
Rating Class	On-balance-sheet gross exposures	Nominal Value	CCF% (Average)	Exposure Value	Weighted Average PD (%)	Number of obligors	Weighted Average LGD (%)	Average maturity	RWA	Average Risk Weight % RWA	Value adjustments	Expected Loss
Class 01	-	-	-	-	-	-	-	-	-	-	-	-
Class 02	-	-	-	-	-	-	-	-	-	-	-	-
Class 03	-	-	-	-	-	-	-	-	-	-	-	-
Class 04	-	-	-	-	-	-	-	-	-	-	-	-
Class 05	76,044	76,044	-	21,061	0.13%	40,772	21.36%	1.00	357	1,69%	6	7
Class 06	21,176	21,176	-	8,696	0.20%	13,785	27.52%	1.00	271	3,11%	5	4
Class 07	24,912	24,912	-	10,051	0.30%	14,816	23.71%	1.00	375	3,73%	7	7
Class 08	21,905	21,905	-	6,791	0.46%	9,388	25.96%	1.00	390	5,75%	8	7
Class 09	23,635	23,635	-	9,017	0.69%	11,815	23.68%	1.00	650	7,21%	15	16
Class 10	20,301	20,301	-	10,392	1.05%	12,962	21.69%	1.00	949	9,13%	24	28
Class 11	13,566	13,566	-	7,316	1.59%	8,758	23.23%	1.00	978	13,37%	27	29
Class 12	16,398	16,398	-	5,912	2.42%	8,734	22.85%	1.00	1.056	17,87%	33	35
Class 13	6,159	6,159	-	3,498	3.99%	4,288	24.73%	1.00	960	27,43%	35	35
Class 14	9,830	9,830	-	8,430	6.31%	8,408	17.65%	1.00	2.229	26,44%	94	84
Class 15	1,676	1,676	-	779	9.95%	0,971	24.25%	1.00	372	47,78%	19	19
Class 16	987	987	-	418	16.03%	0,554	25.16%	1.00	265	63,53%	17	16
Class 17	396	396	-	149	22.12%	0,201	24.78%	1.00	106	71,54%	8	7
Class 18	428	428	-	327	31.63%	0,420	18.30%	1.00	191	58,31%	19	17
Class 19	241	241	-	185	45.00%	0,259	19.64%	1.00	117	63,08%	16	15
Class 20	2,702	2,702	-	780	100.00%	1,600	27.05%	1.00	-	-	211	172
Total as at 31/12/2017	**240,355**	**240,355**	**0.00%**	**93,801**	**1.69%**	**137,731**	**22.85%**	**1.00**	**9,266**		**543**	**497**
Total as at 31/12/2016	**187,555**	**187,555**	**0.00%**	**95,458**	**1.92%**	**147,754**	**22.61%**	**1.00**	**10,201**		**687**	**647**

(a) For reporting purposes, Unused Margin refer to issued guarantees and revocable and irrevocable commitments to disburse funds

(b) The weighted average PD (%) and weighted average LDG (%) under Total does not include class 20

Tab. 5.3.9 – IRB approach: Other retail Exposures - SMEs

	a	b	c	d	e	f	g	h	i	j	k	l
Rating Class	On-balance-sheet gross exposures	Nominal Value	CCF% (Average)	Exposure Value	Weighted Average PD (%)	Number of obligors	Weighted Average LGD (%)	Average maturity	RWA	Average Risk Weight % RWA	Value adjustments	Expected Loss
Class 01	-	-	-	-	-	-	-	-	-	-	-	-
Class 02	53,410	52,039	6.35%	12,249	0.03%	0,188	43.07%	1,89	436	3.56%	2	2
Class 03	159,307	153,860	7.02%	50,098	0.05%	0,569	42.83%	1,89	2,655	5.30%	11	11
Class 04	643,394	634,702	2.41%	72,822	0.09%	10,303	42.65%	1,89	6,112	8.39%	28	30
Class 05	370,149	359,792	6.52%	122,203	0.13%	2,085	42.81%	1,89	13,312	10.89%	68	69
Class 06	601,813	583,367	6.18%	210,581	0.20%	4,125	43.01%	1,89	31,468	14.94%	181	184
Class 07	963,916	930,365	7.35%	412,445	0.30%	7,130	42.48%	1,89	79,018	19.16%	526	530
Class 08	1,037,373	996,938	9.38%	484,392	0.46%	9,754	42.56%	1,89	123,799	25.56%	948	942
Class 09	1,299,529	1,240,400	8.36%	662,421	0.69%	13,259	42.38%	1,89	211,864	31.98%	1,937	1,938
Class 10	1,617,062	1,540,773	7.87%	876,287	1.05%	18,515	42.12%	1,89	341,857	39.01%	3,876	3,874
Class 11	1,888,313	1,789,427	7.98%	1,083,991	1.59%	24,570	41.93%	1,89	484,951	44.74%	7,226	7,240
Class 12	1,944,505	1,838,913	8.50%	1,205,522	2.42%	27,545	41.82%	1,89	595,442	49.39%	12,200	11,971
Class 13	1,538,579	1,458,532	9.03%	1,047,658	3.99%	24,311	41.65%	1,89	549,943	52.49%	17,410	17,049
Class 14	880,692	835,467	9.99%	634,030	6.31%	18,201	41.51%	1,89	345,288	54.46%	16,607	16,026
Class 15	433,360	406,662	12.78%	331,183	9.95%	7,188	40.88%	1,89	195,548	59.05%	13,471	12,368
Class 16	232,510	216,791	16.09%	183,778	16.03%	4,404	40.73%	1,89	131,219	71.40%	12,000	10,952
Class 17	87,834	81,709	14.09%	70,147	22.12%	1,686	40.98%	1,89	58,051	82.76%	6,359	5,709
Class 18	49,944	47,053	16.69%	40,138	31.63%	2,055	39.84%	1,89	35,798	89.19%	5,058	4,498
Class 19	33,855	31,321	25.43%	26,500	45.00%	3,488	39.74%	1,89	24,312	91.74%	4,739	4,202
Class 20	11,032,367	10,925,759	19.77%	10,742,663	100.00%	143,031	61.03%	1,89	-	-	6,612,856	8,387,365
Total as at 31/12/2017	**24,867,914**	**24,123,871**	**7.72%**	**18,269,107**	**3.30%**	**322,407**	**41.93%**	**1,89**	**3,231,074**		**6,715,503**	**8,484,957**
Total as at 31/12/2016	**25,241,258**	**24,590,756**	**6.76%**	**18,269,107**	**3.74%**	**443,664**	**41.73%**	**2,08**	**3,605,850**		**6,143,784**	**6,805,921**

(a) For reporting purposes, Unused Margin refer to issued guarantees and revocable and irrevocable commitments to disburse funds

(b) The weighted average PD (%) and weighted average LDG (%) under Total does not include class 20

Tab. 5.3.10 – IRB approach: Other retail Exposures - Individuals

	a	b	c	d	e	f	g	h	i	j	k	l
Rating Class	On-balance-sheet gross exposures	Nominal Value	CCF% (Average)	Exposure Value	Weighted Average PD (%)	Number of obligors	Weighted Average LGD (%)	Average maturity	RWA	Average Risk Weight % RWA	Value adjustments	Expected Loss
Class 01	-	-	-	-	-	-	-	-	-	-	-	-
Class 02	-	-	-	-	-	-	-	-	-	-	-	-
Class 03	-	-	-	-	-	-	-	-	-	-	-	-
Class 04	-	-	-	-	-	-	-	-	-	-	-	-
Class 05	469,202	469,187	1.37%	68,260	0.13%	82,230	22.98%	1,91	4,987	7.31%	20	19
Class 06	181,085	181,080	4.95%	80,196	0.20%	15,804	23.93%	1,91	8,239	10.27%	38	38
Class 07	279,408	279,227	8.43%	166,109	0.30%	25,220	25.27%	1,91	23,530	14.17%	126	117
Class 08	249,467	249,380	10.93%	151,378	0.46%	19,086	24.94%	1,91	27,446	18.13%	174	172
Class 09	323,880	323,797	5.99%	173,074	0.69%	28,297	24.99%	1,91	39,189	22.64%	298	334
Class 10	351,951	351,821	6.80%	200,114	1.05%	33,190	23.22%	1,91	51,134	25.55%	488	557
Class 11	318,861	318,805	10.47%	207,987	1.59%	29,485	22.35%	1,91	59,537	28.63%	739	770
Class 12	232,684	232,652	7.15%	156,380	2.42%	26,698	23.83%	1,91	53,119	33.97%	902	1,046
Class 13	145,211	145,145	9.94%	118,153	3.99%	17,030	23.33%	1,91	42,209	35.72%	1,100	1,147
Class 14	84,150	84,100	13.60%	72,954	6.31%	20,475	22.43%	1,91	26,274	36.02%	1,032	966
Class 15	47,894	47,866	21.31%	40,069	9.95%	5,264	22.37%	1,91	15,925	39.74%	892	785
Class 16	25,349	25,339	9.90%	22,961	16.03%	3,503	22.88%	1,91	11,290	49.17%	842	763
Class 17	15,988	15,987	15.34%	15,117	22.12%	1,841	21.34%	1,91	7,931	52.47%	714	650
Class 18	8,337	8,336	31.63%	7,823	31.63%	6,868	23.04%	1,91	4,941	63.16%	570	499
Class 19	5,155	5,124	23.83%	4,898	45.00%	14,575	22.70%	1,91	3,112	63.53%	500	438
Class 20	4,612,810	4,612,355	10.99%	4,600,508	100.00%	177,165	40.92%	1,91	-	-	2,014,917	2,929,074
Total as at 31/12/2017	**7,351,433**	**7,350,201**	**6.03%**	**6,085,983**	**2.48%**	**506,731**	**23.72%**	**1,91**	**378,864**		**2,023,353**	**2,937,375**
Total as at 31/12/2016	**6,888,645**	**6,887,171**	**5.71%**	**5,538,073**	**2.62%**	**639,141**	**24.08%**	**1,27**	**416,689**		**1,648,884**	**2,110,760**

(a) For reporting purposes, Unused Margin refer to issued guarantees and revocable and irrevocable commitments to disburse funds

(b) The weighted average PD (%) and weighted average LDG (%) under Total does not include class 20

Exposures subject to the AIRB approach broken down by geographical location

The Montepaschi Group operates almost exclusively in the domestic market. If the geographical location of the counterparties is considered, 99.9999% of AIRB exposures are towards counterparties resident in Italy.

For the purposes of this disclosure and in accordance with Article 452 of the CRR, the relevant geographical location of credit exposures means exposures in the Member States in which the institution has been authorized and Member States or third countries in which institutions carry out activities through a branch or subsidiary. As far as credit risk is concerned, the Group is currently authorized to use internal estimates of PD, LGD parameters for portfolios of loans to locals Counterparties (Companies and Retail Exposures) of the main Italian subsidiaries of the Group, namely Banca Monte dei Paschi di Siena, MPS Capital Services and MPS Leasing & Factoring. The other foreign subsidiaries (MP Banque and MP Belgio) adopt standard models and their exposures are included among those subject to credit risk – the standard approach. The Group also operates in Member States or third countries via foreign branches, whose operations focus on supporting the expansion of Italian businesses and investments abroad and in the major foreign financial markets. AIRB credit exposures (net of default) held by foreign branches amount to 0.0001% and are entirely towards local counterparties (with headquarters/residence or domicile in Italy). The exposures are towards counterparties that were assigned an internal PD and LGD estimate since they are already counterparties of Italian subsidiaries and are reported under the Parent Company Banca MPS for regulatory purposes Accordingly, the values of the exposure-weighted average PD and LGD by geographical location coincide with those reported in the tables above which show the AIRB exposures of authorized Italian subsidiaries broken down by class of exposure. Reported below are the credit exposures subject to the AIRB approach (net of default) according to the definition of geographical location described above, i.e. by Member State in which the institution has been authorized (Italy) and by Member State or third country in which the institution operates through a branch.

Tab. 5.3.11 – IRB approach: Exposures to or secured by corporates – Geographic Segmentation

		EAD	Incidence	Weighted Average PD	Weighted Average LGD	RWA	EL	AL
Exposure to or secured by corporates	Italy	22,722,351	100.00%	2.68%	37.19%	16,900,223	204,665	236,116
	Other EU Countries	56	0.00%	0.08%	0.00%	-	-	-
	Other not EU Countries	-	-	-	-	-	-	-
	Total as at 31/12/2017	**22,722,407**	**100.00%**	**2.68%**	**37.19%**	**16,900,223**	**204,665**	**236,116**
	Total as at 31/12/2016	**25,348,554**	**100.00%**	**3.02%**	**36.61%**	**19,244,524**	**250,146**	**257,492**

Tab. 5.3.12 – IRB approach: Retail Exposures – Geographic Segmentation

		EAD	Incidence	Weighted Average PD	Weighted Average LGD	RWA	EL	AL
Retail exposures	Italy	39,071,712	100.00%	1.86%	19.78%	8,570,427	179,733	188,031
	Other EU Countries	-	0.00%	-	-	-	-	-
	Other not EU Countries	-	-	-	-	-	-	-
	Total as at 31/12/2017	**39,071,712**	**100.00%**	**1.86%**	**19.78%**	**8,570,427**	**179,733**	**188,031**
	Total as at 31/12/2016	**41,484,419**	**100.00%**	**2.13%**	**19.91%**	**9,492,871**	**220,746**	**228,150**

Comparison between expected loss and actual loss

As part of the backtesting of the parameters of AIRB models, the MPS Group makes a comparison between the expected loss estimated at 31 December of the previous year and the actual loss observed at year end. In order to clarify the results of the comparison it should be noted that although the two amounts are comparable, they are calculated on the basis of different logics.

Expected Loss (PA) is the average loss that the bank expects to face against a loan or loan portfolio classified as performing at the end of the previous year. It is calculated as the product between PD, LGD and EAD estimated in compliance with the prudential requirements; in particular, PD is estimated using a longer time series and thus better reflects risk in the portfolio on a through-the-cycle (TCC) basis.

Actual Loss is calculated as the total amount of provisions which were actually registered and recognised in the income statement on performing exposures as at 31 December of the previous year subsequently classified to default status one year later.

Taking into account what has been observed, i.e., that the expected loss expresses an estimation of loss essentially calculated on a TTC basis whereas the actual loss refers to what has been registered and recognised in a specified year, a comparison is provided between expected loss and actual loss ex-post in 2012, 2013, 2014, 2015, 2016 and 2017 on corporate and retail exposures.

Tab. 5.3.13 – Comparison Expected Loss – Actual Loss

Reference Year	Portfolio	Expected Loss	Actual Loss	EL vs AL (var%)
2012	Exp. vs Corporates	542,000	738,000	36.1%
	Retail Exp.	332,000	272,000	-18.1%
	TOTAL	**874,000**	**1,009,000**	**15.5%**
2013	Exp. vs Corporates	507,000	784,000	54.7%
	Retail Exp.	276,000	232,000	-15.9%
	TOTAL	**783,000**	**1,016,000**	**29.8%**
2014	Exp. vs Corporates	425,000	1,371,000	222.8%
	of which implementing AQR	*140,000*	*933,000*	*567.2%*
	of which not implementing AQR	*285,000*	*438,000*	*53.7%*
	Retail Exp.	251,000	489,000	94.6%
	of which implementing AQR	*35,000*	*276,000*	*687.9%*
	of which not implementing AQR	*216,000*	*213,000*	*-1.4%*
	TOTAL	**676,000**	**1,860,000**	**175.2%**
	of which implementing AQR	*175,000*	*1,209,000*	*591.4%*
	of which not implementing AQR	*501,000*	*651,000*	*29.9%*
2015	Exp. vs Corporates	504,000	586,000	16.3%
	Retail Exp.	44,000	97,000	120.4%
	TOTAL	**548,000**	**683,000**	**24.6%**
2016	Exp. vs Corporates	515,000	387,000	-24.9%
	Retail Exp.	55,000	74,000	34.5%
	Specialised Lending	23,000	17,000	26.1%
	TOTAL	**593,000**	**478,000**	**-19.4%**
2017	Exp. vs Corporates	422,000	374,000	-11.4%
	Retail Exp.	49,000	44,000	-10.2%
	Specialised Lending	22,000	0	-100.0%
	TOTAL	**493,000**	**418,000**	**-15.2%**

Expected loss and actual loss values refer respectively to the expected loss registered at the start of the year and the actual loss registered at year-end on a sample of exposures analysed. The sample relates to the exposures of positions which at the start of the year were classified as performing and which transitioned to default status in the course of the year. Corporate exposures also include regulatory classes of exposures secured by real estate - SMEs and other retail exposures - SMEs.

The comparison shows that the difference between actual loss and expected loss for 2012 and 2013 is due to the different logics applied in calculating the two amounts; the largest difference between actual loss and expected loss registered in 2013 for the corporate segment (exposures vs. corporates) largely relates to the higher default rates and the significantly lower levels of recovery for non-performing loans vs. the PD rate estimated at the beginning of the period, resulting from a strongly recessive and worse-than-expected economic cycle when compared to the expectations included in the models. Expected loss calculated with TTC AIRB models does not fully reflect the challenging economic conditions registered in 2013. An even greater difference between actual and expected loss is shown for 2014 since, in addition to the items already reported in 2013, there were additional non-recurring provisions relating to the AQR remedial actions at the end of 2014, designed to incorporate the results of the Asset Quality Review.

Indeed, in 2014 the MPS Group implemented these extraordinary actions on provisioning levels in the portfolios which had been subject to review and included, in its 2014 financial statements, the ECB requirements communicated to the MPS Group (October 2014) upon completion of the AQR exercise. The logics for reviewing assets on the basis of ECB supervisory guidelines resulted in a tougher assessment of the level of credit risk and a consequent increase in coverage levels on exposures. During 2015, the more stringent criteria for the identification of forbearance and the economic conditions of the negative cycle led to an additional element of conservatism in the identification of defaulting flows, which remains high For these reasons, the expected loss calculated using the AIRB TTC models is approximately 25% lower than the actual expected loss.

For the year 2017, the expected loss is basically aligned with the actual loss.

Comparison between estimated and actual results of backtesting (EU CR9)

As previously pointed out, the Monte dei Paschi Group adopts advanced models to determine capital requirements for 'corporate' and 'retail' portfolios. Internally estimated PD (Probability of Default) and LGD (Loss Given Default) parameters are therefore used for both portfolios.

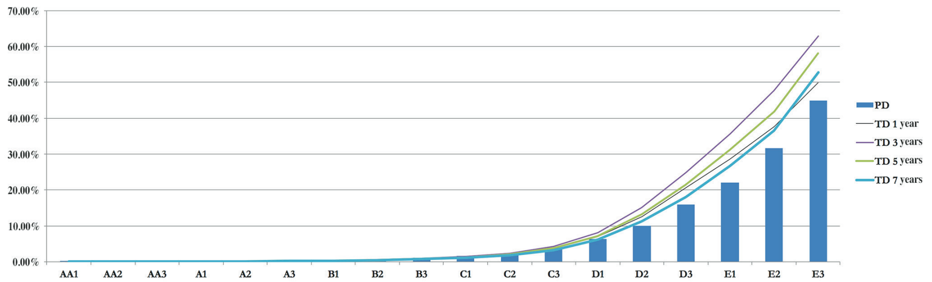
A comparison of estimated vs. actual losses is made on a yearly basis within the framework of PD and LGD backtesting by internal first and second level control functions.

As for PD, statistical models are monitored using a structured automated algorithm. Monitoring consists in a determined number of tests aimed at assessing whether the characteristics of the models in the implementation/production environment continue to be similar to those found in the development phase, in terms of representativeness and performance. Within the monitoring process, estimated PDs are compared against observed default rates through a set of tests designed to verify the alignment between the Probability of Default and Default Rates both for the latest period of reference and for the time series equal to the one used for estimation, in line with the development methodological approach based on long-term average values. The impact on any underestimated default rates on the variables used to measure credit risk (Expected Loss and Regulatory Capital) is also quantified. The overall outcome is formulated on the basis of an internal protocol, which also includes the actions to be put in place in the event of a negative outcome.

Comparison between PD and Default Rates observed by rating class for the Corporate segment

The following tables show the comparison between regulatory PD and default rates observed by rating class for the Corporate segment on different time series.

Corporate Segment



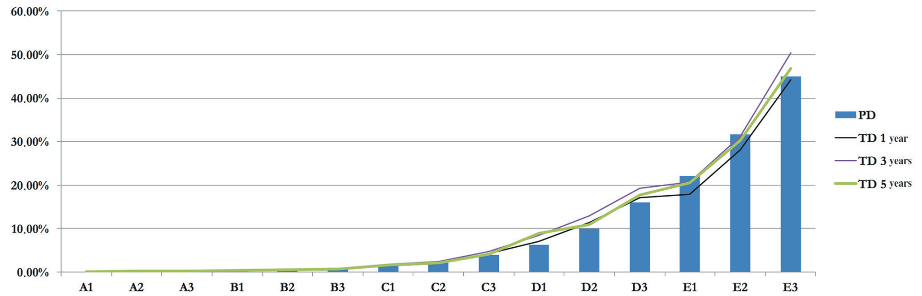
CLASS	AA1	AA2	AA3	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3	E1	E2	E3
TD 1 year	0,00%	0,00%	0,07%	0,12%	0,10%	0,35%	0,33%	0.64%	0.75%	1.25%	1,91%	3,71%	6.91%	12.64%	20.55%	28.69%	37,69%	49.87%
TD 3 years	0,00%	0,09%	0,07%	0,16%	0,16%	0,31%	0,30%	0.57%	0.88%	1,42%	2,37%	4,23%	8,12%	15.15%	24.80%	35.64%	47,62%	62,81%
TD 5 years	0,00%	0,06%	0,08%	0,13%	0,14%	0,26%	0,33%	0.56%	0.80%	1,29%	2.16%	3.81%	7.20%	13.25%	21.37%	31,25%	41.78%	58,10%
TD 7 years	0,00%	0,04%	0,07%	0,11%	0,14%	0,24%	0,28%	0.51%	0.73%	1.14%	1.84%	3.26%	6.16%	11.20%	18,00%	26.82%	36.51%	52.72%
PD	0,03%	0,05%	0,09%	0,13%	0,20%	0,30%	0,46%	0,69%	1,05%	1,59%	2.42%	3.99%	6,31%	9,95%	16.03%	22.12%	31.63%	45.00%

The comparison shows how the alignment between regulated PD calculated on a TTC basis and average default rates on different time series' is gradually reduced as the time series used in calculating the average default rates decreases although the regulatory PD is adequately aligned with the default rates of the last year. These results confirm the TTC oriented nature of the Montepaschi Group's rating system, which generates estimates, which are stable, but are also capable of incorporating the most recent results The results of the annual calibration tests were satisfactory for the Corporate models; only DIN models registered misalignments between the estimated PD and default rates observed. The performances of Corporate models in terms of discriminative power were, on the other hand, fully positive and confirmed the good grading ability of the models, with levels of accuracy that were very much in line with the ranges recognised in AIRB PD model best practices.

Comparison between PD and Default Rates observed by Rating Class for the Retail segment

The information shown for the Retail segment is similar to that reported for the Corporate models.

Retail Segment



CLASS	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3	E1	E2	E3
TD 1 year	0,06%	0,15%	0,21%	0,40%	0,46%	0,59%	1,45%	1,96%	4,34%	7,01%	11,32%	17,11%	17,96%	28,12%	44,15%
TD 3 years	0,08%	0,18%	0,28%	0,47%	0,57%	0,71%	1,77%	2,43%	4,76%	8,43%	12,87%	19,22%	20,60%	31,15%	50,33%
TD 5 years	0,10%	0,22%	0,31%	0,47%	0,55%	0,70%	1,59%	2,15%	4,15%	8,85%	10,97%	17,67%	20,50%	30,18%	46,84%
PD	0,13%	0,20%	0,30%	0,46%	0,69%	1,05%	1,59%	2,42%	3,99%	6,31%	9,95%	16,03%	22,12%	31,63%	45,00%

The default rates observed for the Retail segment are broadly in line with regulatory PD and show an essentially flat rend which increases as rating class risk exposures increase. The performances of Retail models in terms of discriminative power were positive and confirmed the good grading ability of the models, with levels of accuracy that were in line with the ranges recognised in AIRB PD model best practices.

5.4 Credit Risk: value adjustments

For classification of impaired loans into the various categories of risk (non-performing, unlikely-to-pay and non-performing past due exposures), the Montepaschi Group refers to the regulations issued by the bank of Italy, as supplemented with internal provisions which set out automatic criteria and rules for the transfer of receivables from and to different risk categories.

In particular, classification is carried out by bodies within the loan decision-making chain based on a process that provides for a series of codified controls aiming to guarantee proper asset classification, except for loans more than 90 days past due, which are measured using automated procedures.

In line with supervisory definitions, non-performing loans are intended to include the following:

- Non-performing past due loans,
- Unlikely to pay,
- Doubtful loans.

Non-performing loans also include some of the loans concerned by the general concept of restructuring, namely:

- Forborne exposures (as set out in Bank of Italy Circular no. 272);
- debt settlement via borrower substitution or debt-for-equity swap.

In compliance with Bank of Italy regulations, “forborne exposures” are debt contracts in respect of which forbearance measures have been extended. Forbearance measures consist of concessions – the modification and/or refinancing of a troubled debt contract – towards a debtor facing or about to face difficulties in meeting its financial commitments (financial difficulties).

Non-performing exposures with forbearance measures, pursuant to the ITS, are those exposures which represent a sub-category of, depending on the case, doubtful loans, unlikely to pay or non-performing past due; they do not make up their own category of non-performing exposures.

During the year, the new rules for identifying forborne exposures were integrated within the Electronic Loan File. If a new facilitation or a change in the credit line which amounts to a new concession is requested, the manager is asked to evaluate the counterparty’s financial difficulty. With support from the procedure, the manager establishes whether the borrower is in financial difficulty and how severe it is. If the financial difficulty is serious, the manager should decide, in addition to the concession, on whether to change the counterparty’s classification to unlikely to pay.

As an alternative to the previously described options (renegotiations due to borrower difficulties and re-negotiations for commercial reasons/practice) Bank and the borrower may agree on settlement of the original debt via:

- novation or assumption of the loan by another borrower (release from debt liability);

- substantial modification of loan terms involving a debt-equity swap.

Said events, involving a substantial modification of contractual terms, provide for cancellation of the pre-existing loan agreement from an accounting standpoint, and consequent booking of the new agreement at fair value, recognising through profit or loss an amount corresponding to the difference between the fair value of assets received and the book value of the cancelled loan.

There are then other loans concerned by the general concept of restructuring which, instead, fall under the status of performing exposures and are, therefore, excluded from the category of non-performing loans. These are forborne performing exposures pursuant to the ITS and involve the renegotiation of loans granted by the bank to performing customers. The renegotiation is substantially equated with the opening of a new position, if it is granted essentially for commercial reasons rather than for the borrower's economic-financial difficulties and provided that the interest rate applied is a market rate as at the date of renegotiation.

The classification of positions into the different categories of non-performing assets is carried out upon proposals by both the sales and distribution network and outer and central specialist units responsible for credit control and management. On the other hand, as far as non-performing past due loans are concerned, the classification under non-performing status occurs automatically when given default conditions are exceeded. The return of non-performing exposures to performing status occurs on the initiative of the above-mentioned units in charge of credit control and management, with the prior confirmation that the critical/default conditions no longer apply. As regards the non-performing past due loans, the return to performing status occurs automatically once the exposure is reimbursed.

Doubtful loans, unlikely-to-pay loans and non-performing past due loans that have exposures exceeding a given threshold value are subject to an individual assessment process. For all non-performing exposures below a given threshold value, a statistic-based assessment is carried using parameters determined by the Risk Management Function.

The assessment is performed during their classification or upon the occurrence of a significant event and is revised on a regular basis.

Methodology for determining value adjustments

At each balance-sheet date, in line with IAS 39, the financial assets not classified as held-for-trading or designated at fair value are evaluated to check whether there is objective evidence of impairment that might render the book value of these assets not entirely recoverable.

A financial asset has suffered a reduction in value if there is objective evidence of a reduction in future cash flows compared with those originally estimated as a result of one or more specific events that have occurred after initial recognition; the loss should be determined reliably and in relation to recent events.

The reduction in value may also be caused not by a single separate event but by the combined effect of several events.

The objective evidence that a financial asset or group of financial assets has suffered a reduction in value includes measurable data that arise from the following events:

- significant financial difficulty of the issuer or debtor;
- breach of contract, for example non-fulfilment or failure to pay interest or principal;
- granting beneficiary a credit facility that the Group has taken into consideration primarily for economic or legal reasons related to the beneficiary's financial difficulties and that would not have been granted otherwise;
- a reasonable probability that the beneficiary will file for bankruptcy or other financial restructuring procedures.

For the purpose of determining adjustments to the book-value of loans (customer loans, loans to banks, unsecured loans), an analytical and collective valuation is carried out considering the various levels of impairment as indicated below.

An **analytical assessment** is performed on exposures which exceed a given threshold, according to the following categories:

- doubtful loans;
- unlikely to pay;
- non-performing past due loans.

Conversely, the following are subject to collective assessment:

- performing loans;
- non-perfroming loans below a given threshold value not subject to analytical or individual assessment;
- exposures subject to country risk.

For loans subject to **analytical assessment**, the amount of value adjustment for each loan is equal to the difference between the loan book value at the time of measurement (amortised cost) and the current value of estimated future cash flows, as calculated by applying the original effective interest rate. Where the original rate is not directly available, or if retrieving it is excessively costly, the best approximation is applied. For all fixed-rate positions, the interest rate determined in this way is kept constant also in subsequent years, while for variable-rate positions, the interest rate is updated according got the variable component of reference whilst keeping the originally stipulated spread steady.

Expected cash flows take account of the expected repayment schedule, the expected recovery value of collaterals, if any, as well as the costs expected to be incurred for the recovery of the credit exposure.

The value adjustments are booked to the profit and loss statement under item "130 - Net impairment losses (reversals)".

If the quality of the non-performing receivable has improved to such a point that there is no reasonable certainty of timely recovery of the principal and interest, its initial value is recycled in the following years to the extent in which the reasons determining the adjustment disappear, provided that such valuation can be objectively linked with an event which occurred after the adjustment. The reversal is posted to the profit and loss statement an may not in any case exceed the amortised cost that the receivable would have had without prior adjustments.

Receivables with no objective evidence of loss are subject to a collective assessment of impairment. Such assessment is carried out by category, with receivables grouped together according to credit risk, and the relative loss percentages are estimated taking into account time-series based on elements observed on the date of assessment which allow the value of latent loss in each category to be estimated. The segmentation drivers used for this purpose consist of: economic sectors of activity, geographical location and customer segments (turnover); on the basis of the latter indicator, the main segments of the portfolio are differentiated as follows:

- Retail;
- Small and Medium Enterprise Retail;
- Small and Medium Enterprise Corporate;
- Corporate;
- Large Corporate;
- Nbfi;
- Banks;
- Other.

The rate of loss is determined for each portfolio segment, using the historical experience of the Group as reference.

In particular, the impairment for the year of each loan belonging to a particular category is given by the difference between the book value and the recoverable amount on the date of valuation, with the latter being determined by using the parameters of the calculation method provided for by the new supervisory provisions, represented by PD (probability of default) and LGD (loss given default).

Value adjustments determined collectively are posted to the income statement. Any additional write-downs or write-backs are recalculated on a differential basis, at year-end or on the dates of interim reports, with reference to the entire loan portfolio on the same date.

For further information on the loan accounting policies, *please refer* to Part A of the Notes to the Consolidated Financial Statement as at 31.12.2017. For further information regarding value adjustments, *please refer* to the part E, Section A Credit Quality - Quantitative Information of Notes to the Consolidated Financial Statements as at 31.12.2017. In particular reference should be made to:

- table A.1.1 of this section of the Consolidated Financial Statements for a breakdown of credit exposures by portfolio (material exposure class) and credit quality (art. 442 para. d of the CRR);
- table B.2/B.3 of this section of the Consolidated Financial Statements for a breakdown of credit exposures by material exposure class, credit quality and significant area (art. 442 para. d/h of the CRR);
- table B.1 of this section of the Consolidated Financial Statements for

a breakdown of credit exposures by significant industry or counterparty type, disclosing the amount of impaired exposures and specific and general credit risk adjustments (art. 442 para.g/ i) ii) of the CRR);

- tables 1 and 2 in section 1.3 – Liquidity Risk of Part E of the Notes to the Consolidated Financial Statements for residual maturity breakdown of all exposures (art. 442 para.f of the CRR);
- tables A.1.5 and A.1.8 of Section A. Credit Quality, Part E of the Notes to the Consoldiated Financial Statements as at 31.12.2017 for a description of overall value adjustments (art. 442 para. i of the CRR).

Quantitative information

The table below shows a summary of non-performing and performing exposures, adjustments (specific and by portfolio) and net values subject to Standard and AIRB methods as at 31.12.2017 and as at 31.12.2016.

Tab. 5.4.1 – Credit Risk: value adjustments

Prudential Perimeter	dec-17 Default Expositions	Bonis Expositions	Mitigation Techniques	Net Value
IRB	**42,851,521**	**63,384,208**	**29,190,216**	**77,045,514**
of which: off-balance sheet (collateral and obbligations)	-	*3,925,584*	*153,574*	*3,772,010*
SMEs	19,589,896	12,854,716	13,240,152	19,204,460
Other companies	4,355,273	9,867,692	2,990,072	11,232,892
Specialized Lending - Slotting Criteria	768,966	1,510,503	519,767	1,759,702
Secured by real estate: SMEs	1,696,752	4,686,462	750,655	5,632,559
Secured by real estate: Individuals	1,096,683	25,280,324	265,164	26,111,843
Qualifying revolving	780	93,020	497	93,303
Other retail exposures: SMEs	10,742,663	7,526,444	8,484,957	9,784,149
Other retail exposures: Individuals	4,600,508	1,485,475	2,937,375	3,148,608
Securitization positions	-	79,573	1,576	77,997
STD	**2,680,721**	**53,855,843**	**1,825,332**	**54,711,232**
of which: off-balance sheet (collateral and obbligations)	*21,701*	*1,502,851*	*7,761*	*1,516,791*
Total as at 31/12/2017	**45,532,243**	**117,240,051**	**31,015,548**	**131,756,746**

Prudential Perimeter	dec-16 Default Expositions	Bonis Expositions	Mitigation Techniques	Net Value
IRB	**43,717,489**	**68,494,832**	**24,741,329**	**87,470,993**
of which: off-balance sheet (collateral and obbligations)	-	*4,781,261*	*175,211*	*4,606,050*
SMEs	19,766,814	14,726,387	10,977,607	23,515,594
Other companies	4,944,713	10,622,167	3,057,558	12,509,322
Specialized Lending - Slotting Criteria	1,251,048	1,624,470	580,511	2,295,007
Secured by real estate: SMEs	2,189,911	5,178,471	772,358	6,596,024
Secured by real estate: Individuals	1,616,680	26,431,237	435,576	27,612,341
Qualifying revolving	1,124	94,334	647	94,811
Other retail exposures: SMEs	10,011,027	8,178,477	6,805,921	11,383,584
Other retail exposures: Individuals	3,936,173	1,601,900	2,110,760	3,427,313
Securitization positions	-	37,390	393	36,996
STD	**2,678,379**	**56,715,408**	**1,608,020**	**57,785,767**
of which: off-balance sheet (collateral and obbligations)	*14,293*	*1,643,024*	*7,823*	*1,649,493*
Total as at 31/12/2016	**46,395,868**	**125,182,836**	**26,349,349**	**145,256,760**

5.5 Credit Risk: use of risk mitigation techniques

Compensation Policies

With reference to the retail and corporate loan portfolio, the Montepaschi Group does not apply any netting processes to the credit risk exposures with on- or off-balance sheet items with opposite sign. The Montepaschi Group adopts policies reducing counterparty risk with institutional counterparties, by entering into netting agreements according to the international ISDA and ISMA standards and related collateral agreements in relation to derivatives.

Management of collateral

The Montepaschi Group has fulfilled the obligations set out by EU Regulations (CRR 575/2013) for the purpose of recognition of risk mitigation effects produced by any existing collaterals securing the loan.

The disbursement of loans secured by collaterals is subject to specific control measures, differentiated by type of guarantee pledged, which are applied during the phase of disbursement and monitoring. Two main types of guarantees, subject to different regulations, can be identified by volumes of loans granted and number of customers, namely Mortgages and Pledges (cash and Securities).

With reference to compliance with the main organisation requirements for the mitigation of risk, the Group ensured:

- the presence of an IT system in support of the life cycle phases of the guarantees (acquisition, valuation, management, revaluation and enforcement);
- regulated policies for the management of guarantees (principles, practices, processes), available to the users;
- the presence of regulated, documented procedures for the management of guarantees (principles, practices, processes), available to the users;
- independence of the customers' insolvency risk (internal rating) from any existing collaterals.

For the purpose of limiting residual risks (termination or non-existence of the value of protection), the Montepaschi Group requires that:

- in the case of a mortgage guarantee, the acquisition of the right be flanked by the underwriting of insurance policies (catastrophic events) in relation to the assets covered by the guarantee, and a report prepared by reliable experts;
- in the case of a pledge, the original value should be reinstated (ensuring the continuity of the guarantee through papers amending the original guarantee) in view of the depreciation of goods pledged in the case of redemption of the pledge, the repayment should be made at the bank (collection).

The Montepaschi Group identified a set of technical forms (by purpose of the loan/type of customer) providing for the admissibility of mortgage guarantees. Within the IT system, the proposal of financing one of these types of loans triggers a request for detailed information on the characteristics of the real estate subject to guarantee (valuation) which, after loan approval, will make the acquisition steps compulsory.

In the specific case of mortgage loans to retail customers, the loan is disbursed according to specific disbursement processes, characterized by a standardised valuation/inquiry process, which gather all information necessary for the proper management of real estate guarantees.

The Montepaschi Group has developed one single process for the acquisition of collaterals which is at the same time a working instrument and the expression of the Group's management policies. The instrument can activate different paths on the basis of the type of guarantee. The management of guarantees starts after loan disbursement approval, the process of which is broken down into different stages:

- acquisition (also multiple acquisition); the controls of (formal and amount) consistency with the guarantees proposed during the authorisation phase are performed in this stage;
- adjustment/change/amendment; useful to amend the characteristics of a guarantee without interrupting loan protection;
- query; gives information about the present data and the historical trend of guarantees received;
- repayment/cancellation.

A system monitoring the value of collaterals on the basis of market values is in place. If the measures for monitoring collaterals on loans show operational irregularities during the acquisition phase or any inadequacies/losses of the values received as a pledge, events falling within the scope of credit monitoring policies are put in place, which trigger operational obligations of credit risk assessment.

Monitoring of pledge transactions is carried out on a daily basis for listed securities deposited with the bank, whilst for mortgages, the value of properties are verified:

- on a yearly basis for nonresidential properties (on which accurate appraisals of the property are carried out every three years for loans with exposures exceeding Euro 3M;
- every three years for residential properties;
- on a more frequent basis, as described in the points above, should market conditions be subject to significant changes.

If monitoring activities point to a significant reduction in general market prices, the value of the property is estimated again. In this respect, it is important to underline that an assessment is made on the assets pledged as collateral during the mortgage loan approval stage. In the specific case of Retail mortgage loans, a dedicated disbursement process subordinates disbursement to the submission of a technical survey on the asset pledged, thus ensuring the fulfillment of obligations and compliance with relevant validity requirements upon acquisition of the guarantee.

If the value of the property pledged as a guarantee is subject to market or foreign exchange risks, the Montepaschi Group uses the concept of guarantee differential, which is understood as a percentage of the value of the guarantee offered, determined as a function of asset value volatility. The only portion of the loan covered by the value of the assets net of the differential is considered as guaranteed during the approval phase. The monitoring phase requires the adjustment of the guarantees with a market value lower than the value approved, net of the differential. This is notified through a process of daily credit monitoring which alerts the Network with events which may modify risk perception. The availability of collaterals does not alter the valuation of the insolvency risk of a customer. However, it has an impact on the approval process since loan disbursements with mitigated risk are subject to different discretionary powers (this difference at Banca MPS is even more marked due to the introduction of authorization levels dedicated only to Land and Building credit).

Collaterals accepted by the Montepaschi Group

The Montepaschi Group accepts different instruments to protect loans which can be summarised in the following categories:

- Pledge of sums deposited with the bank;
- Pledge of securities and mutual funds deposited with the bank;
- mortgages on immovables (real estate);
- mortgages on movables;
- Pledge of sums deposited with other banks;
- Pledge of securities deposited with other banks;
- Pledge on other entitlements (insurance policies not intermediated by Companies of the Group and Portfolios under management);
- Pledge on loans;
- Pledge on commodities;
- Other forms of collaterals (Insurance, Guarantee funds).

As at today, the first three categories (accounting for more than 98% of the nominal amount of the collaterals received) are compliant with regulatory/legal/organisational requirements set out by EU Regulations (CRR 575/2013) for the enforcement of credit risk mitigation standards. All types that may be received by the Montepaschi Group are entered into a structured collateral management process, under which all sub-steps are operationally shared. If the measures of monitoring of the collaterals show operational irregularities during the acquisition phase or any inadequacies/losses of the values received as a pledge, events falling within the scope of credit monitoring policies are put in place, which trigger operational obligations of credit risk assessment.

Management of personal guarantees

The Montepaschi Group has fulfilled the obligations set out by EU Regulations (CRR 575/2013) for the purpose of recognition of credit risk mitigation effects produced by any personal collaterals securing the loan. Personal credit protection consists of personal collaterals, personal collaterals issued by third parties and credit derivatives. At Group level, personal collateral - as highlighted in the quantitative disclosure - covers a limited portion of the overall credit exposure. The main type of personal collateral consists of Guarantees (including omnibus guarantees and personal collateral issued by third parties) provided they are issued by the parties listed below:

- Sovereign governments and central banks;
- Public sector and local agencies;
- Multilateral development banks;
- Regulated intermediaries;
- Businesses that have a creditworthiness rating by an ECAI (External Credit Assessment Institution) of not less than 2 on the creditworthiness rating scale;
- Companies and individuals, if this type of customer has a probability of default determined using the same rules as for guaranteed exposures;
- Guarantee institutions, provided they are:
  - the Guarantee Fund for SMEs managed by Mediocredito Centrale (the guarantee is an incentive from the Ministry of Economic Development – this applies both to direct guarantees and counter-guarantees acquired through the Intermediaries listed below);
  - SACE SpA (the portion guaranteed is a public incentive since, like the Guarantee Fund, it ultimately provides for State aid);
  - Persons/entities enrolled in the special list provided for by art. 107 of the Banking Act, as Supervised Financial Brokers;
  - Entities registered in a section of the list provided by art. 106 of the consolidated law on banking, having at least one of the following conditions:
- an associated external rating of not less than 2;
- issue a first demand guarantee backed by a counter-guarantee, on first demand, by Governments or Central Banks.

The activities that the MPS Group puts in place for compliance with the main organisational requirements are attributable to the similar activities envisaged for collateral other than real estate.

Under current regulations, banks which adopt the “advanced IRB” model may use the collateral as credit risk mitigation according to two different approaches:

- substitution of weighting or the probability of default (PD) of the debtor with the weighting or the PD of the protection provider
- substitution of personal LGD for unsecured LGD.

In both cases, mitigation is allowed on condition that the guarantor’s PD is better than that of the main underlying obligor and that the requirement for personal guarantee admissibility is met, whereby capital absorption for the beneficiary of the guarantee should not be lower than capital absorption caused to the guarantor.

Based on Group internal regulations on

CRM, the MPS Group has introduced two different policies for treatment of the exposures backed by personal guarantees, which fall within the AIRB scope: Policy 1 and Policy 2. Policy 1 applies to all exposures falling within the AIRB scope, to businesses and consumers, backed by personal collaterals issued by:

- Public Administration and Central Banks,
- Local Institutions,
- Public Sector Entities,
- Multilateral Development Banks,
- International Organisations,
- Regulated Intermediaries,
- Businesses that have a creditworthiness rating by an ECAI (External Credit Assessment Institution) of not less than 2 on the creditworthiness rating scale and that are not currently included in the internal models scope (e.g. Insurance Companies and UCITS).

Personal collateral issued by these groups/ individuals are treated by transferring the guaranteed exposure from the AIRB portfolio to the portfolio of the guarantor who then adopts standard treatment procedures. Policy 2 applies to all those exposures falling within the AIRB scope, businesses and consumers, backed by personal collaterals issued by:

- Corporates,
- Consumers.

In this case, collateralised exposures see the application of an internally estimated loss rate for exposures secured by personal collateral (personal LGD), instead of the loss rate estimated for unsecured positions (LGD unsecured).

Personal guarantees accepted by the Montepaschi Group

The Montepaschi Group accepts different instruments to protect loans which can be summarised in the following categories:

- Guarantees (including omnibus guarantees and personal guarantees issued by third parties);
- Endorsement;
- Guarantee policy;
- Credit mandate;
- Strong/binding patronage letters;
- Negotiable instruments;
- Performance bond agreement;
- Debt delegation;
- Expromission;
- Assumption of debt;
- Personal Collateral governed by foreign law;
- Credit derivatives:
  - credit default swap;
  - total return swaps;
  - credit linked notes.

Debt delegation, expromission and assumption of debt are considered valid for the purpose of credit risk mitigation if equivalent to the transfer of credit.

Fifth-of-salary backed loans can be considered as loans secured by personal collateral, if all requirements for this form of credit protection are met in the overall transaction structure.

The main parties issuing the above credit-protection instruments are:

- Sovereign governments and central banks,
- Public sector and local agencies,
- Multilateral development banks,

- Regulated intermediaries,
- Guarantee institutions (Confidi),
- Companies and individuals. Over 95% of personal guarantees are traceable to companies and individuals as guarantors.

Concentration of collaterals

The main concentration of collaterals is linked with Retail mortgage loans. However, it cannot be referred to as risk concentration by virtue of the principle of risk fragmentation which is implicit in this type of customer. Special provisions are in force on mortgage loans for Retail customers with amounts exceeding Euro 3 mln, a threshold beyond which the value of the collateral is kept up-to-date with regular appraisals of the property.

For transactions falling below the materiality threshold, the value of real estate is updated through the measurement of the average values of the real estate market. Any information on the evaluations is provided, on an annual basis, by specialised industry operators (extraordinary updates may be generated by significant variations in the very short period).

Quantitative information

The values shown below refer to the exposures of the banking group considered for credit risk purposes, Standard approach and IRB approach, secured by financial collaterals, personal guarantees and credit derivatives. The exposures taken into consideration are determined according to prudential supervisory regulations, net of any netting agreements. Therefore, the values do not include all types of guarantees; for example, exposures guaranteed by real estate to which preferential risk weights are assigned by regulatory provisions and which are, therefore, directly reported in the same class, as shown in table 5.2.2 and table 5.3.1. Collateral on transactions secured by real estate are for marginal additional collateral received on these types of transactions. The Montepaschi Group does not have credit exposures hedged with credit derivatives, which are valid for the purpose of risk mitigation techniques. It follow, therefore, that the values reported under Personal Guarantees and credit derivatives refer to collateral received in the form of personal guarantees.

Tab. 5.5.1 – Credit risk mitigation techniques (Standard approach)

Regulatory Portfolio (Standard Approach)	dec-2017 Financial Collaterals	dec-2017 Guarantees and Credit Derivatives	dec-2017 Other Guarantees	dec-2016 Financial Collaterals	dec-2016 Guarantees and Credit Derivatives	dec-2016 Other Guarantees
Exposures to central governments and central banks	-	17	-	-	17	-
Exposures to regional governments and local authorities	-	-	-	-	-	-
Exposures to public sector entities	14,967	23,800	-	14,942	7,847	-
Exposures to Multi-lateral development banks	-	-	-	-	-	-
Exposures to International Organisations	-	-	-	-	-	-
Exposures to Supervised institutions	20,501,481	-	-	43,737,745	62,064	-
Exposures to Corporates	829,738	215,117	-	1,054,519	222,255	-
Retail Exposures	14,762	58,421	-	11,028	44,618	-
Exposures secured by mortgages on immovable property	658	16,885	-	1,020	26,564	-
Exposures in Default	7,274	11,832	-	17,639	7,804	-
Exposures associated with high-risk	-	-	-	-	-	-
Exposures in the form of covered bonds	-	-	-	-	-	-
Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Exposures to UCITs	2,991	-	-	2,660	-	-
Equity Exposures	-	-	-	-	-	-
Other Exposures	-	-	-	-	-	-
Securitization positions	-	-	-	-	-	-
Exposures to Central Counterparties in the form of pre-funded contributions to the guarantee fund	-	-	-	-	-	-
Standard Approach Total	**21,371,871**	**326,072**	**-**	**44,839,554**	**371,169**	**-**

The column Financial Guarantees in the above table is a supplement to the Post CRM exposure reported in table (values of exposures pre and post CRM), which shows the portion of exposure outstandiong not covered by these collaterals. Please note that, pursuant to regualtions, if the line-by-line method is applied, the collateral reduces risk exposure, whereas personal guarantees (simplified approach) transfer the related risk to the regulatory portfolio of the guarantor; thus the representation of personal guarantees in table 5.5.1 is broken down by collateralized exposure, whereas the same exposure, in line with the substitution principle, is shown in reference to the guarantor in table 5.2.2.

Tab. 5.5.2 – Credit risk mitigation techniques (IRB approach)

Portafoglio regolamentare (Metodo IRB)	dec-2017			dec-2016		
	Financial Collaterals	Guarantees and Credit Derivatives	Other Guarantees	Financial Collaterals	Guarantees and Credit Derivatives	Other Guarantees
Exposures to or secured by corporates:	343,350	2,370,198	-	391,497	2,653,068	-
- SMEs	153,973	1,452,923	-	187,812	1,670,418	-
- Other companies	189,378	917,275	-	203,685	982,650	-
Retail exposures:	350,936	1,651,997	-	421,284	1,646,473	-
- secured by real estate: SMEs	4,450	6,864	-	5,913	8,982	-
- secured by real estate: Individuals	4,493	864	-	6,020	2,090	-
- Qualifying revolving	-	-	-	-	-	-
- Other retail exposures: SMEs	210,680	1,617,927	-	253,861	1,605,655	-
- Other retail exposures: Individuals	131,223	26,343	-	155,489	29,747	-
IRB Approach Total	**694,287**	**4,022,195**	**-**	**812,780**	**4,299,541**	**-**

The values reported in the table above are referred to all of the AIRB-scope exposures to businesses and consumers, backed by collaterals or personal guarantees. Exposures to Businesses or Consumers backed by mortgage collateral on real estate, for which the Group adopts the AIRB approach, are not included in this table, as they have already been shown in the tables under the Section dedicated to the use of the AIRB method.

The following table provide the extent of the use of CRM techniques; it shows all collateral, financial guarantees and credit derivatives used as credit risk mitigants for all secured exposures, irrespective of whether the standardised approach or the IRB approach is used for RWA calculation.

Tab.5.5.3 – (EU CR3) – CRM Techniques – Overview

		a Exposures unsecured - Carrying amount	b Exposures secured - Carrying amount	c Exposures secured by collateral	d Exposures secured by financial guarantees	e Exposures secured by credit derivatives
3	**Total exposures as at 31/12/2017**	**163,606,764**	**26,414,424**	**22,066,157**	**4,348,267**	**-**
4	*Of which defaulted*	*16,727,029*	*202,543*	*8,882*	*193,661*	-

The following table shows the effect of all CRM techniques applied in accordance with Part Three, Title II, Chapter 4 of the CRR, including the financial collateral simple method and the financial collateral comprehensive method in the application of Article 222 and Article 223 of the same regulation on standardised approach capital requirements' calculations.

Tab.5.5.4 – (EU CR4) – Standardised approach – Credit Risk Exposure and CRM effects

		a	b	c	d	e	f
	Exposures class	Exposures before CCF and CRM		Exposures before CCF and CRM		RWAs and RWA density	
		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWAs	RWA density
1	Central governments and central banks	24,477,596	22,125	25,739,566	27,976	2,719,215	10.55%
2	Regional governments and local authorities	1,735,055	1,338,828	1,765,048	205,051	393,816	19.99%
3	Public sector entities	411,380	700,376	393,331	83,865	425,174	89.10%
4	Multi-lateral development banks	42,524	45,000	42,524	-	-	0.00%
5	International Organisations	-	-	-	-	-	
6	Supervised institutions	5,559,154	6,496,615	5,637,773	415,412	1,400,070	23.13%
7	Corporates	4,483,769	3,716,673	4,330,447	605,265	4,837,918	98.02%
8	Retail	1,272,249	1,346,175	1,212,320	132,246	943,182	70.15%
9	Secured by mortgages on immovable property	1,404,119	-	1,386,576	-	539,700	38.67%
10	Esposures in Default	1,032,098	291,025	1,013,480	18,530	1,127,490	109.25%
11	Associated with high-risk	93,602	-	93,602	-	140,403	150.00%
12	Covered bonds	695,967	19,235	695,967	8,983	137,802	19.80%
13	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	
14	Exposures to UCITs	438,151	81,793	437,199	17,549	454,748	100.00%
15	Equity exposures	1,798,231	-	1,798,231	-	3,028,061	168.39%
16	Other exposures	5,253,085	-	5,285,733	1,913	3,466,510	65.56%
17	**Total as at 31/12/2017**	**48,696,977**	**14,057,846**	**49,831,795**	**1,516,791**	**19,614,088**	**39.36%**
18	**Total as at 31/12/2016**	**48,593,673**	**15,616,906**	**49,716,624**	**1,649,493**	**21,296,951**	**42.84%**

6. Counterparty Risk

6.1 Counterparty Risk: general disclosure

The Montepaschi Group is committed to monitoring counterparty risk, understood as the risk that the counterparty in a transaction involving specific financial instruments (i.e. OTC derivatives, *securities financing transactions* and long settlement transactions) is in default before the settlement of the transaction.

In conformity with regulatory requirements, the Montepaschi Group uses the "market value" method to calculate the value of exposures for OTC derivatives and long settlement transactions. This method consists in calculating current and potential exposure using the market value as the current exposure and the regulatory add-on to represent, in a simplified manner, the potential future exposure.

For SFTs *(securities financing transactions)*, the comprehensive method with supervisory volatility adjustments is used.

The Group has adopted credit risk mitigation measures such as netting agreements, collaterals, etc. to substantially limit the risk assumed.

From an operational point of view, activities relevant for the purpose of counterparty risk may be broken down into two macro segments on the basis of both counterparty characteristics (ordinary clients and institutional counterparties) and the operational and monitoring methods put in place by the Group. With regard to business with financial institutions, counterparty risk exposure on individual credit lines is monitored on a daily basis by the control units of the various business units. In short, the process involves:

- granting credit lines to counterparties on the basis of requests from business unit staff, with a periodical review of the limits set;
- inserting the limits in the management systems;
- inserting the deals and collaterals according to ISDA/ISMA standards and related credit Support annexes (CSA) and Global Master Repurchase Agreements (GMRA) or Global Master Securities Lending Agreement (GMSLA) signed with each counterparty;
- daily activities to monitor and exchange collaterals with counterparties in relation to the market value of outstanding positions (Collateral Management);
- daily monitoring of drawn and overdrawn amounts - also in real time - considering, the guarantees pledged or received;
- the legal function periodically checking whether netting clauses and collaterals set out in the bilateral agreements signed with the counterparties are judicially and administratively valid in the event of their default, by making reference to

the case law of their respective countries. Please note that a downgrading of the Montepaschi Group does not impact the amount of guarantees to be provided since all minimum rating grades within the contractually agreed terms have already been achieved with immediate effects on the collateralization method (e.g. daily frequencies, null thresholds and very low minimum transfer amounts);

- verifying the eligibility of collateral against counterparty risk falls under the broader management of Credit Risk Mitigation described in paragraph 5.5.

As at the date of this document, no operational limits exist in terms of internal capital for counterparty credit exposures. Since 2016, the Group has also planned the monitoring of RWAs for counterparty risk in the RAF.

With regard to liquidity risk, assessments are carried out on any additions to the guarantees required by institutional counterparties should the Montepaschi Group be downgraded as a result of signed CSA and GMRA agreements. The process for derivative transactions with ordinary clients is based on the distinction of roles and responsibilities among the different entities within the Group. Trading in derivatives with customers provides for centralization of product factors and market risk monitoring within MPS Capital Services, with allocation, management and monitoring of counterparty credit risk for customers in the bank's networks.

To this end, Retail Banks:

- authorise the credit facilities granted to customers;
- manage each transaction in their books;
- take care of the related documents and regulatory requirements;
- review the amounts drawn with respect to the credit facilities granted.

With regard to products offered to customers, from a general point of view, a series of common elements are typical of most operations. Specifically, the products traded are:

- not of a speculative nature;
- are for the exclusive purpose of covering risk;
- are associated with an underlying position, even if they are contractually and administratively separate from it;
- show limited elements of complexity;
- on the overall position covered, they hold no financial leverage.

In order to reduce counterparty risk and in accordance with the EMIR regulations in force, the Montepaschi Group indirectly joined the swap clearing service managed by the central counterparty, LCH.Clearnet London, for activities with OTC derivatives on interest rates - MPS Capital Services starting from 2010 and Banca MPS from 2016. Moreover, starting in 2016 MPS Capital Services indirectly joined the credit derivative clearing service managed by the central counterparty ICE Clear Europe.

The centralisation of a part of trading in OTC derivatives to the clearing companies makes it possible to considerably reduce the risk of default since the clearing companies are the guarantors and direct administrators of flows from contracts. Any default of a direct member of the service is covered by the guarantee funds and backup systems. A project is under way to identify and manage exposure that is adversely correlated with counterparties' credit quality (i.e. *wrong way risk*) for the definition of related internal policies.

Quantitative information

The following table shows the value of exposures in derivatives, long-term settlement transactions and Security Financing Transactions (SFTs), broken down by method of assessment for regulatory purposes and counterparty portfolio. Specifically, the methods applied are as follows:

- *Market value method*: derivatives and long-term settlement transactions;
- *Comprehensive method with supervisory volatility adjustments:* SFTs.

Tab. 6.1.1 – Counterparty Risk: summary

	dec-2017		dec-2016	
	Exposure Total	Capital Requirements	Exposure Total	Capital Requirements
Market value method				
Derivative e op. with LT reg.				
of which: Standard Approach	1,811,765	40,388	2,284,541	50,739
of which: AIRB Approach	344,775	28,184	430,558	31,847
Market value method	**2,156,539**	**68,572**	**2,715,099**	**82,586**
Comprehensive method				
SFT Operations				
of which: Standard Approach	1,550,881	45,342	4,135,109	100,094
of which: AIRB Approach	137,686	367	27,970	130
Comprehensive method	**1,688,567**	**45,709**	**4,163,078**	**100,224**
Total	**3,845,107**	**114,281**	**6,878,177**	**182,809**

In the Market Value method (transactions in derivatives and Long term repos) the Exposure is a value determined according to rules of prudential supervision and is based on the positive fair value net of nettings; this value is increased by the future credit exposure (add-on) and reduced by the effects of the guarantee agreements. The future credit exposure takes account of the probability that in future the current value of the contract, if positive, may increase or, if negative, may become a credit position. This probability is linked with the volatility of the underlying market factors and the residual maturity of the contract. In other terms, it is calculated on the basis of the notional amount of all the derivatives taken into consideration, both with a positive and negative fair value. The capital requirement for counterparty risk, shown in the above table, relates to the regulatory trading portfolio and banking book and is reported for the individual regulatory portfolio of reference and also summarised in the table on capital adequacy for credit risk under the standard approach and AIRB approach (*see* tab 4.2; tab 5.1.1).

Tab. 6.1.2 – (EU CCR5-A) – Impact of netting and collateral held on exposure values

		a Gross positive fair value or net carrying amount	b Netting benefits	c Netted current credit exposure	d Collateral held	e Net credit exposure
1	Derivatives	4,740,462	2,932,148	1,808,313	1,531,664	2,219,851
4	**Total as at 31/12/2017**	**4,740,462**	**2,932,148**	**1,808,313**	**1,531,664**	**2,219,851**

Table 6.1.2 shows the gross positive fair of the contracts, the advantages resulting from the netting agreements, the netted fair value and the net credit exposure of the Banking Group to counterparty risk for derivative instruments. All the financial and credit derivatives traded over the counter (OTC) with any counterparty institutional, corporate, retail counterparties etc.) are included in the table irrespective of the regulatory (trading and banking) portfolio they belong to. In particular, the "gross positive fair value" corresponds to the book value of the above-mentioned contracts and therefore is inclusive of the netting agreements. The Nettings" represent the gross positive fair value amount, which as a result of the agreements executed with the counterparties, is offset with negative value transactions. The net "netted fair value" indicates the positive fair value amount remaining after the nettings.

Table 6.1.3 shows the breakdown of the gross positive fair value of OTC derivatives by type of underlying.

Tab. 6.1.3 – Derivatives: breakdown of positive fair value by type of underlying

	Interest rates	Foreign currencies and gold	Equity securities	Credits	Other	Total
Derivatives as at 31/12/2017	**4,309,814**	**89,623**	**311,687**	**11,415**	**17,923**	**4,740,462**
Derivatives as at 31/12/2016	**5,211,878**	**192,307**	**324,045**	**39,929**	**17,771**	**5,785,930**

It should be noted that as at the date of this document, the Group did not have any transactions in credit derivatives hedging loan book exposures.

Tab. 6.1.4 - (EU CCR6) - Credit derivatives exposures

	a	b	c
	Credit derivative hedges		Other Credit derivatives
Notionals	Protection bought	Protection sold	
Credit default products	-	-	2,947,910
Total rate of return swaps	-	-	
Total notionals	**-**	**-**	**2,947,910**
Fair value			
Positive Fair value	**-**	**-**	***11,415***
Negative Fair value	-	-	***34,211***

The table 6.1.4 shows the notional values of credit derivative contracts, by portfolio (banking and trading book) and the role played by the Montepaschi Group (buyer/seller of protection). For more details on derivatives, see Part E – Section 1.2.4 Derivative instruments of the Consolidated Financial Statements 31.12.2017.

The following table provide CVA regulatory calculations (with a breakdown by standardised and advanced approaches).

Tab. 6.1.5 - (EU CCR2) - CVA capital charge

		dec-17	
		Exposure value	RWAs
1	Total portfolios subject to the advanced method	-	-
2	(i) VaR component (including the 3× multiplier)	x	-
3	(ii) SVaR component (including the 3× multiplier)	x	-
4	All portfolios subject to the standardised method	672,260	345,620
EU4	Based on the original exposure method	-	-
5	**Total subject to the CVA capital charge**	**672,260**	**345,620**

The following table provide a breakdown of all types of collateral (cash, sovereign debt, corporate bonds, etc.) used by banks to support or reduce CCR exposures related to derivative transactions or to SFTs.

Tab. 6.1.6 - (EU CCR5-B) – Composition of collateral for exposures to CCR

	dec-2017		dec-2016	
	Collateral used in derivative transactions	Collateral used in SFTs	Collateral used in derivative transactions	Collateral used in SFTs
Standard Approach				
Comprehensive method	1,536,440	18,908,717	1,683,781	41,248,512
simple method	-	-	-	-
Standard Approach Total	**1,536,440**	**18,908,717**	**1,683,781**	**41,248,512**
IRB Approach				
	-	-	-	-
IRB Approach Total	-	-	-	-
Total	**1,536,440**	**18,908,717**	**1,683,781**	**41,248,512**

The following table provide a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method.

Tab. 6.1.7 - (EU CCR1) – Analysis of CCR exposure by approach

		dec-17						
		a Notional	b Replacement cost/current market value	c Potential futurecredit exposure	d EEPE	e Multiplier	f EAD post CRM	g RWAs
1	Market value method	x	2,012,104	1,680,876	x	x	2,156,539	857,155
9	Financial collateral comprehensive method (for SFTs)	x	x	x	x	x	1,688,567	571,361
11	**Total**	**x**	**2,012,104**	**1,680,876**	**x**	**x**	**3,845,107**	**1,428,516**

The following table provide a breakdown of CCR exposures by portfolio (type of counterparties) and by risk weight (riskiness attributed according to the standardised approach).

Tab.6.1.8 (EU CCR3) – Standardised approach – CCR exposures by regulatory portfolio and risk

	Exposure classes	Risk weight											Total
		0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	
1	Central governments or central banks	566	-	-	-	-	-	1,585	-	-	-	-	**2,151**
2	Regional government or local authorities	-	-	-	-	12,502	-	-	-	-	-	-	**12,502**
3	Public sector entities	-	-	-	-	-	-	-	-	-	7,191	26	**7,217**
4	Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	**-**
5	International organisations	-	-	-	-	-	-	-	-	-	-	-	**-**
6	Institutions	-	244,256	1,067,652	-	478,592	-	1,262,612	-	-	25,621	-	**3,078,732**
7	Corporates	-	-	-	-	-	-	0	-	-	258,842	-	**258,843**
8	Retail	-	-	-	-	-	-	-	-	50	-	-	**50**
9	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	**-**
10	Other items	-	-	-	-	-	-	-	-	-	-	-	**-**
	Exposures in Default	-	-	-	-	-	-	-	-	-	*267*	*220*	***488***
	Exposures to UCITs	-	-	-	-	-	-	-	-	-	*2,664*	-	***2,664***
11	**Total**	**566**	**244,256**	**1,067,652**	**-**	**491,094**	**-**	**1,264,197**	**-**	**50**	**294,585**	**246**	**3,362,646**

The following table provide a comprehensive picture of the institution's exposures to CCPs: in particular, the template includes all types of exposures (due to operations, margins, and contributions to default funds) and related capital requirements.

Tab.6.1.9 - (EU CCR8) – Exposures to CCPs

		dec-17	
		a	b
		EAD post CRM	RWAs
1	**Exposures to QCCPs (total)**	×	**47.591**
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	1,311,908	47,591
3	(i) OTC derivatives	-	-
4	(ii) Exchange-traded derivatives	-	-
5	(iii) SFTs	224,917	4,498
6	(iv) Netting sets where cross-product netting has been approved	1,086,991	43,093
7	Segregated initial margin	454,922	×
8	Non-segregated initial margin	-	-
9	Prefunded default fund contributions	447,369	12,782
10	Alternative calculation of own funds requirements for exposures	×	-
11	**Exposures to non-QCCPs (total)**	×	-
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-
13	(i) OTC derivatives	-	-
14	(ii) Exchange-traded derivatives	-	-
15	(iii) SFTs	-	-
16	(iv) Netting sets where cross-product netting has been approved	-	-
17	Segregated initial margin	-	×
18	Non-segregated initial margin	-	-
19	Prefunded default fund contributions	-	-
20	Unfunded default fund contributions	-	-

7. Market Risk

7.1 Trading Book Market Risk: general disclosure

The Group's Regulatory Trading Portfolio (RTP), or Trading Book, is made up of all the Regulatory Trading Books managed by the Parent Bank (BMPS) and MPS Capital Services (MPSCS). The Trading Portfolios of the other subsidiaries are immune to market risk. Trading in derivatives, which are brokered on behalf of customers, calls for risk to be centralised at, and managed by, MPSC.

The market risks in the trading book of both the Parent Company and the other Group entities (which are relevant as independent market risk taking centres), are monitored in terms of Value-at-Risk (VaR) for operational purposes. The Group's Finance and Liquidity Committee is responsible for directing and coordinating the overall process of managing the Group's proprietary finance thereby ensuring that the management strategies of the various business units are consistent.

The Group's Trading Book is subject to daily monitoring and reporting by Financial Risk Officer Area of the Parent Company on the basis of proprietary systems. VaR for management purposes is calculated separately from the operating units, using the internal risk measurement model implemented by the Risk Management function in keeping with international best practices. However, the Group uses the standardised methodology in the area of market risks solely for reporting purposes.

Operating limits to trading activities are expressed by level of delegated authority in terms of VaR, which is diversified by risk factors and portfolios, monthly and annual stop losses and Stress. Furthermore, the trading book's credit risk, in addition to being included in VaR computations and in the respective limits for the credit spread risk component, is also subject to specific operating limits for issuer and bond concentration risk which specify maximum notional amounts by type of guarantor and rating class.

VaR is calculated with a 99% confidence interval and a holding period of 1 business day. The Group adopts the method of historical simulation with daily full revaluation of all basic positions, out of 500 historical entries of risk factors (lookback period) with daily scrolling. The VaR calculated in this manner takes account of all diversification effects of risk factors, portfolios and types of instruments traded. It is not necessary to assume, a priori, any functional form in the distribution of asset returns, and the correlations of different financial instruments are implicitly captured by the VaR model on the basis of the combined time trend of risk factors.

The management reporting flow on market risks is periodically transmitted to the Management Risk Committee, the Group's Top Management and the Board of

Directors of the Parent Company in a Risk Management Report, which keeps Executive Management and governing bodies up to date on the overall risk profile of the Group.

The macro-categories of risk factors covered by the Internal Market Risk Model are IR, EQ, CO, FX and CS as described below:

- IR: interest rates on all relevant curves, inflation curves and related volatilities;
- EQ: share prices, indexes, baskets and relative volatilities;
- CO: commodity prices, indexes and baskets;
- FX: exchange rates and related volatilities;
- CS: credit spread levels.

VaR (or diversified or net VaR) is calculated and broken down daily for internal management purposes, even with respect to other dimensions of analysis:

- organisational/management analysis of portfolios,
- analysis by financial instrument,
- analysis by risk family.

It is then possible to assess VaR along each combination of these dimensions in order to facilitate highly detailed analyses of events characterising the portfolios.

In particular, with reference to risk factors the following are identified: Interest Rate VaR (IR VaR), Equity VaR (EQ VaR), Commodity VaR (CO VaR), Forex VaR (FX VaR) and Credit Spread VaR (CS VaR). The algebraic sum of these items gives the so-called Gross VaR (or non-diversified VaR), which, when compared with diversified VaR, makes it possible to quantify the benefit of diversifying risk factors resulting from holding portfolios on asset class and risk factor allocations which are not perfectly correlated. This information can also be analysed along all the dimensions referenced above.

The model enables the production of diversified VaR metrics for the entire Group in order to get an integrated overview of all the effects of diversification that can be generated among the banks of the Group on account of the specific joint positioning of the various business units.

Moreover, scenario and stress-test analyses are regularly conducted on various risk factors with different degrees of granularity across the entire tree structure of the Group's portfolios and for all categories of instruments analysed.

Stress tests are used to assess the bank's capacity to absorb large potential losses in extreme market situations, so as to identify the measures necessary to reduce the risk profile and preserve assets.

- Stress tests are developed on the basis of discretionary and trend-based scenarios. Trend-based scenarios are defined on the basis of previously-registered real situations of market disruption. Such scenarios are identified based on a time frame in which risk factors were subjected to stress. No particular assumptions are required with regard to the correlation among risk factors since trend-based data for the stress period identified has been measured.

Stress tests based upon discretionary scenarios assume extreme changes occurring to certain market parameters (interest rates, exchange rates, stock indices, credit spreads and volatility) and measure the corresponding impact on the value of portfolios, regardless of their actual occurrence in the past. Simple discretionary scenarios are currently being developed (variation of a single risk factor) as are multiple ones (variation of several risk factors simultaneously). Simple discretionary scenarios are calibrated to independently deal with one category of risk factors at a time, assuming shocks do not spread to the other factors. Multiple discretionary scenarios, on the other hand, aim to assess the impact of global shocks that simultaneously affect all types of risk factors.

It should be noted that the VaR methodology described above is, for operational purposes, also applied to the portion of the Banking Book consisting of financial instruments that are similar to trading instruments (eg. AFS bonds/Equity instruments).

The Group has implemented a backtesting procedure compliant with current regulations governing Market Risk as part of its own risk management system.

Backtesting refers to a series of tests conducted on VaR model results against day-to-day changes in the trading book value, with a view to assessing the model's forecasting capacity as regards the accuracy of risk metrics generated. If the model is robust, by periodically comparing the estimated daily VaR against daily trading losses from the previous day, the result should be that actual losses greater than the VaR occur with a frequency consistent with that defined by the confidence level.

Based on applicable regulatory provisions, the Financial Risk Officer Area considered it appropriate to apply the theoretical and actual backtesting methods and integrate these into the Group's management reporting system.

The first type of test (theoretical backtesting) has a stronger statistical significance in reference to measuring the accuracy of the VaR model ("uncontaminated test").

The second type of test (actual backtesting) meets the need for verifying the VaR model's forecasting reliability in reference to actual Bank operations (daily trading P&L) less the effect of any interest accrued between trading days t-1 and t on the securities and less the effect of fees and commissions.

These "clean" P&L results (the "actual P&L") are compared with the previous trading day VaR. If the losses are greater than those forecast by the model an "exception" is recorded.

Each bank of the MPS Group which is relevant as a market risk-taking centre contributes to the generation of interest rate risk and price risk in the overall Trading Book.

With reference specifically to the Parent Company, the Finance, Treasury & Capital Management Area (FTCMA) within the CFO division is the Business Area in charge of trading. The Global Markets Division carries out trading activities for MPSCS.

The FTCMA manages a proprietary portfolio which takes trading positions on interest rates and credit. In general, interest rate positions are taken by purchasing or selling bonds, and by creating positions in listed derivatives (futures) and OTCs (IRS, swaptions). Trading is carried out exclusively on the Bank's own behalf, with objectives of absolute return, in compliance with the delegated limits of monthly and yearly VaR and Stop Loss.

In particular, the FTCMA operates in the short-term portion of the main interest rate curves, mostly through bonds and listed derivatives.

With regard to credit risk in the trading book, the equity positions are generally managed through the purchase or sale of bonds issued by companies or by creating synthetic positions in derivatives. The activity is oriented to achieving a long or short position on individual issuers, or a long or short exposure on specific commodities. The activity is carried out solely on the Bank's own behalf with objectives of absolute return and in compliance with other specific issuer and concentration risk limits approved by the Board of Directors.

The Business Area in charge of the Parent Bank's trading activity with respect to price risk is the FTCMA which manages a proprietary portfolio and takes trading positions on equities, Stock Exchange indexes and commodities. In general, positions on equity securities are taken both through the purchase/sale of equities and through the positions created in listed derivatives (e.g. futures) and OTC (e.g. options). Trading is carried out exclusively on the Bank's own behalf, with objectives of absolute return, in compliance with the delegated limits of monthly and yearly VaR and Stop Loss. Similarly, the Global Markets Division carries out trading activities for MPSCS. For further information, please refer to the **Notes to the Consolidated Financial Statements**, *Part E – Information on risks and hedging policies – Section 2.1 – Interest Rate Risk and Price Risk – Regulatory Trading Book.*

In the course of 2017, the market risks of the Group's Regulatory Trading Book showed, in terms of VaR, performance influenced by the subsidiary MPS Capital Services for proprietary trading activities as well as client driven activities (structuring and coverage of policies and other structured products) primarily in the credit spread and interest rate segments (transactions on Italian government bonds as well as derivatives, primarily long futures and interest rate future options) and to a less significant extent in the equity segment (options and equity futures on the main equity indexes). The Parent Company's contribution to total VaR was negligible during the year. Volatility in VaR measurements at the end of the year is linked to proprietary trading for trading at auction in Italian government bonds and trading in long futures of the subsidiary MPS Capital Services.

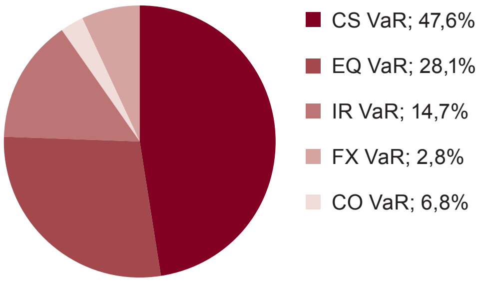
A breakdown of VaR by risk factors shows that 47.6% of the Group's portfolio was allocated to Credit Spread risk factors (CS

VaR), 28.1% was absorbed by equity risk factors (EQ VaR), 14.7% by interest rate risk factors (IR VaR), 6.8% by commodity risk factors (CO VaR) and the remaining 2.8% by foreign exchange risk factors (FX VaR).

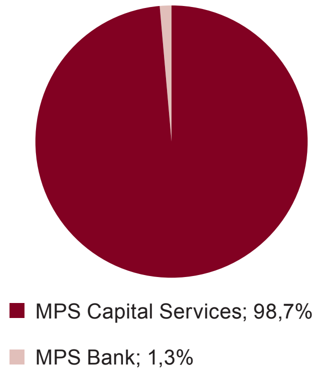
With regard to the legal entities, MPSCS accounted for 98.7% and the Parent Company for 1.3% of overall risk as at 31 December 2017.

VaR Breakdown

MPS Group: Trading Book
VaR by Risk Factor as at 31/12/2017



MPS Group: Trading Book
VaR by Bank as at 31/12/2017

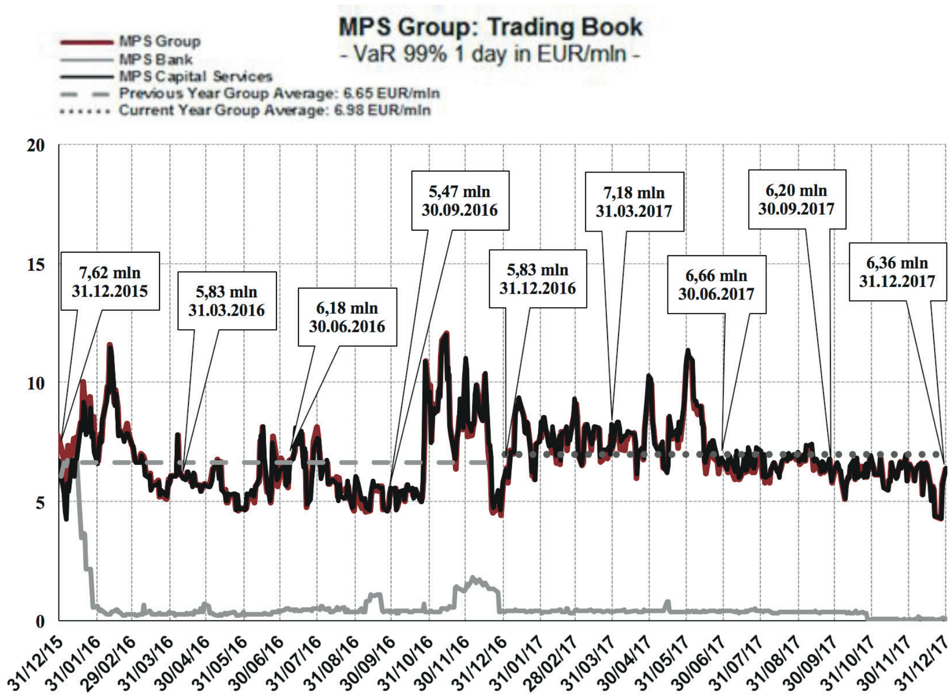


Group VaR

In 2017, the Group's VaR in the Regulatory Trading Book ranged between a low of EUR 4.28 mln recorded on 27 December 2017 and a high of EUR 11.06 mln on 1 June 2017 with an average value registered of EUR 6.98 mln. The Regulatory Trading Book VaR as at 31 December 2017 amounted to EUR 6.36 mln.

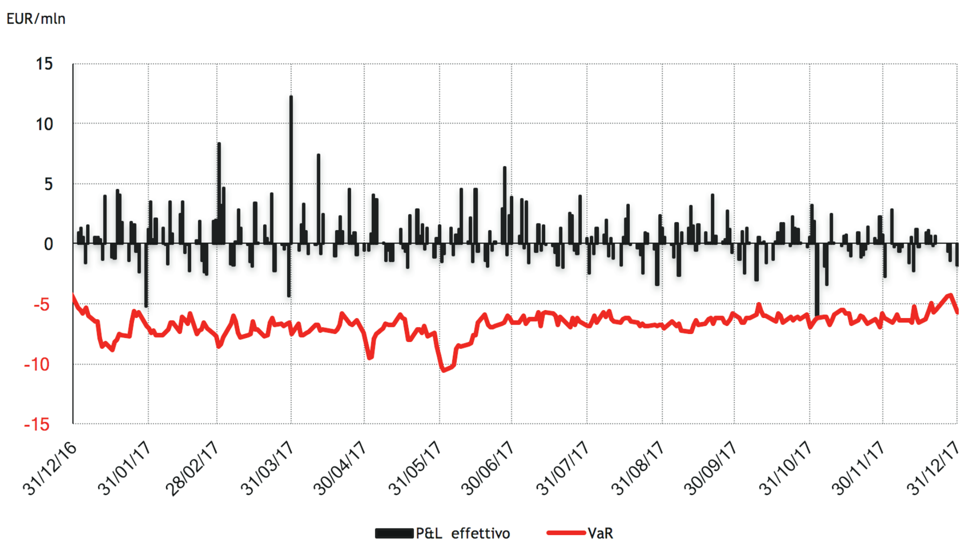
MPS Group: Trading Book
VaR 99% 1 day in EUR/mln

	VaR	Data
End of Period	6.36	31/12/2017
Min	4.28	27/12/2017
Max	11.06	01/06/2017
Average	6.98	



The following chart shows the data Effective Backtesting of the internal model for Market Risk, related to the Supervisory Trading Portfolio of the group.

MPS Group: Trading Book Effective Back Testing



The backtesting shows no exceptions during the year.

The following table display the components of own funds requirements under the standardised approach for market risk.

Tab.7 - (EU MR1) – Market risk under the standardised approach

		dec-17	
		a	b
		RWAs	Capital requirements
	Outright products		
1	Interest rate risk (general and specific)	1,258,968	100,717
2	Equity risk (general and specific)	352,134	28,171
3	Foreign exchange risk	201,906	16,152
4	Commodity risk	163,740	13,099
	Options		
5	Simplified approach	-	-
6	Delta-plus method	368,660	29,493
7	Scenario approach	-	-
8	**Securitisation (specific risk)**	**147,228**	**11,778**
9	**Total**	**2,492,636**	**199,411**

8. Exposure to interest rate risk on positions not included in the trading book

The Group adopts an interest rate risk governance and management system known as the IRRBB Framework which avails itself of:

- a quantitative model, which provides the basis for monthly calculation of the exposure of the Group and the individual companies to interest rate risk in terms of risk indicators;
- risk monitoring processes, aimed at periodically verifying compliance with the operational limits (risk limits and risk tolerance) assigned to the Group overall and to the individual legal entities within the Risk Appetite Statement;
- risk control and management processes, geared toward bringing about adequate initiatives for optimising the risk profile and activating any necessary corrective actions in the case of exceptions from and/or misalignments with the IRRBB Strategy.

In its governance function, the Parent Company therefore defines criteria, policies, responsibilities, processes, limits and instruments for rate risk management.

The Banking Book consists of all exposures not included in the Trading Book and, in accordance with international best practices, identifies the set of the Group's commercial trades connected to the transformation of maturities in the assets and liabilities and ALM financial activities (treasury and risk hedging derivatives).

The strategic Banking Book rate risk choices are defined periodically in the IRRBB Strategy document approved by the Board of Directors and made operational within the Group's Finance and Liquidity Committee; these choices are based on interest rate risk measures expressed in terms of changes in economic value as well as interest margin.

With reference to the sensitivity test on economic value, the Montepaschi Group applies a predefined set of interest rate scenarios in line with the Basel guidelines, which envisage non-parallel movements of the curve aside from parallel shifts of 25, 100 and 200 bps. As interest margin analyses focus on the short term, they consider exclusively the application of parallel scenarios.

The Group is committed to the continual updating of risk measurement methodologies by gradually fine-tuning the estimation models so as to include all major factors that progressively modify the interest rate risk profile of the banking book.

Risk metrics are calculated by using a model for the valuation of demand items (non-maturity deposits, NMDs) whose characteristics of stability and partial insensitivity to interest rate changes are described in the systems with a statistical approach which takes into consideration the time series of customer behaviours.

In addition, the Montepaschi Group

incorporates within rate risk measurements a behavioural model which takes into account the aspect of residential mortgage prepayment (so-called prepayment risk). Specifically, the statistical volume stability analysis approach for NMDs was updated with the incorporation of risk metrics for management purposes starting from 2018. The economic value sensitivity measures are determined by clearing the origination of the cash flows of the components not directly relating to interest rate risk.

Tab. 8 – Exposure to interest rate risk in the Banking Book

Shift (+/-)	Effect on Economic Value (values in €/mln)		Effect on Net Interest Income (values in €/mln)	
	dec-17	dec-16	dec-17	dec-16
Eur +200bp	319.58	-494.86	272.43	-82.66
Usd +200bp	-15.35	9.16	2.22	15.64
Other +200bp	-0.92	-1.41	8.20	3.52
Total +200bp	**303.31**	**-487.11**	**282.85**	**-63.50**
Eur -200bp	-21.97	-3.01	-267.47	-6.92
Usd -200bp	17.55	23.60	-2.85	-3.05
Other -200bp	-0.83	2.31	-3.53	-1.18
Total -200bp	**-5.26**	**22.90**	**-273.86**	**-11.15**

The amount of economic value at risk is, in any case, below the level considered as a critical threshold by current regulations.

Please note that the interest margin sensitivity measurement, calculated over a twelve-month time horizon, expresses only the effect of changes in rates on the items subject to analysis. Assumptions regarding future trends in assets and liabilities are thus excluded and, therefore, cannot be considered as a predictor of level of net interest.

The sensitivity of the Montepaschi Group, at the end of 2017, suggests a profile of exposure to rate reduction risk with a shift of +200 bp in the interest rate curve, total sensitivity of the economic value stands at +303.31 Eur/mil (-487.11Eur/mln at 2016). Risk is almost entirely allocated to exposures denominated in Euros. For further information, please refer to the **Notes to the Consolidated Financial Statements**, *Part E – Information on risks and hedging policies – Section 2.2 – Interest Rate Risk and Price Risk – Banking Book*.

9. Exposures in equities not included in the trading book

Exposures in equity instruments are held by the Group for strategic purposes (group investments, associates and joint ventures), institutional purposes (investments in trade associations, local entities and institutions), purposes functional to the bank's business and the development of commercial business and financial investment purposes (limited to the investments associated with the merchant banking business of MPS Capital Services). Other investments exist, which are no longer considered as strategic and that are being sold, as well as investments in companies in liquidation.

Equity exposures included in the Banking book are classified for balance sheet purposes under available-for-sale financial assets and equity investments.

Measurements and accounting criteria

Financial Assets available for sale

Classification criteria

This category includes non-derivative financial assets which are not classified as loans, financial assets designated at fair value through profit and loss or financial assets held to maturity. In particular, this category also comprises strategic equity investments which are not managed for trading purposes and cannot be defined as controlling interest, investment in an associate and joint control, and bonds which are not subject to trading. Such investments may be transferred for any reason, such as need for liquidity or variations in interest rates, exchange rates, or stock price.

Recognition criteria

Financial assets represented by debt or equity securities are initially booked at the settlement date, whereas receivables are initially booked as of the disbursement date. On initial recognition, the assets are reported at their fair value which normally corresponds to the price paid, inclusive of transaction costs or income directly attributable to the instrument. if recognition occurs as a result of reclassification from assets held to maturity, the value at which the assets are booked is represented by the fair value as of the date of transfer. In the case of debt instruments, any difference between the initial value and the value of repayment is posted to P&L and spread out over the life of the debt instrument in accordance with the method of amortised cost.

Measurement criteria

After initial recognition, financial assets available for sale are measured at fair value, with interest being recognised in the income statement as resulting from the application of the amortised cost and with appropriation to a specific net equity reserve of the gains or losses arising from changes in fair value net of the related tax effect, except losses due to impairment. Foreign exchange fluctuations in relation to non-monetary (equity) instruments are posted to the specific net equity reserve, whereas changes in monetary instruments (loans/receivables and debt instruments) are allocated to profit and loss. Equities, for which it is not possible to determine a reliable fair value, are maintained at cost, adjusted for any impairment losses. Financial assets available for sale are reviewed for objective evidence of impairment at each balance sheet and interim reporting date. Indicators of a likely impairment are, for instance, significant financial difficulty of the issuer, non-fulfilment or defaults in payments of interest or principal , the possibility that the borrower is declared bankrupt or submitted to other forms of insolvency proceedings, the disappearance of an active market for the assets. In particular, as far as equity instruments that have a quoted market price in an active market are concerned, a market price as at the date of the financial statements lower than the original purchasing cost of at least 30% or a market value lower than the cost lasting more than 12 months are considered an objective evidence of value reduction. If further reductions take place in subsequent financial years, these are charged directly to the profit and loss statement. With regard to debt securities, regardless of whether or not these are listed on active markets, any impairment loss is recognised in the profit and loss statement strictly in relation to the issuer's ability to fulfil its obligations and therefore make the necessary payments and repay capital at maturity. Therefore, it needs to be established whether there are indications of a loss event which could have a negative impact on estimated future cash flows. Where there are no actual losses, no loss is recognised on the stock, and any capital loss is recognised in the negative net equity reserve. Any writedowns recognised as a result of the impairment test are booked to the profit and loss statement as an operating expense. If the reasons for impairment cease to exist, following an event which occurred after recognition of impairment, writebacks are recognised in equity in the case of equity instruments, and through profit and loss in the case of debt securities.

Derecognition criteria

Financial assets are derecognised from the balance sheet when the contractual rights to the cash flows derived from the assets expire or when the financial asset is sold and virtually all of the risks and rewards in relation thereto are transferred. Securities received within the scope of a transaction that contractually provides for subsequent sale are not recognised in the financial statements, and securities delivered within the scope of a transaction that contractually provides for subsequent repurchase are not derecognised from the financial statements. Securities received within the scope of a transaction that contractually provides for subsequent sale are not recognised in the financial statements, and securities delivered within the scope of a transaction that contractually provides for subsequent repurchase are not derecognised from the financial statements. Consequently, in the case of securities acquired with an agreement for resale, the amount paid is recognised in the financial statements as loans to customers or banks, while in the case of securities transferred with an agreement for repurchase, the liability is shown under deposits from customers or deposits from banks.

Criteria for reporting of income and expenses

Upon disposal, or exchange with other financial instruments or measurement of a loss of value following impairment testing, the fair value results accrued to the reserve for assets available for sale are reversed to profit and loss under:

- account "100 - Gains/losses on purchase/ disposal of: b) financial assets available for sale", in the case of disposal;
- account "130 - Net impairment losses/ reversals" on: b) financial assets available for sale", in the case of recognition of impairment.

If the reasons for impairment cease to exist, following an event which occurred after the impairment was recognised, the impairment loss is appropriately reversed: through profit and loss in the case of loans or debt securities, and through net equity in the case of equity instruments.

Equity investments

Classification criteria

The Group considers as associates, that is subject to significant influence, the companies of which it holds at least 20 per cent of the voting rights (including potential voting rights) and in which it has the power to participate in determining the financial and operating policies. Similarly, companies are considered associates also when the Group – despite a lower percentage of voting rights– has the power of participating in the determination of the financial and operating policies of the investee on account of specific legal agreements such as, for example, the participation in important committees of the investee as well as the presence of vetoing rights on significant decisions.

The Group considers jointly controlled those companies with respect to which the following

circumstances occur simultaneously:

- a written agreement is in place providing for participation in the management of the investee's business through the presence in the latter's Board of Directors;
- none of the parties to the agreement holds exclusive control of the investee;
- the decisions on key activities are made unanimously by the identified parties (each has an implicit or explicit veto power on key decisions).

Recognition criteria

The account includes equity investments held in associates and in joint ventures: these investments are initially recognised at purchase cost.

Revenue recognition and measurement criteria

In consideration of the above, this item broadly contains the valuation of equity investments using the equity method; this method provides for initial recognition of the investment at cost and its subsequent adjustment on the basis of the share of the investee's profits and losses made after the date of purchase. The pro-rata amount of the profit/loss for the period of the investee is posted to item 240 "Gains/losses on investments" in the consolidated profit and loss statement. If evidence of impairment indicates that there may have been a loss in value of an equity investment, then the recoverable value of the investment (which is the higher of the fair value, less costs to sell, and the value in use) should be estimated. The value in use is the present value of the future cash flows expected to be derived from the investment, including those arising from its final disposal. Should the recoverable value be less than its carrying value, the difference is recognised in profit or loss under account "240 - Gains (losses) on equity investments". Should the reasons for impairment no longer apply as a result of an event occurring after the impairment was recognised, reversals of impairment losses are credited to the same account in profit and loss.

Derecognition criteria

Investments are derecognised from the balance sheet when the contractual rights to the cash flows derived from the assets expire or when the financial asset is sold and virtually all of the risks and rewards in relation thereto are transferred. If a company is committed to a plan to sell a subsidiary that involves loss of control over said subsidiary, all the subsidiary's assets and liabilities should be reclassified as assets held for sale, regardless of whether the company will retain a non-controlling interest after the sale.

Quantitative disclosure

The table illustrates exposures in capital instruments broken down by the respective accounting portfolio. The values refer to Group accounting exposures included in the Banking Book and do not include exposures in equity investemnts (shareholding) which are deducted for the calculation of Own Funds. The item "financial assets available for sale" refers to equity investments whose shareholdings are lower than the controlling or associate interests.

Tab. 9.1 – Exposures in equities not included in the trading book

Type of exposure / values	Book value		Fair value		Market value	Gains / losses realized		Gains / losses not realized and recognized in net assets	
Amounts as at 31.12.2017	Level 1	Level 2/3	Level 1	Level 2/3	Level 1	Profits	Losses	Plus (+)	Minus (-)
A. Equity investments	11,315	817,495	15,305	X	15,305	5,817	-	X	X
B. Financial assets available for sale	4,254	318,173	4,254	318,173	4,254	19,035	-1	11,768	-24,011

X = not attributable value
The item Financial Assets available for sale includes AFS investments classified under assets held for sale in the balance sheet in the amount of EUR 0.3M.

In addition to exposures in the equity instruments illustrated above, the Group also holds the portion of UCITs (EUR 96.2 mln) not intended for trading purposes and therefore included in assets available for sale for accounting purposes, as summarized in table 9.2.

Tab. 9.2 – Units of UCITS: breakdown by main category

Categories/Amounts	dec-2017	dec-2016
Equity	-	-
Bonds	-	-
Balanced	-	-
Hedge Funds	667	8,681
Private Equity	78,050	151,488
Real estate	15,873	8,683
Other	1,633	4,660
Total	**96,222**	**173,512**

The units of UCITS relate mostly to interests held by the Parent Company in private equity funds, whose purpose is to increase the value of the respective equity through mainly medium to long-term investments chiefly in the purchase and/or subscription of shares, units and securities in general representing the equity of target enterprises, exclusively in the best interest of the investors. The remaining portion of the Parent Company's UCITS portfolio consists of hedge funds, in particular side pocket, funds under liquidation and holdbacks on total redemptions as well as units of a closed-end real estate fund for qualified investors only, held by the subsidiary MPSCS.

Maximum exposure to the risk of loss was determined to be equal to book value for exposures to UCITS units other than the financial and credit derivatives for which reference is made to positive fair value plus the add-on (calculated also taking into account positions with a negative fair value). The standard approach is applied for calculating the capital requirements for these exposures.

10. Encumbered and unencumbered assets

The MPS Group adopts a highly diversified business model, based on traditional retail & commercial banking services, and also covering, via specialized companies, business areas such as leasing, factoring, corporate finance and investment banking.

Business financing strategies are based on the principle of diversification and are aimed at establishing an optimum funding mix in terms of supply channels, costs, maturities, stability of sources.

As part of the Group's funding strategies, the use of collateral, i.e. the pledging of assets (balance sheet or off-balance sheet assets) as collateral for liabilities – according to the guidelines set by the encumbrance policies and in accordance with the system of limits adopted by the Group – has a central role in achieving the objectives of reducing the average cost of funding and extending the maturities of liabilities. In fact, secured funding typically has a lower cost compared to unsecured funding makes it possible to meet maturities that are not easily achievable.

Encumbered assets, securing the Group's liabilities, include both marketable assets, consisting in securities (e.g. the bank's portfolio, retained ABS/ Covered Bonds, securities from securities lending transactions with customers) and non-marketable assets, mainly receivables meeting certain eligibility requirements in terms of contractual arrangements, standardization of clauses and creditworthiness.

These assets are mainly used for the following:

- Eurosystem refinancing operations (both TLTRO and MRO), in accordance with the applicable regulatory framework and secured by a pool of eligible securities and loans pledged by the Group;
- Securitisation transactions, carried out pursuant to Law no. 130/1999 and typically having residential mortgages, corporate loans to small and medium-sized enterprises, consumer credit and leasing contracts as underlying assets;
- Issuances of Covered Bonds, carried out pursuant to Law no. 130/1999 and the Supervisory framework (Bank of Italy 17.05.2007 as amended), based on two specific issuance programmes. The pool of collateral underlying the two programmes exclusively includes residential mortgage loans in one case (CB1), whilst it also includes commercial mortgages in the other case (CB2).
- Securities Repurchase Transactions ("Repo"), in bilateral form, pursuant to the standard contractual framework (GMRA) and any specific confirmations supplementing/derogating from the terms and conditions of the framework agreement;
- Triparty Repo, bilateral financing operations backed by marketable assets, in which operating and administrative collateral management activities are assigned to specialized entities, generally already acting as central custodians;

- Margin lending (in securities) for repurchase agreements or derivative transactions, if required by the contract governing the underlying operations.

Quantitative Information

Information on the Group's encumbered and unencumbered assets was prepared on the basis of guidelines and templates issued by the EBA on 27 June 2014 in accordance with the provisions of Part eight, Title II of EU Regulations (CRR 575/2013). To this end, an asset is considered as encumbered if it has been pledged or if it is subject to any form of arrangement to secure, collateralise or credit-enhance any on-balance-sheet or off-balance-sheet transaction from which it cannot be freely withdrawn. Assets pledged that are subject to any restrictions in withdrawal, such as assets that require prior approval before withdrawal or replacement by other assets, should be considered encumbered. Generally, the following types of contracts are considered encumbered:

a. secured financing transactions, including repurchase contracts and agreements, securities lending and other forms of secured lending;
b. collateral agreements, for instance, collateral placed for the market value of derivatives transactions;
c. financial guarantees that are collateralised;
d. collateral placed in clearing systems, with central counterparties (CCPs) and with other infrastructure institutions as a condition for access to service; this includes default funds and initial margins;
e. central bank facilities; pre-positioned assets should be considered unencumbered only if the central bank allows withdrawal of assets placed without prior approval;
f. underlying assets from securitisation structures, where the financial assets have not been derecognised from the institution's financial assets; assets that are underlying fully retained securities do not count as encumbered, unless these securities are pledged or collateralised in any way to secure a transaction;
g. assets in cover pools used for covered bond issuance; assets that are underlying covered bonds count as encumbered, except in certain situations where the institution holds the corresponding covered bonds as referred to in Article 33 of the CRR.

The table below reports the amount of encumbered and unencumbered assets by asset type in accordance with Template A of EBA Guidelines of 27/06/2014 and based on the median values of the quarterly data. The encumbered assets are: on-balance sheet assets that have been either pledged or transferred without derecognition or otherwise encumbered; collateral received that meets the conditions for recognition in the balance sheet of the transferee in accordance with the applicable accounting framework.

Tab. 10.1 – Encumbered and unencumbered assets

dec-17	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets	**53,856,057**		**95,489,916**	
of which: Equity instruments	*24,376*	*24,376*	*491,335*	*504,651*
of which: Debt securities	*15,218,809*	*15,215,655*	*7,416,006*	*7,374,112*
of which: Other assets	*156,729*		*18,915,920*	

dec-16	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets	**59,613,013**		**104,512,963**	
of which: Equity instruments	*45,598*	*45,598*	*506,345*	*505,934*
of which: Debt securities	*19,993,119*	*19,991,498*	*4,928,183*	*4,909,371*
of which: Other assets	*767,405*		*16,291,162*	

As at 31 December 2017 the Montepaschi Group registered Euro 53.86 BN of encumbered financial assets, accounting for approximately 36% of total assets, and mainly attributable to maturity loans and debt securities (28%). Similarly, unencumbered assets mainly consist of maturity loans and debt securities. The encumbered assets mostly refer to the Parent Company, Banca MPS. Encumbered assets have reduced compared with December 2016, when they amounted to Euro 59.6 bn and accounted for 39% of total assets. Other assets with the same accounting value as the unencumbered assets, amounting to Euro 18.9 BN as at the end of December 2017, mainly consist of deferred tax assets, tangible and intangible assets, and derivative assets for the most part unencumbrable in the course of the Group's ordinary activities.

The table below shows the amount of encumbered and unencumbered collateral received that does not meet the conditions for recognition in the balance sheet of the transferee in accordance with the applicable accounting framework, typically guarantees for securities lending transactions or repo agreements (assets), including repurchased own issued securities. Approximately 82% of off-balance sheet assets - mainly consisting of debt securities received as collateral - were encumbered compared to 89% in the previous year. The asset encumbrance ratio, calculated pursuant to Regulation (EU) No 2015/79, compared to the "extended" Group Financial Accounts (and thus inclusive of the collateral received) stands at approximately 40% for 2017. At the end of 2016 it was approximately 41%.

Tab. 10.2 – Collateral received

	dec-17		dec-16	
	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
Collateral received	**11,259,486**	**2,528,029**	**13,230,473**	**1,601,504**
of which: Equity instruments	*212,914*	*39,094*	*403,216*	*1,396*
of which: Debt securities	*10,794,923*	*2,411,150*	*12,803,969*	*1,596,183*
of which: Other collateral received	-	-	-	-
Own debt securities issued other than own covered bonds or ABSs	**4,586,885**	342,442	**1,610,319**	-

The table 10.3 includes the total of the different sources of liabilities, of which the more significant for the MPS Group are repos (liabilities), collateralized deposits other than repos and debt securities issued. The assets reported refer to both on- and off-balance sheet assets.

Tab. 10.3 – Encumbered assets / collateral received and associated liabilities

	dec-17		dec-16	
	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	47,040,660	56,285,787	61,929,867	66,834,052

The most quantitatively important items for the MPS Group in terms of encumbered assets are the pooling financing and the funding through Repos (liabilities) on the institutional market and with customers.

The ratio between "Assets, collateral received and own debt securities issued other than covered bonds and ABSs" and the corresponding "Financial liabilities, contingent liabilities and securities lent associated with encumbered assets" is at 120% due to the haircuts applied to the market value of the asset as part of refinancing transactions in the market (repos) and with the European Central Bank as well as to the overcollateralisation clauses established for the issue of Covered Bonds.

11. Exposures to securitisation transactions

11.1 General information

The Group operates in the securitisation market both as an originator, through the issue of notes from originated securitisations, and as an investor through subscription of securities from third-party securitisations.

As at today, the Montepaschi Group has not sponsored any securitisation transactions.

Originated securitisations include:

- securitisation transactions structured with the aim of deriving economic advantages regarding the optimisation of the loan portfolio, the diversification of sources of funding and the reduction of the cost of funding and the alignment of the natural maturities of assets and liabilities (securitisation transactions in the strict sense). To date the Group does not have any securitization transactions that substantially transfer all the risk and return of the portfolio transferred (securitization with derecognition, Casaforte).
- securitisations aimed at strengthening the available funding sources, through the conversion of the loans sold into securities that can be refinanced (self-securitisations). Self-securitisation transactions are part of the more general policy of strengthening the group's liquidity position and are not included in securitisations of a stricter sense since they do not transfer risk outside the Group.

For this reason, the numerical data concerning these transactions are not included in the tables under the quantitative section.

Securitizations in the strict sense of the term

In general this type of transaction involves the spin-off of a package of assets (generally loans) recognised in the balance sheet of Group Banks and its subsequent transfer to a Special Purpose Entity. The SPE, in turn, finances the purchase through the issue and placement of securities exclusively guaranteed by the assets received (ABS – Asset-Backed Securities). Resources raised in this way are returned to the Montepaschi Group (the seller), whereas commitments to subscribers are met using the cash flows generated by the loans sold. Following is an outline of the Group's main securitisation transactions (of the traditional type, as the Group has not engaged in any synthetic securitisations) originated in previous years and outstanding at 31 December 2017 - broken down into quality/type of underlying and vehicle company:

- securitisation of **performing loans**:
  - Siena Mortgages 10-7 Srl (2010, BMPS);

  - Casaforte Srl (2010, BMPS);
  - SienaConsumer2015(2015,Consum.it);
  - Siena PMI 2015 Srl (2015, BMPS);
  - Siena LEASE 2016-2 Srl (2015, L&F Banca)
- securitisation of **non performing loans:**
  - Norma srl 2017 (2017, Multioriginator)

Siena Mortgages 10-7 S.r.l

This securitisation transaction was carried out on 30 September 2010. Its portfolio contained 34,971 BMPS performing, real estate backed loans for a total outstanding debt of approx. Euro 3.5 bn. The special-purpose vehicle Siena Mortgages 10–7 is 93% owned by Stichting Canova, a foundation incorporated under Dutch law, and the remaining part is owned by the Parent Company.

The vehicle structure ensures its independence. The remaining debt balance amounted to EUR 1.9 bn as at 31/12/2017 (22,426 outstanding mortgages).

Classes A1 and A2 were placed with market investors, whereas the remaining classes of notes issued by the vehicle were initially underwritten by the Parent Company and a part of them (from Class 3) were sold on the market. The deal has not entailed the derecognition of the underlying assets from the balance sheet of the Parent Company (transferor), which has substantially retained all risks and rewards associated with the property of the assets sold.

Casaforte Srl

With a view to enhancing part of the Group's properties used in the business, the Parent Company formalised an additional securitisation transaction for an amount of Euro 1.7 bn on 21 September 2010. The transaction was completed at the end of December in the same year with the transfer of receivables arising from a mortgage loan granted to the consortium company "Perimetro Gestione Proprietà Immobiliari", to vehicle Casaforte srl. As at 31/12/2017, the total outstanding debt amounted to Euro 1.27 bn.

The Class A notes were placed to the public, while Class B and Z notes are not offered to the public. They were placed with professional and/or qualified investors. At first, the securitisation-underlying assets were derecognised in their entirety from the balance sheet of the Parent Company, since all of the risks and rewards associated thereto were transferred to the vehicle in both form and substance.

The subsidiary MPS Capital Services holds Class A and B notes in its portfolio. At the end of December 2013, the MPS Group acquired control of 'Perimetro Gestione Proprietà Immobiliari' and 'Casaforte'. The acquisition of control was completed by way of a two-step purchase of 100% of Equity Instruments issued by Perimetro and Class Z notes issued by Casaforte for an approximate EUR 70 mln. At the end of the year, Casaforte Class A Notes amounting to EUR

157.2 mln placed with third-party investors are posted under item “30 – Debt securities issued” of the liabilities in the consolidated balance sheet. The Group is committed to repurchasing these securities from investors at a price calculated on the basis of the equivalent issue spread. As a result of these purchases, the Parent Company acquired control of the Company, which was subsequently consolidated in the Financial Statements. The transactions are part of the activities planned for the restructuring of the ‘Chianti Classico’ trade, outlined in the Parent Company’s Restructuring Plan and approved by the Board of Directors on 7 October 2013 and subsequently by the European Commission on 27 November 2013.

Siena Consumer 2015 Srl

On 27 February 2015, the former subsidiary Consum.it S.p.A., now absorbed into the Parent Company, carried out a second securitisation transaction with the disposal of a portfolio of 198,371 personal, auto and special purpose loans, all disbursed by Consum.it S.p.A. As at 31 December 2017, the remaining debt balance amounted to EUR 365.5 mln (nr. 191,994 outstanding loans).

To finance the purchase of this portfolio the Vehicle issued various classes of ABS securities, of which those in the Senior Class were placed with an institutional investor; the remaining mezzanine and junior classes were subscribed by the Parent Company. This transaction also did not entail the derecognition of the underlying loans from the transferor’s financial statements.

Siena PMI 2015 Srl

In order to optimise the Group’s liquidity profile, the securitisation of loans to small and medium businesses disbursed by BMPS was initiated on 6 August 2016.. On 26 June 2015, BMPS transferred to the vehicle company “Siena PMI 2015 Srl”, a portfolio of performing, unsecured or mortgage loans disbursed to Italian SMEs, consisting of 24,683 mortgages totaling € 3,002.7 mln. As at 31 December 2017, the remaining debt balance amounted to EUR 1,167.0 mln (13,309 outstanding loans).

To fund the acquisition of the portfolio, the Vehicle issued ABS securities on 6 August 2015. In the senior tranche, Senior classes A1A and A1B were placed with institutional investors, while classes A2A and A2B were placed with the European Investment Bank. The remaining classes of notes issued were initially repurchased by the Parent Company (transferor), to be subsequently sold in part (class B).The Senior and Mezzanine classes were rated by Moody’s and DBRS.

The placement of part of the notes did not entail the derecognition of the underlying assets from the balance sheet of the Parent Company, which has substantially retained all risks and rewards associated with the ownership of the assets sold; therefore, a liability was recognized under the Vehicle as an offsetting item to the liquidity received from the sale.

Siena LEASE 2016-2 Srl

On 3 December 2015, the subsidiary MPS Leasing & Factoring Banca per i Servizi Finanziari alle Imprese sold a portfolio consisting of 13,181 performing finance leases totalling EUR 1,622.4 mln to the vehicle company "Siena Lease 2016-2 S.r.l.".

As at 31 December 2017, the remaining debt balance amounted to EUR 1,061.9 mln (8,647 outstanding contracts).

To fund the acquisition of the portfolio, the Vehicle issued ABS securities on 28 January 2016. In particular, the senior tranche was placed with institutional investors, while the remaining classes of securities issued were repurchased by the Originator. The Senior and Mezzanine classes were rated by Moody's and Fitch.

The placement did not entail the derecognition of the underlying assets from the balance sheet of the Parent Company, which has substantially retained all risks and rewards associated with the ownership of the assets sold.

Norma SPV Srl

On 1 July 2017, as part of a securitisation of non-performing loans originated by MPS Group banks as well as banks outside the MPS Group, Banca MPS and MPS Capital Services completed the disposal of a portfolio of non-performing loans in the real estate and shipping sectors.

At the disposal date, the total portfolio acquired by the vehicle consisted of 20 loans for a value of EUR 284.9 mln, of which 12 loans disbursed by Banca MPS for a value of EUR 24 mln for "real estate" and EUR 145.3 mln for "shipping", and 8 loans disbursed by MPS Capital Services for a value of EUR 28.8 mln for "real estate" and USD 86.8 mln for "shipping".

At 31 December 2017, the remaining debt (including interest on arrears accrued) on the total portfolio amounted to EUR 474.8 mln, of which EUR 91.3 mln in real estate loans and EUR 383.5 mln in shipping loans, for a total of 54 loans. Of these, the portfolio originated by the MPS Group amounted to EUR 252.7 mln (19 outstanding loans), of which EUR 160.0 mln disbursed by Banca MPS and EUR 110.1 mln in loans disbursed by MPS Capital Services.

To fund the acquisition of this portfolio, the Vehicle issued the following ABS securities (the "Notes") on 21 July 2017:

Real Estate

Class A1 series 1 for EUR 2,112,000;

Class B for EUR 40,134,000;

Class C for EUR 11,862,000;

Class D for EUR 44,626,000.

Shipping

Class A1 for USD 7,514,000;

Class B for USD 142,765,000;

Class C for USD 67,061,000;

Class D for USD 21,336,000.

The senior classes of both the Real Estate and Shipping transactions were placed with institutional investors, while the mezzanine and junior classes were subscribed by each transferring bank in proportion with the loans transferred.

The placement of part of the Notes did not entail the derecognition of the underlying assets from the balance sheet of the transferring Banks, which have substantially retained all risks and rewards associated with the ownership of the assets sold.

For all the securitisation transactions described above (and described subsequently), during the period under review the Parent Company and its subsidiaries have not provided any financial or other support without being obliged under the contract. There are no cases of financial or other support to a previously non-consolidated structured entity as a result of which the structured entity was controlled by the Group.

The Group also does not intend to provide financial or other support to consolidated securitisation vehicles, nor to assist entities in obtaining financial support.

Self-Securitisations

These transactions involve the transfer of a portfolio of loans originated by Group Banks to a Special Purpose Entity which, in turn, finances the purchase through the issue of Residential Mortgage- Backed Floating Rate Notes (also known as Residential Mortgage-Backed Securities or RMBS). All Residential Mortgage Backed Securities (RMBS) issued are underwritten by the Parent Company. Although the Group's full underwriting did not generate any direct cash flows from the market, it still provided the Group with securities that could be used for ECB refinancing and repo transactions, thereby improving the MPS's safety margin against the MPS Group's liquidity risk position. In fact, self-securitisations allow for liquidity requirements to be covered by optimising the amount of assets readily available. The Senior Securities (eligible assets) represent the Group's main core for covering short-term obligations using instruments that can be readily liquidated. Here follows a list of the self-securitisations as at 31 December 2017:

- Self-securitisations of performing loans (mortgages):
  - Siena Mortgages 07 -5 Srl (2007);
  - Siena Mortgages 07 -5/Bis Srl (2008);
  - Siena Mortgages 09 -6 (2009);
- Self-securitisations of performing loans (financing contracts):
  - Siena PMI 2016 Srl
  - Siena Consumer srl
- Self-securitisations of non-performing loans (financing contracts):
  - Siena NPL 2018 Srl.

Transactions as at 31 December 2017: the first two transactions, involving performing residential mortgage loans were carried out in December 2007 (Euro 5.2 bn) and march 2008 (Euro 3.4 bn) for an overall amount of Euro 8.6 bn, through the vehicle, Siena mortgages 07-5 Srl.

In 2009, two new transactions were added (Euro 4.4 bn as at February 2009 and Euro 4.1 bn as at June 2009), involving performing loans for a total of approx. Euro 8.5 bn through the vehicle, Siena mortgages 09 – 6 Srl. .

Self-securitisations do not contribute to the numerical data reported in the following tables of the quantitative disclosure, because - as was explained above - they do not constitute securitisations in the strict sense of the term.

Siena PMI 2016 Srl

In 2016 the Group carried out a securitisation through the vehicle named Siena PMI 2016 S.r.l. The transaction was finalised on 30 September 2016 through the sale by the Parent Company of a portfolio of performing loans to Italian small and medium enterprises, for a total of EUR 1,739.3 mln. As at 31/12/2017, the remaining debt balance stands at EUR 1,034.1 mln, for a total of 15,764 loans.

In order to fund the acquisition of the portfolio sold, on 27 October 2016 the Vehicle issued asset-backed securities (ABS) in the following classes, rated by Fitch and DBRS as at 31 December 2017:

- Class A1 notes (AA and AAA) for a nominal amount of EUR 470.0 mln, redeemed in full;
- Class A2 notes (AA and AAA) for a nominal amount of EUR 400.0 mln, of which EUR 84.3 mln redeemed;
- Class B notes (AA and AAH), for a nominal amount of EUR 150.0 mln;
- Class C notes (BBB and BBH) for a nominal amount of EUR 313.0 mln;
- Class J notes (not rated) for a nominal amount of EUR 406.3 mln, of which EUR 34.6 mln redeemed

Siena Consumer

In December 2013 a securitisation transaction was carried out through the sale to the vehicle Siena Consumer S.r.l. of a portfolio of approximately EUR 1,500 mln consisting of 200,542 personal loans, auto loans, and special-purpose loans originated by Consum.it S.p.A., now absorbed by Banca Monte dei Paschi di Siena S.p.A. As at 31 December 2017, the remaining debt balance amounted to EUR 178.8 mln (194,632 outstanding loans). To fund the acquisition of the portfolio, the Vehicle issued unrated asset-backed securities in the following classes:

- Class A notes for a nominal amount of EUR 991.6 mln, redeemed in full;
- Class B notes for a nominal amount of EUR 488.3 mln, EUR 324.0 mln of which redeemed;
- Class C notes for a nominal amount of EUR 21.9 mln.

Siena NPL 2018

In the course of 2017, on the basis of what is set forth in the Restructuring Plan and in line with the terms of the agreements entered into with Quaestio Capital Management SGR S.p.A., the MPS Group completed the securitisation of a portfolio of doubtful loans originated by Banca Monte dei Paschi di Siena S.p.A., MPS Capital Services Banca per le Imprese S.p.A. and Monte dei Paschi di Siena Leasing & Factoring, Banca per i Servizi Finanziari alle Imprese S.p.A. The carrying amount of this portfolio as at 31 December 2017 amounts to EUR 4,579.7 mln. The portfolio was sold on 20 December 2017 to the vehicle Siena NPL 2018 S.r.l., established for this purpose, which on 28 December 2017 issued Asset-Backed Securities (the "Securities") in the following classes:

- Senior A1 notes for a nominal amount of EUR 2,683.5 mln;
- Senior A2 notes for a nominal amount of EUR 412.1 mln;
- Mezzanine notes for a nominal amount of EUR 847.6 mln;
- Junior notes for a nominal amount of EUR 565.0 mln.

The Securities were subscribed in full by the transferors and as at 31 December 2017 they are all held by the Group.

The 2017-2021 Restructuring Plan and the agreements with Quaestio also call for, by the end of the first half of 2018:

- the transfer of 95% of the mezzanine notes to the Atlante Fund managed by Quaestio (already completed on 22 December 2017, effective as of 9 January 2018);
- rating by at least two agencies of the Senior A1 Notes (and possibly of other classes of Notes);
- after obtaining an investment grade rating from at least two agencies, the request for the application of the guarantee ("GACS") from the Ministry of Economy and Finance (MEF or GACS Guarantor) pursuant to Law Decree No. 18 of 14 February 2016, converted with amendments into Law No. 49 of 8 April 2016, and in compliance with what is laid out in the relative implementing measures (including, inter alia, the MEF decree of 3 August 2016) on the Senior A1 Notes (and possibly the Senior A2 as well);
- after obtaining the GACS, the transfer of 95% of the Junior Notes to the Atlante Fund, with the simultaneous deconsolidation of the assets transferred;
- the sale of 95% of the class A2 Notes to institutional investors.

<u>Third-party securitizations</u>

The Group allocates a part of its capital to stock market investments, with the objective to:

- attain a risk-adjusted return that is significantly higher than the cost of allocated capital so as to create value for the shareholders;
- diversify risks with respect to other risks that are typical of its business;
- maintain in-depth and up-to-date

knowledge of financial market trends which additionally and inevitably condition the domestic markets in which the Group mainly operates.

Activities are overseen by the Finance, Treasury and Capital Management Area and are carried out within a broad and varied range of potential financial market areas so as to draw maximum benefit from risk diversification and reduced exposure to individual sectors: from investment activities in the government bonds, securities and forex markets to activities in the corporate bond and credit derivative markets.

Third-party securitisations are compliant with the above-mentioned process of diversification and with the support of a specialised desk within the subsidiary, Mps Capital Services. The investment process starts with the analyses carried out by the traders in a bottom-up logic and is included in the overall monitoring of portfolio risks. As with all operations in securities markets, these investments are subject to risk limits set by the Board of Directors that are monitored daily by the Business Control Units and Risk Management; Stop loss, risk and nominal limits are defined for maximum exposure for major issuer categories broken down by rating.

Methods for calculating risk weighted exposures

To calculate capital adequacy for credit risk relating to securitisation transactions included in the Banking Book, the MPS Group applies the standardised approach and the AIRB approach.

The standardized approach is also used to calculate the capital requirement for market risk (specific risk) relating to securitised exposures included in the Trading Book for Regulatory purposes.

Under the standardized approach, risk-weighted exposure is calculated by applying a 'weight' depending on the ratings assigned by an External Credit Assessment Institution (ECAI) to the securitised exposures (in the banking book and trading book). The ECAIs used by the group for positions in short-term rated securitisations and securitisations other than those with a short-term rating, include:

- *Fitch Rating Ltd,*
- *Moody's Investors Service Ltd,*
- *Standard & Poor's Rating Services,*
- *DBRS.*

Under the AIRB approach, the Supervisory Formula Approach (SFA) is adopted for Tranched Cover transactions.

Below is a list of the securitisations along with the agencies that provide their ratings.

Rating Agencies for securitizations

Type[a]	Rating agencies
SIENA MORTGAGES 10-7 (BMPS)	Fitch Rating Ltd Moody's Investors Service Ltd
SIENA CONSUMER 2015 (CONSUM.IT)	N.R. N.R.
CASAFORTE (BMPS)	Fitch Rating Ltd Moody's Investors Service Ltd
SIENA PMI 2015 (BMPS)	Fitch Rating Ltd DBRS Ratings Ltd
SIENA LEASE 2016-2 (MPS Leasing & Factoring)	Fitch Rating Ltd Moody's Investors Service Ltd

(a) Originator in brackets.

Accounting policies

The accounting of securitisation transactions completed prior to the first-time adoption (FTA) of international accounting standards is not reported in the financial statements inasmuch as the Group has made use of the optional exemption provided for by IFRS 1, which permits not re-posting financial assets/ liabilities sold or derecognised prior to 1 January 2004. Therefore, loans underlying the transactions prior to the first-time-adoption of international accounting standards have been derecognised from the transferor's balance sheet. The relative junior securities underwritten have been classified among receivables. For transactions completed subsequent to the first-time-adoption of international accounting standards, where receivables were sold to vehicle companies and in which - even with formal transfer of legal ownership of the receivables - control over the cash flows deriving therefrom and most risks and rewards are maintained, the loans that are the object of the transaction are not eliminated from the transferor's balance sheet. In this case, a payable is posted with the vehicle company net of the securities issued by the company and repurchased by the seller. The profit and loss statement also reflects the same accounting criteria. related junior notes underwritten were classified among receivables. Thus, for the purposes of calculating capital absorption, the loans are maintained in the Group's weighted assets as if they had never been sold. The only exception among securitisations completed after F.T.A. (first-time adoption) and outstanding as at 31.12.2016 is Casaforte Srl, the underlying receivables of which were removed in their entirety from the Parent Company's balance sheet since the risks and rewards connected thereto were transferred to the vehicle company in both form and substance. From an accounting standpoint, self-securitisations do not entail the derecognition of underlying assets.

All outstanding securitisation transactions should be considered "financing".

In 2017, no profits/losses were realised on sales as part of securitisation transactions. For accounting purposes, in the case of securitisations with derecognition, the Group would adopt IAS 39, where the profit or loss is calculated as the difference between the consideration less the gross exposure of the assets transferred, while in the case of the transfer of assets without derecognition, no accounting impact would be expected in the income statement. In the upcoming months, a transfer of assets with derecognition could be completed (transfer of NPLs). The Group adopts IFRS 5 as an accounting standard in this sense, due to which it included the self-securitisation SIENA NPL 2018 at 31.12.2017 in the "Non-current assets held for sale and discontinued operations" portfolio.

For all the securitisation transactions, during the period under review the Parent Company and its subsidiaries have not provided any financial or other support without being obliged under the contract.

If the Bank had agreements that could require the provision of financial support for securitised assets, they would be accounted for following IAS 37 “Provisions, Contingent Liabilities and Contingent Assets”, as they are contingent liabilities. In view of these transactions, the Parent Company allocated reserves in support of the vehicles, should such funds be needed upon occurrence of certain events. As at 31 December 2017, these reserves amounted to EUR 129.83 mln.

Control System and Top Management Reporting

The securitisation management process is supported by a specific internal procedure which assigns roles and responsibilities to the various organisational units involved in the individual phases of the process.

The Parent Company’s Structural Liquidity Service establishes general practices and coordinates activities in relation to securitisation transactions. The Montepaschi Group set up a specific unit within the Parent Company’s Specialised Processes and Services Area, responsible for determining the rules and criteria for the management of performing securitisations. More specifically, the Special-purpose Loans and Securitisations Service within this area sets the operational guidelines while looking after aspects and obligations associated with servicing activities.

The trend of the transactions is steadily monitored through the periodical (monthly and quarterly) recording of remaining principal repayment flows, default and bad debt positions generated by these securitisations. In coordination with other originator Banks in the Group, the Special-Purpose Loans and Securitisations Service prepares summary reports on portfolios sold (“Servicer reports”). In addition, as part of critical situation management, The Parent Company’s Structural Liquidity Service notifies cases that may pose potential risks for noteholders to the relevant functions in the organisation.

In its capacity as third-level control body, the Risk Audit Service uses sampling procedures to periodically validate:

- whether the degree of recoverability of loans sold is accurate and, as a result, whether the fair value of securities issued is appropriate;
- whether line checks assigned to the various units have been carried out and roles and responsibilities properly identified;
- it also verifies the compliance of reporting/accounting procedures with current regulations in collaboration with other units, as necessary;
- the existence of any conflicts of interest with respect to noteholders; and compliance, on a sampling basis, with the obligations of law 197/91, as amended.

Non-performing securitisations, on the other hand, are handled by the Distressed Credit Risk Departmental Sector, while all activities connected with the securitisation of loans originated by other subsidiaries (in particular Mps Leasing&Factoring) are managed by the subsidiaries themselves.

Risk-hedging policies

With regard to monitoring procedures for risks inherent in own securitisations , the Bank uses the control tools already in place for portfolio risks. Pursuant to the provisions set out in the Supervisory Instructions Issued by the Bank of Italy on this subject, the Bank makes sure that the overall transactions are managed in compliance with the law and the prospectuses.

When transactions are structured, it is the responsibility of the Structural Liquidity Service in collaboration with the Arranger and liaising with the asset-holding unit, the Quality Control function and Risk Management, to submit to the approval of the Finance Committee the definition of the hedging strategy as well as the potential recourse to a back-to-back swap as a way to hedge against the risks of fluctuations in the interest rates of securitised assets.

With regard to procedures aimed at monitoring the risks of third party securitisations, the Bank uses the control tools and internal models implemented for the measurement and management of market risks in line with the qualitative and quantitative requirements set out by the regulatory authorities. In detail, the BoD-defined limits of the following are monitored: Stop loss, Value at risk (Var) and nominal limits of maximum exposure by issuer's product categories, broken down by rating classes. Finally, the appropriateness and quality of the market settings applied to Front Office and market risk management are monitored, as are the frequency and quality of upgrades. Traditional securitisations and self-securitisations originated by the Group are also relevant for liquidity risk monitoring and management. Securitisations have been used by the Group in recent years primarily with a view to 'certificate' commercial assets, using hem for ECB refinancing transactions and collateralised securities lending. In order to maximise the efficiency and economic advantageousness of these transactions, some of the structuring roles required are generally carried out by the *originator bank* itself. In particular, the roles that are particularly relevant for the purpose of liquidity management include the following:

- Servicer: the originating entity, which manages the cash flows and usually maintains a direct relationship with its own customers, avoiding disclosure of the list of debtors sold to a third party entrusted with the collection of payments for -and daily management of- the portfolio in question;
- Account Bank**:** the entity that acts as a custodian of the securitisation liquidity, i.e. the depository bank for the collections that the servicer deposits on a daily basis;
- Interest rate hedging contract counterparty**:** the direct counterparty for swaps/caps hedging interest rate risk of vehicles.

To fulfil the above roles, the entity is required to comply with specific credit market requirements for the entire period in which the transaction is in place. To maintain the rating of its transactions, if the creditworthiness of the *originator* is downgraded to a rating below the minimum levels set out by the Rating Agencies, the originator will be required to put in place remedies which may expose it to liquidity risk. On a case by case basis it may, in particular, be necessary to collateralize or secure the credit exposure arising from the role itself or replace it with a third institution. Consequently, a downgrade has significant repercussions on the originating banks in terms of liquidity risk, due both to higher collateral required to maintain the typical roles of these transactions in place and the cost for outsourcing part of these roles.

More specifically:

- in order to maintain the role of Servicer, if the bank's rating is downgraded to below the levels set out by the rating agencies, it will be required to fund a reserve, known as the **commingling** reserve which, should a default occur, will provide hedging against the risk that the amounts collected on behalf of the vehicle and not yet credited to the vehicle's accounts may fall into the funds available for the general body of creditors of the bankrupt bank;
- for the role of Account Bank, Rating Agencies may require a third bank to be entrusted with the custody of the vehicles' financial assets, thus generating strong liquidity losses;
- for the role of Counterparty contratto di copertura dal rischio tasso di interesse, if credit scoring is below a certain level, Agencies may require either replacement of (or a guarantee from) the counterparty or specific collateralization. Externalisation or derivative guarantee may instead be imposed by the agencies if creditworthiness is below a certain limit threshold.

Covered Bond Transactions

The MPS Group currently has two Covered Bond programmes for a total of Euro 30 bn. In the course of 2010, the Montepaschi Group launched a first programme for the issuance of Covered Bonds for an amount of Euro 10 bn with a view to improving the mid-long term financial profile.

In light of the developments in the financial markets, the programme should be considered as part of a wider strategy, aimed at:

- curbing the costs of funding: covered bonds are widely preferred, inasmuch as they are issued directly by the bank and their repayment is guaranteed by a segregated pool of assets (in this case, residential mortgage loans); in the event of issuer bankruptcy, covered bond holders enjoy a right of recourse on a portfolio of segregated high-quality assets and are, therefore, willing to accept a lower yield than the one offered by similar uncovered bonds;
- diversifying the bank's funding sources on the international market too;
- lengthening its average debt maturity profile.

- On 26 June 2015, the meeting of covered bond holders approved the proposed amendments to the Programme which made it possible to:
- amend the Programme, to obtain a rating from DBRS (in addition to Moody's and Fitch) for the covered bonds issued and to be issued as part of the Programme;
- activate, if specific cases of default take place pursuant to the Programme, a "conditional pass through" type mechanism for the repayment of the bonds issued.

With a view to improving the efficiency and stability of the Group's counterbalancing capacity, in 2012 a second issuance programme was authorised for a maximum of Euro 20 bn. The covered bonds were not explicitly rated when launched but, in the course of 2013, were assigned a rating (A) by the agency DBRS. The second programme is not intended for the market but for transactions eligible as collateral in refinancing transactions through the European Central Bank. These transactions are structured into the following stages:

a) the Parent Company, or other Group Company, transfers, without recourse, a pool of assets having certain characteristics to the vehicle, MPS Covered Bond S.r.l. and MPS Covered Bond 2 S.r.l, thus forming a segregated *Cover Pool*;

b) the Transferor grants a subordinated loan to the vehicle, for the purpose of financing payment of the assets' purchase price by the vehicle;

c) the Parent Company issues covered bonds secured by an autonomous, irrevocable and unconditional first demand guarantee issued by the vehicle for the only benefit of the bond-holding investors and senior debtors involved in the transaction; the guarantee involves limited recourse to the assets of the Cover Pool owned by the vehicle (guarantor).

The structure of the deal is such that the Parent Company is the transferor (a), lender (b) and issuer (c) in the transaction.

In order to allow the transferee to meet the obligations of the collateral pledged, the Parent Company uses appropriate Asset & Liability Management techniques to secure a trend of substantial balance between the maturities of cash flows arising from the assets sold and maturities of payments due in relation with the covered bonds issued and other costs of the transaction. The programmes, in both cases, were structured in compliance with applicable rules and regulations which authorise the issuance of covered bonds only if the transferring and issuing banks meet certain capital requirements.

The structure of the debt issuance programmes of the Parent Company (transferor and servicer) is subject to stringent regulatory requirements and calls for continuous actions by the Specialised Credit Processes and Services Area; Finance, Treasury & Capital Management and Risk Management Areas, as well as supervision by an external auditor (Deloitte & Touche) as asset monitors. In particular, these actions include:

- assessment of capital requirements mandated by Supervisory Instructions when it comes to covered bond issuance programmes;
- assessment of the quality and integrity of assets transferred with regard, in particular, to the estimated value of properties, both residential and non-residential, on which a mortgage in relation with the asset-backed loans is placed; this assessment may result in repurchases, integrations and additional transfers of supplemental assets;
- assessment of an appropriate ratio being maintained between bonds issued and assets transferred as collateral (Cover Pool -mortgage and residential assets; commercial assets for the second programme);
- assessment of transfer limits and integration practices;
- assessment on whether risks are effectively and adequately hedged by derivative contracts in relation to the transaction.

In the course of 2013, the mitigation strategy for interest rate risk on the first Programme was restructured in order to minimise the Vehicle's exposure to market counterparties. In particular, the newly-defined strategy aims to only cover the Vehicle's net exposure to interest rate risk, as opposed to the nominal amount.

At the same time, in December 2013, the outsourcing of three Covered Bond Swaps outstanding with market counterparties was carried out. This was followed in 2014 with the further outsourcing of 3 Covered Bond Swaps for a total

outstanding as at 31 December 2017 of approx. € 3.47 bn.

The paragraphs below provide information on the nature of the risks associated with the interest in the MPS Covered Bond S.r.l. vehicle, whose assets are pledged as collateral of bond issues of the Parent Company partly placed with the market.

In particular, the terms of the agreements that could require the Group to provide financial support to the vehicle MPS Covered Bond S.r.l. are as follows:

- the Parent Company undertakes, in accordance with the programme's terms, to ensure compliance over time with the regulatory and contractual tests determined according to the methodologies set by the rating agencies from time to time
- if the Parent Company's rating decreases below "BBB(low)" (DBRS), "BBB-" (Fitch) and "Baa3" (Moody's), the repayment of each subordinated loan will be delayed by 6 months after the original expiry;
- in accordance with the Master Definition Agreement, the Parent Company shall allocate and change the amount of the variable liquidity reserve according to criteria agreed upon with the rating agencies.

During the period under review the Parent Company and its subsidiaries did not provid any financial or other support without being obliged under the contract.

There are no cases of financial or other support to a previously non-consolidated structured entity as a result of which the structured entity was controlled by the Group.

The Group does not intend to provide financial or other support to the vehicle, nor to assist the entity in obtaining financial support.

Description of individual issuances

In order to support the issuances of Covered Bonds in the first programme, the Parent Company transferred a portfolio of approximately 180 thousand mortgages for a total value of Euro 18.3 bn, consisting in performing residential mortgages in real estate and building secured by 1st mortgages and with all instalments regularly paid as at the date of valuation of the portfolio.

Here follows a summary of the main characteristics regarding transfers in the first Programme:

Date of sale	Portfolio	Loans number	Amount (€/bln)
21/05/10	Loans BMPS	36,711	4.4
19/11/10	Loans BMPS	19,058	2.4
25/02/11	Loans BMPS	40,627	3.9
25/05/11	Loans BMPS (ex BAV)	26,804	2.3
16/09/11	Loans BMPS	27,973	2.3
14/06/13	Loans BMPS	4,259	0.4
18/09/15	Loans BMPS	15,080	1.5
31/10/16	Loans BMPS	7,630	0.7
22/12/16	Loans BMPS	1,903	0.2
Total		**180,045**	**18.3**

In the Covered Bond, it is MPS and not the vehicle that directly issues the bonds.

As part of its first issuance programme, the Parent Company completed a total of 25 issuances, 13 of which had not yet matured or been repaid early for a total, as at 31 December 2017, of EUR 8,420 mln, of which EUR 5,187 mln were placed on the market, while EUR 3,233 mln were repurchased by the Bank.

The remaining debt balance on the portfolio as at 31 December 2017 amounted to EUR 10,025.0 mln for 125,730 mortgages.

In 2017 no securities were issued as part of the first Programme.

As part of the second Programme, the Parent Company completed 33 issuances (of which 17 not yet matured or redeemed early), which were not intended for the market but repurchased by the Bank and used as collateral for refinancing transactions in the Eurosystem, for a total as at 31 December 2017 of EUR 8,900 mln.

The remaining debt balance on the portfolio as at 31 December 2017 amounted to EUR 9,520.3 mln for 95,488 mortgages. The portfolio sold consists of real estate-backed, residential and commercial mortgage loans, receivables from -or guaranteed by- the Public administration and securities issued as part of securitisations consisting in these same types of loans and receivables. On 24 March 2017, a portfolio containing 5,799 residential and commercial mortgage loans was sold for € 789.2 mln. Details are reported in the table below:

Date of sale	Portfolio	Amount (€/bln)	Loans number
27/04/2012	Residential Mortgages	2.38	27,047
22/06/2012	Residential and Commercial Mortgages	2.48	13,993
24/08/2012	Residential and Commercial Mortgages	1.4	17,353
21/09/2012	Residential and Commercial Mortgages	2.47	9,870
15/02/2013	Residential and Commercial Mortgages	1.29	9,033
21/06/2013	Residential and Commercial Mortgages	2.15	12,771
29/03/2014	Residential and Commercial Mortgages	1.46	5,645
16/10/2015	Residential and Commercial Mortgages	0.98	5,671
18/07/2016	Residential and Commercial Mortgages	2.01	24,162
26/08/2016	Residential and Commercial Mortgages	0.81	7,211
24/03/2017	Residential and Commercial Mortgages	0.79	5,799
Total		**18.23**	**138,555**

Management of the new Covered Bond Programme follows the proven processes and controls already adopted for management of the covered bonds Programme established in 2010.

As part of the second Covered Bond Programme, the following issues were made in 2017 as the re-opening of covered bond series no. 26 and no. 27 already outstanding:

Issuer Date	Amount (€/bln)	Coupon	Legal Final Maturity
02/02/2017	0.50	3mE + 0.85%	Jan-21
02/02/2017	0.30	3mE + 0.85%	Apr-21
Total	**0.80**		

From an accounting viewpoint, both covered bond transactions did not involve the derecognition of assets sold and consequent recognition in the balance sheet of swaps connected with the transaction. It should be noted that:

- transferred loans continue to be reported in the Parent Company's balance sheet inasmuch as the Parent Company retains the risks and rewards of ownership of the loans transferred;
- the loan disbursed by the Parent to the Vehicle is not classified as a separate item in the balance sheet, since it is offset with the amount due to the Vehicle in which the initial transfer price was recognised. The loan, therefore, is not subject to credit risk assessment, because this risk is entirely reflected in the assessment of transferred loans, which continue to be reported in the Parent Company's balance sheet;
- loans are subject to movements based on own events (figures and assessment);
- instalments collected by the Parent (which also acts as a servicer) are reallocated daily to the Vehicle's "collection account" and accounted for by the Parent as follows:
  - collection of principal from borrower is recognised as an offsetting entry to the reduction in the loan to the borrower;
  - reallocation of principal to the Vehicle is recognised as an offsetting entry to the recognition of a loan to the Vehicle; this loan is paid off upon

repayment of the subordinated loan;
  - interest received by borrower is recognized as an offsetting entry to account 10 “Interest income: loans to customers” (interest on loans continues to be recognised on an accrual basis);
  - reallocation of interest to the Vehicle is recognised as an offsetting entry to the recognition of a loan to the Vehicle;
  - this loan is paid off upon collection of the receive leg of the Cover Pool Swap.
- the Vehicle “MPS Covered Bond S.r.l.” is invested in by the Parent Company for a control stake of 90%, recognised under account 100 “Equity investments” and included in the Group’s consolidated financial statements under the comprehensive approach;
- the vehicle “MPS Covered Bond 2 S.r.l.” is invested in by the Parent company for a control stake of 90%, recognised under Account 100 “Equity investments” and included in the Group’s consolidated financial statements under the comprehensive approach;
- bonds issued are posted to Account 30 “debt securities in issue” on the liabilities side, and related interest expense is recognized on an accrual basis.

The following tables report the Group’s overall exposures in securitisations.

Quantitative disclosure

Tab. 11.1.1 – Exposures securitised by the MPS Group

Type of Assets / Exposures securitised	Exposure net	Exposure of which impaired	Losses for the period
RMBS	**4,962,348**	**83,032**	**-**
Non-performing loans	-	-	-
	-	-	-
Mortgages	4,962,348	83,032	-
Casaforte Srl (Banca MPS)	1,269,567	-	-
Siena Mortgages 10 - 7 (Banca MPS)	1,899,546	67,906	
Siena PMI 2015 Srl	1,793,235	15,126	
ABS	**348,564**	**74,197**	**-**
Consumer Credit	348,564	74,197	-
Siena Consumer 2015	*348,564*	*74,197*	
CDO	**-**	**-**	**-**
Bonds and credit derivatives	-	-	-
Gonzaga Finance (Bam)	-	-	-
Total as at 31/12/2017	**5,310,912**	**157,229**	**-**
Total as at 31/12/2016	**6,089,247**	**127,344**	**-**

Reported below are the assets underlying the securitizations originated by the Bank, included in the Banking Book and Trading Book. These securitizations involve total derecognition of underlying assets from an accounting viewpoint, with the exception of Siena Mortgages 10 – 7, Siena PMI 2015 Srl, and Siena Consumer 2015.
The Group has not issued any synthetic securitizations so far.

The following tables report the Group's overall exposures in on- and off-balance sheet securitisations broken down by banking and Trading book and by type of securities.

The tables refer to exposures used for prudential supervisory reporting purposes and include securitised exposures that are not recognised for the purpose of capital requirement calculation. In this latter case, capital requirements are calculated having regard to the securitised assets and not to the corresponding exposure.

Tab. 11.1.2 – Total Securitised Exposures by type of Securities(*) (On and Off-Balance sheet)

	Securitisations		Total
	of third parties	own	
1. Balance-sheet exposures	**989,735**	**273,339**	**1,263,074**
Banking book	**2,821**	**-**	**2,821**
CMO	2,821	-	2,821
CDO	-	-	-
Regulatory Trading book	**986,915**	**273,339**	**1,260,254**
CDO	-	82,992	82,992
CMO	986,915	190,346	1,177,261
2. Off-balance-sheet exposures	-	-	-
Total as at 31/12/2017	**989,735**	**273,339**	**1,263,074**
Total as at 31/12/2016	**1,037,885**	**116,436**	**1,153,690**

(*) *Asset types are defined in the Glossary.*

Tab. 11.1.3 – Own securitised exposures by type of securities and underlying assets – Banking Book

	Junior	Mezzanine	Senior	Total
CMO	**2,821**	**-**	**-**	**2,821**
Mortgages	2,821	-	-	2,821
Total as at 31/12/2017	**2,821**	**-**	**-**	**2,821**
Total as at 31/12/2016	**632**	**-**	**-**	**632**

The shown exposures are not included in the calculation of prudential requirements reported in Tables 11.1.8 and 11.1.9.

Tab. 11.1.4 – Third-party securitised exposures by type of securities and underlying assets – Banking Book

	Junior	Mezzanine	Senior	Total
CDO	-	-	-	-
Bond	-	-		-
CLO	-	-	-	-
Mortgages	-	-	-	-
Total as at 31/12/2017	**-**	**-**	**-**	**-**
Total as at 31/12/2016	**-**	**-**	**-**	**-**

Tab. 11.1.5 – Own securitised exposures by type of Securities and underlying assets – Trading Book

	Junior	Mezzanine	Senior	Total
CMO	**-**	**136,495**	**850,420**	**986,915**
Commercial mortgages	-	136,495	850,420	986,915
Total as at 31/12/2017	**-**	**136,495**	**850,420**	**986,915**
Total as at 31/12/2016	**-**	**131,327**	**905,926**	**1,037,253**

The shown exposures are not included in the calculation of prudential requirements reported in Tables 11.1.10 and 11.1.11.

Tab. 11.1.6 – Third-party securitised exposures by type of Securities and underlying assets – Trading Book

	Junior	Mezzanine	Senior	Total
CDO	**4,065**	**27,859**	**51,068**	**82,992**
Consumer loans	-	22,350	2,500	24,850
Utility	-	4,646	46,480	51,126
Leasing	4,065	864	2,088	7,017
CMO	**-**	**23,572**	**166,774**	**190,346**
Residential mortgages	-	17,117	134,572	151,688
Commercial mortgages	-	6,456	32,202	38,658
Total as at 31/12/2017	**4,065**	**51,432**	**217,842**	**273,339**
Total as at 31/12/2016	**5,004**	**31,734**	**79,699**	**116,436**

Tab. 11.1.7 – Total securitised exposures by Banking/Trading and related capital requirements (standard approach)

Type	Exposure	Requirement
Banking Book	79,573	621
of which Standardised Approach	-	-
of which AIRB Approach	*79,573*	*621*
Regulatory Trading Book	273,339	11,778
Total as at 31/12/2017	**352,912**	**12,399**
Total as at 31/12/2016	**153,826**	**5,353**

The tables refer to securitised exposures (own and third-party securitisations), broken down by Banking or Trading book subject to the standard approach and related capital requirements. The tables do not include exposures whose requirements are calculated on the basis of their underlying assets. The risk weighting factors provided for by regulations are applied in this latter case and such exposures are included in the regulatory portfolios of Table 5.2.2 Exposures in own and third-party securitisations and re-securitisations are not credit risk mitigated through CRM techniques such as those included in Table 5.5.1 and 5.2.2. The exposures broken down by Banking or Trading book, type of securitisation and weight band are reported in the tables below.

Tab. 11.1.8 – Securitised exposures by risk weight bands – Banking Book

	Risk weight band							
Type	0%	20%	50%	100%	225%	650% 1250%	1250% No Rating	Total
Own Securitisations	-	-	-	-	-	-	-	-
Third-party Securitisations	-	-	-	-	-	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-
Total as at 31/12/2017	-	-	-	-	-	-	-	-
Total as at 31/12/2016	-	-	-	-	-	-	-	-

The table above details the securitised exposures by risk weight bands and type of transactions. The amounts shown, in line with prudential regulations, relate to own and third-party securitised exposures included in the banking book. Therefore, they do not include the securitised exposures included in the regulatory trading book, detailed in the following tab. 11.1.10. Moreover, as far as own securitisations are concerned, in compliance with supervisory regulations, the table does not include securitised exposures:

a) that refer to transactions that are not recognised as securitisations for prudential supervisory purposes, since, among other reasons, they do not entail the actual transfer of credit risk;

b) whose overall risk-weighted value to the same securitisation exceeds the risk-weighted value of underlying securitised assets, calculated as if they had not been securitised (cap test).

Both in the case of a) and b), capital requirements are calculated in relation to securitised assets and not to the corresponding exposures securitised. Moreover, in this case, securitized assets are classified in their original regulatory classes (exposures secured by real estate, etc.) and are therefore excluded from "Securitisations".

Tab. 11.1.9 – Capital requirements of securitised exposures by risk weight bands – Banking Book

Type	Risk weight band 0%	20%	50%	100%	225%	650% 1250%	1250% No Rating	Total
Own Securitisations	-	-	-	-	-	-	-	-
Third-party Securitisations	-	-	-	-	-	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-
Total as at 31/12/2017	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total as at 31/12/2016	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Tab. 11.1.10 – Securitised exposures by risk weight bands – Trading Book

Type	Risk weight band 20%	50%	100%	225%	350%	650% 1250%	1250% No Rating	Total
Own Securitisations	-	-	-	-	-	-	-	-
Third-party Securitisations	153,484	44,788	67,439	7,628	-	-	-	273,339
Re-securitisation	-	-	-	-	-	-	-	-
Total as at 31/12/2017	**153,484**	**44,788**	**67,439**	**7,628**	**-**	**-**	**-**	**273,339**
Total as at 31/12/2016	**49,667**	**33,620**	**33,140**	**-**	**-**	**9**	**-**	**116,436**

The table above details the exposures securitised by risk weight bands and by type of transactions. The amounts shown relate to own and third-party securitised exposures included in the regulatory trading book.

Tab. 11.1.11 – Capital requirements of securitised exposures by risk weight bands – Trading Book

Type	Risk weight band 20%	50%	100%	225%	350%	650% 1250%	1250% No Rating	Total
Own Securitisations	-	-	-	-	-	-	-	-
Third-party Securitisations	2,456	1,792	5,395	-	-	-	-	11,778
Re-securitisation	-	-	-	-	-	-	-	-
Total as at 31/12/2017	**2,456**	**1,792**	**5,395**	**-**	**-**	**-**	**-**	**11,778**
Total as at 31/12/2016	**795**	**1,345**	**2,651**	**-**	**-**	**9**	**-**	**4,800**

12. Operational Risk

12.1 Operational Risk: general disclosure

The Montepaschi Group has implemented an integrated risk management system on the basis of a governance model which involves all the companies of the Montepaschi Group included in the scope of application. The approach defines the standards, methods and instruments that make it possible to measure risk exposure and the effects of mitigation by business area.

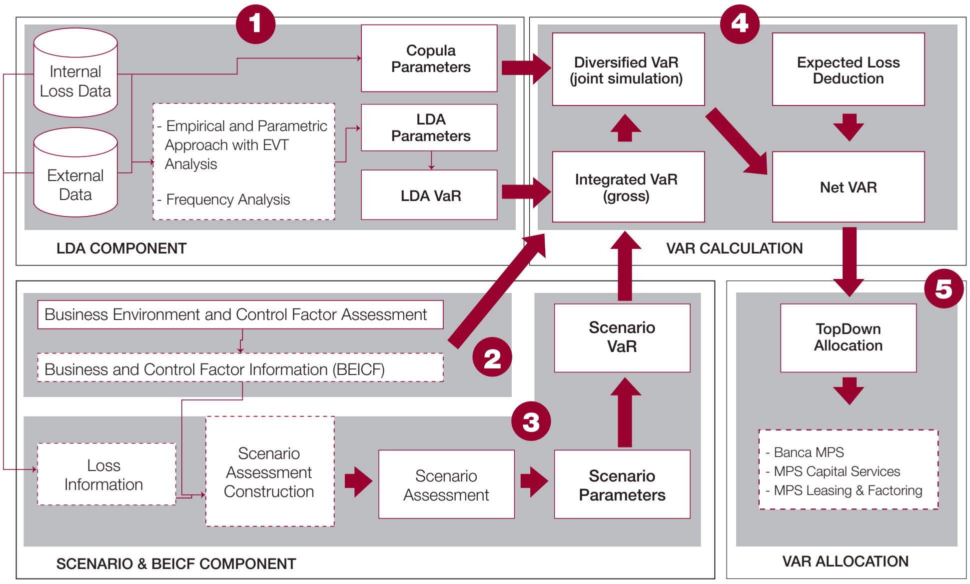
The Montepaschi Group was authorized by the Bank of Italy on 12 June 2008 to use the internal advanced measurement approach (AMA) for the calculation of capital requirements for operational risks. The advanced model officially started operating on 1 January 2008. The first consolidated regulatory reporting on the basis of the model was prepared in relation to the results as at 30 June 2008.

All the domestic banking and financial components are incorporated in the scope of advanced measurement approach (AMA). For remaining components and foreign companies, the foundation model has been adopted.

Today's internal model coverage in terms of total banking income exceeds 95%. The advanced approach adopted by the Montepaschi Group is designed so as to homogeneously combine all the main qualitative and quantitative information (or data) sources (mixed LDA-Scenario model). The quantitative loss Distribution Approach component is based on the statistical collection, analysis and modelling of internal and external historical loss data (Italian Database of Operational Losses, DIPO). The model includes calculation in relation to the 7 categories of events established by Basel 2 used as risk classes, with the adoption of Extreme Value Theory techniques. The estimated frequency of occurrence is based exclusively on internal data.

The qualitative component focuses on the evaluation of the risk profile of each unit and is based on the identification of relevant scenarios. In this framework, the companies are involved in process and risk identification, risk evaluation by process managers, identification of possible mitigation plans, discussion (in scenario-sharing sessions) of priorities and technical-economic feasibility of mitigation actions with the H.O. units.

Despite having insurance coverage to mitigate operational risk, the MPS Group does not use insurance for the mitigation of risk in the calculation of capital requirements since this has not yet been authorized by the supervisor. As of 30 June 2017, the Advanced Measurement Model was changed to increase the historical depth of internal loss data from 5 to 10 years and to introduce the scaling of external data in order to discourage unexpected requirement fluctuations.



Finally, the percentage breakdown of events and operational losses recorded in 2017 is reported, divided into the following risk classes:

- Internal fraud: losses arising from unauthorised activities, fraud, embezzlement or violation of laws, regulations or corporate directives that involve at least one internal resource of the Group;
- External fraud: losses due to fraud, embezzlement or violation of laws by subjects external to the Group;
- Employment relationships and Occupational safety: losses arising from actions in breach of employment, occupational health and safety laws and agreements, payment of compensation for personal injury or episodes of discrimination or failure to apply equal treatment;
- Customers, products and operating practices: losses arising from non-fulfilment of professional obligations with customers or from the nature and characteristics of the product or service provided;
- Property damage: losses arising from external events, including natural disasters, acts of terrorism or vandalism;
- Business disruptions and system failures: losses due to business disruption or system failures or interruption;
- Process management, execution and delivery: losses arising from operational and process management shortfalls, as well from transactions with business counterparties, vendors and suppliers.

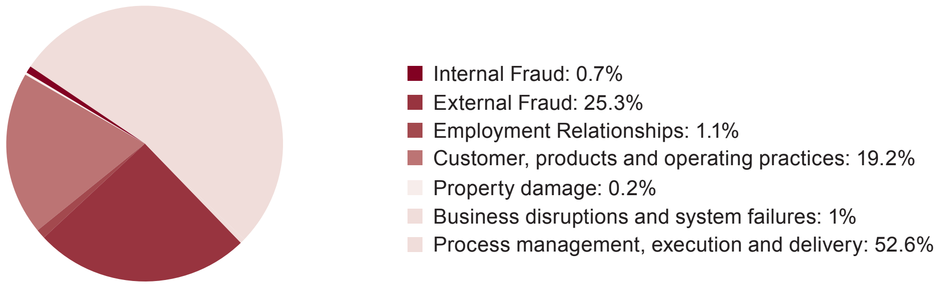
As at 31 December 2017, the number of operational risk events was down as compared to December 2016, while operational losses rose as a result of disputes with customers.

The types of event with the greatest impact on the income statement remain attributable to non-fulfilment of professional obligations with customers (under “Customers, products and operating practices”: approximately 64% of the total) and operational and process management shortfalls (under “Process management, execution and delivery”: 11% of the total).

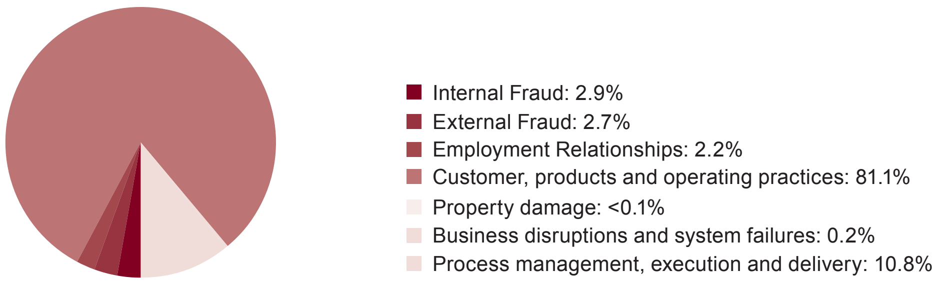
With regard to “non-fulfilment of professional obligations with customers”, risk events are mainly associated with disputes for past share capital increases and claims due to the application of compound interest.

For further information, please refer to the **Notes to the Consoldiated Financial Statements** - *Part E – Information on risks and hedging policies – Section 4 – Operating Risks*.

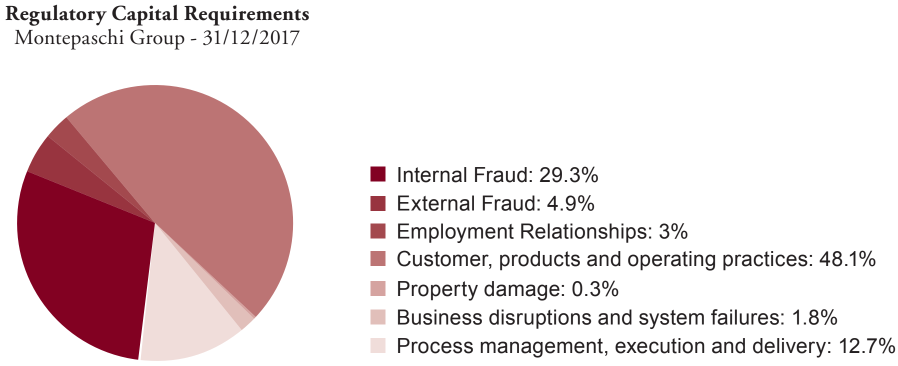
Events breakdown
Montepaschi Group - 31/12/2017



Losses breakdown
Montepaschi Group - 31/12/2017



The graph below shows the breakdown of regulatory requirements by class of risk:



The Regulatory Requirement as at 31 December 2017 was up slightly compared to the requirement of December 2016, primarily as a result of the developments in the models enacted as at 30 June 2017. The breakdown of operational losses clearly differs from the breakdown of capital in that the latter is calculated using a 10-year time series and the incidence of the unexpected loss component prevails.

Quantitative Disclosure

Tab. 12 – Capital requirements for Operational Risk

Requirements by Approach	dec-2017	dec-2016
Foundation Approach	11,936	15,234
Standardised Approach	-	-
Advanced Measurements Approach	788,987	662,827
Total Operational Risk	**800,923**	**678,061**

Statement of the Chief Executive Officer pursuant to art. 435, e) and f) and Art. 431, paragraph 3, paragraph 1 of Regulation (EU) no. 575/2013 of 26-06-2013

By mandate of the Board of Directors of Banca Monte dei Paschi di Siena S.p.A and pursuant to art. 435, e) and f) and Art. 431, paragraph 3, paragraph 1 of Regulation (EU) no. 575/2013 of 26-06-2013, the Chief Executive Officer, Marco Morelli, declares that:

a) the risk management systems put in place by the Parent Company and described in the document "Pillar 3 Disclosure: update as at 31 December 2016" are in line with the Banking institution's profile and strategy;
b) the section, "Executive Summary", of the same document provides a summary description of the Montepaschi Group's overall risk profile in relation to the company strategy adopted;
c) the process of preparing and auditing the Pillar 3 public disclosure complies with the internal control procedures and processes approved by the Board of Directors.

Siena, 1 March 2018

Marco Morelli
Chief Executive Officer

Declaration of the Financial Reporting Officer

Pursuant to para. 2, article 154-bis of the Consolidated Law on Banking, the Financial Reporting Officer, Mr. Nicola Massimo Clarelli, declares that the accounting information contained in this document corresponds to the underlying documentary evidence and accounting records.

Siena, 1 March 2018

Nicola Massimo Clarelli

Financial Reporting Officer

Nicola Massimo Clarelli

List of Tables

Appendix 1: Summary of Information published in line with CRR requirements

CRR Article		*Annual Report 2017 Location*
Art. 431 - *Scope of disclosure requirements*	*Par.1; 2 ;3; 4*	**Introduction**
Art. 432 - *Non-material, proprietary or confidential information*		**Introduction**
Art. 433 - *Frequency of disclosure*		**Introduction**
Art. 434 - *Means of disclosures*		**Introduction**
Art. 435 - *Risk management objectives and policies*	*Par.1*	**Chapter 1** - Risk management objectives and policies
	Par.2	**Introduction:** reference to the link: https://www.gruppomps.it/en/corporate-governance/corporate-governance-report.html
Art. 436 - *Scope of application*	*Par. a; b; c; d; e*	**Chapter 2** - Scope of application
Art. 437- *Own funds*	*Par.a*	**Chapter 3** - Own Funds - Tab. 3.2; Tab. 3.3
	Par. b	**Chapter 3** - Own Funds - Features of CET1, AT1 and T2 instruments (pp. 54-55)
	Par. c	n.a.
	Par. d	**Chapter 3** - Own Funds - Tab. 3.1.1/3.1.2/3.1.3/3.1.4 (pp. 56-59)
	Par. e/f	**Chapter 3** - Own Funds (pp. 54-55) Reference to the section F of Notes - Financial **Statement**
		2. Reference to section F of Notes-Financial Statement, **2.2** Own Funds (pp.54-55)
Art. 438 - *Capital requirement*	*Par. a*	**Chapter 4** - Capital requirements, liquidity ratios and leverage (pp. 62-65)
	Par. b	**1. Executive Summary;** **2. Chapter 4** - Capital requirements, liquidity ratios and leverage (pp. 62-65)
	Par. c; d	**Chapter 4** - Capital requirements, liquidity ratios and leverage (pp. 68-69)
	Par. e; f	**Chapter 4** - Capital requirements, liquidity ratios and leverage (Tab. 4)
	Slotting criteria	**Chapter 4** - Capital requirements, liquidity ratios and leverage (Tab. 4.3)
Art. 439 - *Exposure to counterparty credit risk*	*Par. a; b; c; d; e; f; g; h; i*	**1. Chapter 6** - Counterparty risk; **2. Reference to the section E of Notes** - Financial Statement
Art. 440 - *Capital buffers*	*Par.a;*	**Chapter 4** - Section: minimum capital requirements (pp. 73-73)(Tab. 4.6.2/4.6.3)
	Par. b	**1. Executive Summary** (pp. 11-14); **2. Chapter 4** - Section countercyclical capital buffer: (pp. 71)(Tab. 4.6.1)
Art. 441 - *Indicators of global systemic importance*		With an overall exposure valid for the purpose of calculating the financial leverage of less than € 200 billion as at 31.12.2017, BMPS is not included in the list of banks subject to publication of systemic importance indicators as defined by the EBA.
Art. 442 - *Credit risk adjustments*	*Par. a; b; c*	**Chapter 5.4** - regulatory overview Tab. 5.4.1
	Par. d; e; f; g; h; i;	**2. Reference to the section E and A of Notes** - Financial Statement (pp. 139)
	Par. e	**Chapter 5.3** - Credit risk: AIRB approach -Tab. 5.3.1 – IRB Approach: Summary of Exposures, RWAs, expected and actual losses (pp. 117)
Art. 443 - *Unencumbered assets*		**Chapter 10** - Encumbered and unencumbered assets (pp. 172)
Art. 444 - *Use of ECAIs*	*Par.a; b; c; d*	**Chapter 5.2** - Credit risk: Standard approach (pp. 93-94)
	par. e	**Chapter 5.2** - Credit risk: Standard approach (Tab. 5.2.1; Tab. 5.2.2; pp. 95-96)
Art. 445 - *Exposure to market risk*		**Chapter 4** - Capital requirements, liquidity ratios and leverage (Tab. 4; Tab.4.4) pp. 70

Appendix 1: Summary of Information published in line with CRR requirements

CRR Article		Annual Report 2017 Location
Art. 446 - *Operational risk*		**1. Chapter 12** - Operational risk **2. Reference to the section E of Notes** - Financial Statement
Art. 447 - *Exposures in equities not included in the trading book*		**Chapter 9** - Exposures in equities not included in the Trading book
Art. 448 - *Exposure to interest rate risk on positions not included in the trading book*		**1. Chapter 8** - Exposure to interest rate risk on positions not included in the Trading book **2. Reference to 2.1 of the section E of Notes** - Financial Statement
Art. 449 - *Exposure to securitisation positions*	*par. a; b; d; e; f; g ; i;*	**Chapter 11** - Exposures to securitisation transactions: General information
	par. c	**Chapter 11** - Section 11.1 - Quantitative disclosure Tab.11.1.1 (pp. 195)
	par. h; k; l	**Chapter 11** - Section "Methods for calculating risk weighted exposures"
	par. j	**Chapter 11** - Section "Accounting policies"
	par. m	**Chapter 11** - Section 11.1 - Quantitative disclosure
	par. n	**Chapter 11** - Section 11.1 - Quantitative disclosure - Tab. 11.1.3/ 11.1.4/11.1.5/11.1.6
	par.o	**Chapter 11** - Section 11.1 - Quantitative disclosure - Tab. 11.1.9/11.1.10/11.1.11
	par. p	**Chapter 11** - Section 11.1 - Quantitative disclosure - Tab. 11.1.1
	par. q	**Chapter 11** - Section 11.1 - Quantitative disclosure - Tab. 11.1.5
	par. r	**Chapter 11** - Section "Accounting policies"
Art. 450 -*Remuneration Policy*		**Introduction** - reference to BMPS website *https://www.gruppomps.it/corporate-governance/remunerazione.html*
Art. 451 - *Leverage*		**Chapter 4** - Capital requirements, liquidity ratios and leverage pp. 77
Art. 452 - *Use of the IRB Approach to credit risk*	*Par. a; b; c;*	**Chapter 5.3** - Credit risk: use of the AIRB approach (pp. 98-116)
	Par. c;	**Chapter 5.5** - Credit risk: use of risk mitigation techniques (pp. 142-146)
	Par. d; e; f;	**Chapter 5.3** -Tab 5.3.1; from Tab.5.3.2 till Tab 5.3.10 (pp. 117-126)
	Par. g	**Chapter 5.4** - Tab. 5.4.1 (pp. 140)
	Par. h	**Chapter 5.3** - Section "Comparison between expected loss and actual loss"; Backtesting (pp. 129-131)
	Par. i	**Chapter 5.3** - Section "Comparison between expected loss and actual loss"; tab.5.3.13;
	Par. j	**Chapter 5.3** - pp. 127-128 (tab. 5.3.11 e 5.3.12)
Art. 453 - *Use of credit risk mitigation techniques*		**Chapter 5.5** - Credit risk: use of risk mitigation techniques (Tab.5.5.1; 5.5.2) pp. 141-148
Art. 454 - *Use of the Advanced Measurement Approaches to operational risk*		**1. Chapter 12** - Operational risk **2. Reference to the Section E of Notes** - Financial Statements
Art. 455 - *Use of Internal Market Risk Models*		**Introduction:** It should be noted that the Group does not use the advanced methods for market risk and does not provide information in this regard (please refer to page 9).

Appendix 2 - Details of Information provided in compliance with EBA Guidelines GL 11/2016

Guidelines on disclosure requirements EBA/GL/2016/11		Pillar 3 - 2017	
OV1	Overview of RWAs	4. Capital requirements, liquidity ratios and leverage	tab.4b
LI1	Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories	2. Scope of application	tab.2.2
LI2	Main sources of differences between regulatory exposure amounts and carrying values in financial statements	n.a.	
LI3	Outline of the differences in the scopes of consolidation (entity by entity)	2. Scope of application	tab.2.1
INS1	Non-deducted participations in insurance undertakings	4. Capital requirements, liquidity ratios and leverage	tab 4.6
EU CRB-B	Total and average net amount of exposures	5.1 Credit Risk: general disclosure	tab 5.1.4
EU CRB-C	Geographical breakdown of exposures	5.1 Credit Risk: general disclosure	tab 5.1.5
EU CRB-D	Concentration of exposures by industry or counterparty types	n.a	
EU CRB-E	Maturity of exposures	5.1 Credit Risk: general disclosure	tab 5.1.6
EU CR1-A	Credit quality of exposures by exposure class and instrument	5.1 Credit Risk: general disclosure	tab 5.1.7
EU CR1-B	Credit quality of exposures by industry or counterparty types	table B.2 in the Consolidated Financial Statement	
EU CR1-C	Credit quality of exposures by geography	n.a	
EU CR1-D	Ageing of past-due exposures	5.1 Credit Risk: general disclosure	tab 5.1.8
EU CR1-E	Non-performing and forborne exposures	5.1 Credit Risk: general disclosure	tab 5.1.9
EU CR2-A	Changes in the stock of general and specific credit risk adjustments	5.1 Credit Risk: general disclosure	tab 5.1.10
EU CR2-B	EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities	table A.1.4 and A.1.7 in the Consolidated Financial Statement	
EU CR3	CRM techniques – Overview	5.5 Credit Risk: use of risk mitigation techniques	tab. 5.5.3
EU CR4	Standardised approach – Credit risk exposure and CRM effects	5.5 Credit Risk: use of risk mitigation techniques	tab. 5.5.4
EU CR5	Standardised approach	5.2 Credit Risk: Standard approach	tab 5.2.3
EU CR6	IRB approach – Credit risk exposures by exposure class and PD range	5.3 Credit Risk: use of the AIRB approach	tab.5.3.4-tab.5.3.10
EU CR7	IRB approach – Effect on the RWAs of credit derivatives used as CRM techniques	n.s	
EU CR8	RWA flow statements of credit risk exposures under the IRB approach	5.1 Credit Risk: general disclosure	tab 5.1.3

Appendix 2 - Details of Information provided in compliance with EBA Guidelines GL 11/2016

Guidelines on disclosure requirements EBA/GL/2016/11		Pillar 3 - 2017	
EU CR9	IRB approach – Backtesting of PD per exposure class	5.3 Credit Risk: use of the AIRB approach	pp. 132-134
EU CR10	IRB (specialised lending and equities)	5.3 Credit Risk: use of the AIRB approach	tab 5.3.3
EU CCR1	Analysis of CCR exposure by approach	6.1 Counterparty Risk: general disclosure	tab 6.1.7
EU CCR2	CVA capital charge	6.1 Counterparty Risk: general disclosure	tab 6.1.5
EU CCR3	Standardised approach – CCR exposures by regulatory portfolio and risk	6.1 Counterparty Risk: general disclosure	tab 6.1.8
EU CCR4	IRB approach – CCR exposures by portfolio and PD scale	n.a	
EU CCR5-A	Impact of netting and collateral held on exposure values	6.1 Counterparty Risk: general disclosure	tab 6.1.2
EU CCR5-B	Composition of collateral for exposures to CCR	6.1 Counterparty Risk: general disclosure	tab 6.1.6
EU CCR6	Credit derivatives exposures	6.1 Counterparty Risk: general disclosure	tab 6.1.4
EU CCR7	RWA flow statements of CCR exposures under the IMM	n.a.	
EU CCR8	Exposures to CCPs	6.1 Counterparty Risk: general disclosure	tab 6.1.9
EU MR1	Market risk under the standardised approach	7.1 Trading Book Market Risk: general disclosure	tab. 7
EU MR2-A	Market risk under the IMA	n.a.	
EU MR2-B	RWA flow statements of market risk exposures under the IMA	n.a.	
EU MR3	IMA values for trading portfolios	n.a.	
EU MR4	Comparison of VaR estimates with gains/losses	n.a.	

n.a. *Not applicable as Montepaschi Group adopts the standardized approach to calculate capital requirements for market risk*
n.s. *Not significant as Montepaschi Group does not have credit exposures hedged with credit derivatives, which are valid for the purpose of risk mitigation techniques*
n.a. *Not available*

Glossary

ABS (Asset Backed Securities): Financial Securities whose coupon yield and redemption are guaranteed by a pool of assets (collateral) of the issuer (usually a Special Purpose Vehicle), exclusively intended to ensure satisfaction of the rights attached to said financial securities. Typically, thy are broken down into RMBS and CMBS.

AFS (Available For Sale): IAS category used to classify the assets available for sale.

AIRB (Advanced Internal Rating Based): advanced internal models used to calculate capital requirements for credit and counterparty risk within the Basel 2 and Basel 3international framework. They differ from the FIRB models since with the AIRB approach, the banks uses its own internal estimates for all inputs. See also PD, LGD, EAD.

ALM (Asset & Liability Management): the set of risk management models and techniques applied to the Banking Book for the purpose of measuring interest rate risk and liquidity risk.
See also Banking Book, Interest Rate Sensitivity, Shift Sensitivity, Economic Value Approach.

AMA (Advanced Measurement Appro-ach): advanced internal models used to calculate capital requirements for operational risk within the Basel 2 and Basel 3 international framework. The approach involves the measurement of capital requirements by the bank through calculation models based on operational loss data and other valuation elements the bank collects and processes.

AT1 (Additional Tier 1): Additional Tier 1 Capital consists of equity instruments other than ordinary shares (calculated in CET1) that meet the conditions for inclusion in Tier 1 capital net of deductions of class 1 items. The latter mainly relate to instruments held in financial entities with significant investments and not to cross-shareholdings.

Banking Book: in accordance with International best practices, the term “banking book” refers to all of the non-trading operations of the Bank in relation to the transformation of maturities with respect to balance-sheet assets and liabilities, Treasury, foreign branches and hedging derivatives. The interest rate, liquidity and forex risk of the Banking Book are typically measured trough Asset & Liability Management (ALM) models. See Regulatory Banking Book.

Basel 1: the regulations relating to the application of Minimum Capital Requirements issued by the Basel Committee in 1988.

Basel 2: the regulations relating to the application of the New Capital Accord issued by the Basel Committee in 2006.

Basel 3: a set of reforms that has been introduced by the Basel Committee as of 2010 to strengthen regulations concerning capital and liquidity and thereby increase the resilience of the banking sector. The reforms are aimed at increasing the banking system's capacity to absorb shocks arising from financial and economic stress, whatever their origin, and reduce the risk of contagion from the financial sector to the real economy. Implemented within the Community by the "CRR", Regulation (EU) No 575/2013 and "CRD IV", Directive 2013/36/EU.

BCU: Business Control Unit. Local, first-level risk management functions, located within the areas / business units (BUs).

BP (basis point): one hundredth of a percentage point, ie. 1bp = 0.01% = 0.0001.

BU: Business Unit.

Capital Requirements: the sum of capital, calculated according to supervisory regulations, destined to cover the single risks of the First Pillar in compliance with the supervisory framework.

Overall Internal Capital: (or Overall Absorbed Capital) is the minimum amount of capital resources required to cover economic losses resulting from unforeseen events caused by the simultaneous exposure to different types of risk. In addition to Pillar 1 regulatory requirements for Credit and Counterparty Risk (which already include those relating to Issuer Risk in the Banking Book, Equity Investment Risk and Real Estate Risk) and for Operational Risk, internal operational models relating to Market Risk, Interest Rate Risk in the Banking Book, Concentration Risk and Strategic Risk are also added. Overall Internal Capital is calculated without considering inter-risk diversification and includes the input from each individual risk.

CCF: Credit Conversion Factor.

CDS (Credit Default Swap): An agreement whereby, upon payment of a premium, one party transfers to another party the credit risk attached to a loan or security, in the event of a loan default by the debtor.

CDO (Collateralized Debt Obligation): Securities issued based on differentiated risk classes with various tranches following the securitisation of a portfolio of debt instruments embedding a credit risk. Typically characterised by financial leverage.

ABS CDO: CDOs whose underlying asset portfolio primarily consists of Asset-Backed Securities.

Corporate customers: customer segment consisting of medium- and large-sized companies (mid corporate, large corporate).

Retail customers: customer segment primarily consisting of consumers, professionals, shop-keepers and artisans.

CMBS: Commercial Mortgage Backed Securities.

Prudential Ratios: Regulatory ratios which relate different types of capital to risk-weighted assets (RWAs). *See also* CET1 capital ratio, Tier 1 Capital Ratio, Total Capital Ratio.

Common Equity Tier 1 (CET1) Capital Ratio: the ratio between CET1 and total RWA.

Confidence level: level of probability linked to a risk measurements (e.g. VaR).

Counterparty Risk: Counterparty risk is the risk that the counterparty in a specific financial transaction is in default prior to settlement. Counterparty Risk is associated with certain, specifically-identified types of transactions, which: 1) generate an exposure that is equal to their positive fair value; 2) have a market value which evolves over time depending on underlying market variables; 3) generate an exchange of payments or an exchange of financial instruments or goods against payment. The categories of transactions subject to counterparty risk are:

- credit and financial derivative instruments traded Over the Counter (OTC);
- Securities Financing Transactions (SFT);
- Long Settlement Transactions (LST).

Covered bond: Special bank bond that, in addition to the guarantee of the issuing bank, is also backed by a portfolio of mortgage loans or ther high-quality loans sold to a special purpose vehicle.

CRD IV (Capital Requirements Directive IV): Directive 2013/36/EU of the European Parliament and of the Council of the 26 June 2013, on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

CRR (Capital Requirements Regulation): Regulation (EU) No 575/2013 of the European Parliament and of the Council of the 26 June 2013, on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

Credit derivatives: Derivative contracts for the transfer of credit risks. These products allow investors to perform arbitrage and/or hedging on the credit market, , to acquire credit exposures of varying maturities and intensities, to modify the risk profile of a portfolio and to separate credit risks from other market risks.

Credit Risk: the risk that a debtor may default on his obligations, either at maturity or subsequently. Credit Risk is associated with an unexpected change in creditworthiness of a responsable party – towards whom there is an exposure – which generates a corresponding unexpected change in the value of the credit position.

CRM (Credit Risk Mitigation): set of credit risk mitigation techniques recognised for supervisory purposes (e.g., compensation of accounts in balance sheet, personal guarantees, credit derivatives, financial collaterals), for which the following eligibility requirements apply - legal, economic and organisational - for the purpose of reducing risk.

Cure Rate: the rate with which impaired loan positions return to performing status.

Default, credit exposures: these include nonperforming loans, watchlist loans, restructured loans and past-due.

Default status: state of insolvency or delinquency of a debtor. Declared inability to honour one's debt and/or make the relevant interest payments.

Deferred Tax Assets (DTA): the amounts of income taxes payable in future periods in respect of taxable temporary differences between the carrying amount of an asset or liability and its tax base.

Deferred Tax Assets (DTA) that rely on future profitability: deferred tax assets, the future value of which may be realised in the event the institution generates taxable profit in the future. They are divided between DTAs arising from temporary differences and DTAs not arising from temporary differences (eg. Tax losses).

Delta EL: *see* Surplus of expected loss value over the value of net provisions.

DIPO: Database Italiano Perdite Operative. The Italian Database of Operational Losses. Database used for operational risk.

Diversification: benefit arising from the simultaneous holding of financial instruments which depend upon risk factors not perfectly matched. In the case of VaR, this corresponds to the correlation effect among risk factors on the overall VaR value.

EAD: *see* Exposure-at-Default.

ECA: Export Credit Agency.

ECAI (External Credit Assessment Institution): External Credit Assessment Institution (Rating Agencies).

Economic Capital: the capital needed to deal with any loss in value generated by unexpected changes in conditions, internal or external, as a consequence of risk. It is calculated on the basis of risk measurement models developed by the Risk Management area. In general, it is obtained on the basis of a consistent transformation in terms of holding period and confidence interval of VaR measurements calculated for individual risk factors and appropriately diversified. The confidence interval is a function of the bank's objective rating. The Economic Capital is the internal estimation of capital needed to deal with risk that is the necessary operational equivalent of Capital Requirements (Regulatory Capital).

Economic Value approach: measure of the changes in the Banking Book overall net current value (defined as the difference between the current value of assets, the current value of liabilities and the value of hedging derivatives) in the presence of different alternative interest rate scenarios. The focus is placed on the changes in the net current economic value of the Bank and takes account of all maturities of assets, liabilities and off-balance-sheet items existing at the time of each valuation. It is typically measured with shift sensitivity assumptions. See also AL M, Banking Book, Interest Rate Sensitivity, Shift Sensitivity.

Expected Loss (EL): the total amount of net losses which, on average, the bank can expect (estimate) to incur in the 12 month period following the date of reference on the total amount of performing loans in the portfolio upon measurement. Estimated ex-ante as the "cost of doing business", it ought to be directly included, in terms of spread, in the pricing conditions applied to the customer and covered using an appropriate accounting provision policy. It is defined as the product of the probability of default (PD) and loss given default (LGD):

$$EL = PD \times LGD$$

The Expected Loss amount is defined as the product between EL and Exposure at Default (EAD):

$$EL\ amount = EL \times EAD$$

Exposure at Default (EAD): estimated future value of an exposure upon default of a client. EAD, for the purposes of calculating capital requirements, includes both the cash exposure and the expected usage of the endorsment exposure.

Value required in the advanced model for credit risk measurement (AIRB - “Advanced Internal Rating Base Approach”) as set out by Basel framework.

Fair Value (FV): the amount at which an asset could be bought or sold or a liability incurred or settled, in an arm’s length transaction between willing, independent parties.

FIRB (Foundation Internal Rating Based): the internal models used to calculate capital requirements for credit and counterparty risk within the international Basel 2 Accord. It differs from the AIR B approaches because, in this case, only the PD parameters are estimated by the bank.

Grandfathering: Provision to safeguard capital adequacy, whereby an old rule continues to apply to some existing situations while a new rule will apply to all future situations.

HFT (Held For Trading): IAS category used to classify trading assets and liabilities.

Holding period (hp): forward-looking length of time for which a position is held.

IAS/IFRS: the International Accounting Standards are issued by the International Accounting Standards Board (IASB). The standards issued after July 2002 are called IFRS (International Financial Reporting Standards).

ICAAP (Internal Capital Adequacy Assessment Process): it is the “Second Pillar” of Basel framework. Banks are required to adopt processes and instruments for determining the level of internal capital needed to cover any type of risk, including risks different from those covered by the total capital requirement (“First Pillar”), when assessing current and future exposure, taking into account business strategies and developments in the economic and business environment.

ILAAP (Internal Liquidity Adequacy Assessment Process): is the internal process for assessing the overall liquidity profile of an institution. The equivalent ICAAP for liquidity risk within SREP.

IMA (Internal Models Approach): method of VaR internal models for the calculation of capital requirements for market risk.

Impairment: when referred to a financial asset, a situation of impairment is identified when the book value of an asset exceeds its estimated recoverable amount.

Risk Adjusted Indicators: see Risk Adjusted Performance Measurement.

Interest Rate Sensitivity (Economic Value approach): measurement of the impact an unexpected shift (parallel or not) in the yield curves by maturity generates on the bank's economic value. It is typically used to measure the interest rate risk of the Banking Book within the Asset & Liability Management (ALM) systems. The value is obtained from calculating the variation in the current value of the real and notional cash flows of sheet assets, liabilities and off-balance items existing at a certain date when there is a variation in the yield curve (eg. +25 bp) with respect to the values of the baseline.

Investment grade: issuers or issues with a rating between AAA and BBB-.

Issuer Risk: connected to the issuer's official rating, this is the risk of decreasing portfolio value due to the unfavourable change in the issuer's credit standing up to the extreme case of default, in the buying and selling of plain vanilla or credit structured bonds, ie. purchase/selling of protection through credit derivatives.

Junior tranche: in a securitisation transaction it is the lowest-ranking tranche of the securities issued (Equity tranche), being the fi rst to bear losses that may occur in the course of the recovery of the underlying assets.

LCR (Liquidity Coverage Ratio): Liquidity regulatory ratio. It aims to strengthen the short-term resilience of the liquidity profile of the bank.

LDA (Loss Distribution Approach): model used to assess exposure to operational risk. It makes it possible to estimate the amount of expected and unexpected loss for any event/loss combination and any business line.

Leverage Ratio: indicator given by the ratio between Tier 1 and total assets introduced by Basel regulations with the objective to limit the growth of leverage in the banking sector and strengthen the risk-based requirements using a different measure based on balance sheet aggregates.

LGD (Loss-Given-Default): Tasso di perdita in caso di insolvenza (default) determinato come il rapporto tra la perdita subita su un'esposizione a causa del default di una controparte e l'importo residuo al momento del default. LGD is estimated in the form of a coefficient ranging from 0 to 1 (or in percentages) based on the following drivers: type of borrower, type of guarantee pledged, technical form of lending. This value is required within the framework of the Advanced Internal Ratings-Based Approach (AIRB) for credit risk under Basel framework. When conditioned on adverse macro-economic scenarios (or downturns), the LGD parameter is defined as "downturn LGD".

Liquidity Risk: the risk that a company will be unable to meet its payment obligations due to its inability to liquidate assets or obtain adequate funding from the market (funding liquidity risk) or due to the difficulty/impossibility of rapidly converting financial assets into cash without negatively and significantly affecting their price due to inadequate market depth or temporary market disruptions (market liquidity risk).

L&R (Loans & Receivables): IAS category used to classify credit.

LST (Long Settlement Transactions): long settlement transactions (in which a counterparty commits to delivering (receiving) a security, commodity or foreign currency against receipt (delivery) of cash payment, other financial instruments or goods with settlement upon a pre-established contractual date, later than the one determined by market practice for these types of transaction, namely five days from the transaction stipulation date.

M (Maturity): the residual life of an exposure, calculated according to prudential requirements for credit risk. For banks authorised to use internal ratings, it is explicitly considered if the advanced approach is adopted, while it is predetermined by legislation if the FIR B approach is adopted.

Margin Sensitivity: measurement of the impact which an unexpected shift (parallel or not) in the yield curve by maturity generates on the Bank's estimated one year net interest income. It is typically used to measure interest rate risk in the banking book within Asset & Liability Management (ALM) systems along with Interest Rate Sensitivity.

Mark-to-market: valuation of a position at market value, usually from the trading book. For instruments officially traded on organised markets, it corresponds daily to the market closure price. For unlisted instruments, it results from the development and the application of specifically- developed pricing functions which determine the valuation starting from the market parameters relating to the respective risk factors. It is at the basis of the calculation of P&L in the trading book.

Mark-to-model: Valuation of financial instruments on the basis of internal valuation models since publicly observable market prices or comparable approaches are not available.

Market Risk: the risk of value loss on a financial instrument or a portfolio of financial instruments, resulting from an unfavourable and unexpected change in market risk factors (interest rates, share prices, exchange rates, price of goods, indices,…). A typical risk of the trading book.

Market Value Method (former Current Value method): supervisory method used to determine counterparty risk in derivatives and the capital requirement to cover it. The current value is calculated adding the replacement cost (or intrinsic value, determined on the basis of the "mark-to-market" value of the derivative, if positive) to the future credit exposure (approximating the time value of then derivative, i.e. the probability that, in the future, the intrinsic value will increase, if positive, or convert into a credit exposure if negative); the future credit exposure is determined for all contracts, independently of the positive value of the replacement cost, multiplying the nominal value of each derivative contract by coefficients differentiated by residual maturity and type of contract.

Mezzanine tranche: in a securitisation transaction, it is the tranche ranking between junior and senior tranche. As a rule, the mezzanine tranche is broken down into 2 or more tranches with different levels of risk, subordinated one to the other. They are typically characterised by an investment grade rating.

NFIs: New Financial Instruments, issued pursuant to art. 23-sexies of Legislative Decree no. 95 of 6 July 2012, containing "Urgent measures for reviewing public spending with unchanged services for citizens and measures to strengthen the capital of undertakings in the banking sector" converted, as amended, by law no. 135 of 7 August 2012, n.135 as subsequently amended.

NSFR (Net Stable Funding Ratio): Liquidity regulatory ratio. It is defined as the ratio between the available amount of stable funding and the required amount of stable funding.
The time horizon considered for evaluating stable funding is one year. The minimum requirements of the NSFR is being defined by the EBA.

Non performing: term generally referring to loans for which payments are overdue.

Operational Risk: the risk of incurring losses due to inadequacy or failure of processes, human resources or internal systems, or as a result of external events, including legal risk. These include, among other , loss deriving from fraud, human error, business disruption, system failure, breach of contract, natural disasters.
Operational Risk includes legal risk while it does not include strategic or reputational risk (included in Pillar II of Basel).

Overall Capital Requirement (or Regulatory Capital): the sum of the capital requirements for the individual risk types (Credit, Counterparty, Market and Operational).

OTC: *see* OTC derivatives.

OTC Derivatives (Over the Counter): financial and credit derivatives traded over the counter (e.g.: swaps, forward rate agreements).

Own Funds: sum of Tier 1 (T1) and Tier 2 (T2) Capital.

Past due: *see* Default.

PD: *see* Probability of Default.

Performing: term generally referring to loans characterised by regular performance.

Regulatory Banking Book: comprises all positions that are not assigned to the Regulatory Trading Book; its definition is therefore 'residual' in nature, even though most of a retail bank's exposures are assigned to this portfolio; in general, the rules for determining the capital requirements for Credit Risk are applied to the Regulatory Banking Book. See also Banking Book.

Regulatory Trading Book: positions intentionally held for trading purposes and destined to be disposed of in the short term and/or assumed with the aim of benefitting, in the short term, from the differences between purchase and sale price, or other price or interest rate variations. It consists in a set of positions in financial instruments and commodities held for trading or to cover risk inherent in other constituent of the same portfolio. For eligibility to be included under the trading book prudential treatment, the financial instruments must be exempt from any clause which would limit their trade ability or, in alternative, fully covered. Furthermore, the positions must be frequently and accurately assessed. The trading book must be actively managed.

Private equity: activity aimed at the acquisition of equity investments and their subsequent sale to specific counterparties, without public offerings.

Preference shares: are innovative capital instruments that enjoy preferential rights in relation both to dividends (which may be cumulative or non-cumulative) and rights clearance and whose administrative rights are, as a rule, limited or subject to certain conditions of use.

Probability of Default (PD): the probability that a customer/counterparty will default within the space of 1 year. Each

PD derives from an internal ratings system and thus falls within a specific range of values corresponding to those used by the official rating agencies (masterscale) so as to obtain standardised data processing between internal and external rating systems.

Profit & Loss (P&L): operational profit or loss indicator of the Trading book which expresses the difference in value of an instrument or a portfolio in a given timeframe, calculated on the basis of market values and directly validated/listed ("mark-to-market") or determined on the basis of internally-adopted pricing models ("mark-to-model").

RAPM: cfr. Risk Adjusted Performance Measurement.

Rating: the degree of risk of non-compliance regarding a specific debtor (counterparty or issuer rating) or a single loan (issuance rating).
It is typically expressed through a qualitative assessment belonging to a calibration scale. If determined by a rating agency it becomes an "official" rating. If it is based upon internally-developed models it is called an "internal" rating. It expresses the likelihood of default or insolvency.

Risk: can be defined as an unexpected potential economic loss. Risk is an economic loss in the sense that, against the commercial initiatives undertaken, if risk emerges it always results in a loss of value in the books of the Bank. Risk is an unexpected loss and implies the need to set aside a corresponding sum of capital in order to guarantee the bank's stability and solvency over a long period. Risk is a potential loss in the sense that there may or may not be a certain confidence level (probability) in the future (forward looking) estimate and it is therefore an estimate, not a known value. Since risk is potential, it is always prospective or forward-looking. It is not the measurement of an economic effect that has already materialised.

Risk Adjusted Performance Measurement (RAPM): measurement of performance adjusted by risk. Method of measurement of profitability, which is defined as "risk adjusted" in that – on the one hand - it includes a new P&L negative component under Profit for the Year, that rises as the expected risk component increases (Expected Loss), and - on the other - replaces the "book value" capital used in the transaction with the Economic Capital.

Risk factor: the driver/variable which determines the variation in value of a financial instrument.

RMBS (Residential Mortgage Backed Securities): ABS backed by mortgages.

RWA (Risk Weighted Assets): it results from the application of certain risk weights to exposures as determined by supervisory regulations.

Securitisation Cap Test: the test undergone by all securitisation transactions recognised for prudential purposes, according to which the risk-RWAs of securitisation positions are compared with those of securitized exposures (calculated as though the latter were not securitised).
If the RWAs of the former are greater than those of the latter (cap) then the latter are taken into consideration.

Scoring: a company's customer analysis system which consists in an indicator resulting from both an analysis of book data and an assessment of the performance forecast for the sector, on the basis of statistic-based methodologies.

Senior/Super Senior tranche: it represents the tranche with the highest credit enhancement, or rather the highest level of privilege in terms of priority of remuneration and reimbursement. It has a high rating and is higher than the mezzanine tranche.

Seniority: Level of subordination regarding the repayment of notes, generally broken down (in decreasing order) into SuperSenior, Senior, Mezzanine, Junior.

Servicer: in securitisation transactions it is the subject that - on the basis of a specific servicing contract - continues to manage the securitized loans or assets after they have been transferred to the special purpose vehicle responsible for issuing the securities.

Settlement Risk: the risk that arises in transactions on securities when, after expiry of a contract, the counterparty is in default with regard to delivery of securities or payment of amounts due.

SFT (Security Financing Transactions): repos and reverse repos on securities or commodities, securities or commodities lending or borrowing transactions and margin lending transactions.

Shift Sensitivity: measurement of the impact of an unexpected and parallel shift in the yield curve upon the bank's economic value. See ALM, Banking Book, Interest Rate Sensitivity, Economic Value Approach.

SMEs: Small and Medium Enterprises.

Speculative grade: issuers or issues with a rating below BBB-.

SPE/SPV (Special Purpose Entities o Special Purpose Vehicles): established in pursuit of specific objectives, mainly to isolate financial risk. The assets consist in a portfolio, the proceeds of which are used for the servicing of bond loans issued. Typically used in asset securitisation transactions.

SREP (Supervisory Review and Evaluation Process): a supervisory review and evaluation process put in place by the Regulatory Authority. It is composed of three main elements:

- a Risk Assessment System (RAS), which assesses the level of risk and control activities of credit institutions;
- a comprehensive review of the ICAAP and ILAAP processes;
- a methodology for quantifying capital and liquidity on the basis of risk assessment results.

Stress test: a set of quantitative and qualitative techniques used by banks to assess their vulnerability to exceptional, though plausible, events.

Surplus Expected Losses on Net Provisions ("Delta PA"): the difference between expected losses and overall net value adjustments, limited to the exposures subject to internal models for credit risk; it is a component of the Own Funds.

Consolidated Banking Act (CBA): Legislative Decree no. 385 of 1 September 1993 and subsequent amendments and additions.

T1 (Tier 1): Tier 1 capital. It is the sum of CET1 and AT1.

T2 (Tier 2): Tier 2 capital. It is mainly composed of computable subordinated liabilities computable and any excess value adjustments with respect to expected losses for exposures weighted according to the AIRB approach.

Tier 1 Capital Ratio: ratio between T1 and total RWAs.

Tier Total (see Own Funds, former Regulatory Capital): sum of Tier 1 (T1) and Tier 2 (T2) capital.

Total Capital Ratio: ratio between Tier Total (Own Funds) and total RWAs.

TTC (Through-the-cycle): a rating system which uses a long-term time series and better reflects the risks relating to a borrower's specific situation. The impact of macroeconomic trends on this kind of model are limited. A "Point-in-time" rating system uses a short-term or one year time series and not only reflects information regarding the individual borrower. It produces ratings that change on the basis of systemic factors. Most internal rating models estimated by banks do not perfectly correspond to one rating system or the other but fall somewhere between the two models. They are defined as "Hybrid".

UCITS: Undertakings for Collective Investments in Transferable Securities.

Value-at-Risk (VaR): probability measure of a portfolio's market risk. It is defined as the maximum potential loss in value of an asset or portfolio over a defined period *(holding period)* for a given *confidence interval* (with the *confidence level* expressing probability). As an example, with regard to the trading book, the VaR model estimates the maximum decrease (loss) that a portfolio is expected to incur with a specified probability (for ex. 99%), over a defined time horizon (for ex. 1 day). In this example, a 1 day VaR with a 99% confidence implies that there is only a 1% chance of the Bank losing more than the VaR amount in one single working day.

Volatility: measure of the exposure to fluctuations of a risk factor (e.g. rates, prices, foreign exchange,…) over a set period of time.

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