# ILAAP 2016

## Outcomes

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# 1. Foreword

The Internal Liquidity Adequacy Assessment Process of the MPS Group represents the approach adopted by the Group to evaluate, manage and control liquidity risk, aiming at guaranteeing adequacy of liquidity resources and management processes. This document represents a synthetic but complete overview of the MPS ILAAP outcomes and includes the main conclusions about the actual position of the Group in terms of risks to liquidity and funding, liquidity adequacy and liquidity risk management and control practices. The MPS ILAAP outcomes is intended to act as a support for the Liquidity Adequacy Statement (LAS) containing the view of the management body of the Group's liquidity adequacy.

The first dimensions herein represented are the inherent liquidity and funding risks and the liquidity adequacy of the Group, including the evaluation of consistency with the RAF, regulatory and internal limits and the Group business strategies.
The second dimension concerns the way liquidity and funding risks are embedded in the Group processes and how they are monitored and managed within the risk management and control framework.

The evaluation of the liquidity risk position and liquidity related processes is complemented by the actions the Group will adopt to fix the main weaknesses and align its processes to the best practices and the regulatory principles.

The reference date of this ILAAP Outcomes is 31 December 2016. However, the main features in terms of methodology changes and key processes evolution have been here represented – with a specific reference – despite in some cases the formal coming into force took place after 31 December 2016. Furthermore, the Group has chosen to describe the actions undertaken in defense of liquidity adequacy after the liquidity crises occurred in 2016, in particular the program for issuing new Government Guaranteed Bonds (GGB) from January 2017. For this purpose, a specific paragraph has been added to the analysis of inherent risks and liquidity adequacy in order to represent the updated situation as of 28/02/2017 and draw the appropriate conclusions.

# 2. Inherent risks and liquidity adequacy assessment

This chapter focuses on the analysis of liquidity and funding position as of 2016 year end, sources of inherent risks and adequacy of liquidity resources to face liquidity and funding risks.
During 2016, the liquidity position of the Group has been strongly influenced by several exceptional events, both systemic and specific. Through the last year the Group suffered phases of severe liquidity stress with events close to real bank runs that were addressed developing a specific business plan to limit the loss of stable funding. In particular:

- January 2016 – following the adoption of BRRD and the resolution of four Italian banks occurred in November 2015, tension on Italian banking sector brought pressure on MPS stock price leading to a first severe deposits run-off (about -8 €/bn during 2016 first quarter);
- July-August 2016 – following the ECB draft letter requiring the Group to massively dispose non-performing loans (NPL), with the consequent need for a new capital increase, and the negative outcome of stress test, the commercial funding of the Group was put under pressure again (about -9 €/bn during 2016 third quarter);
- October 2016 – the Group developed a new business plan concerning the securitization of non-performing loans and a capital increase on the market before the end of the year, in accordance with the requests of ECB;
- December 2016 – The outcome of Italian constitutional referendum and the subsequent resignation of the Italian Government brought a strong uncertainty on the possibility to undertake, before the end of 2016, the planned recapitalization and to solve the NPL issue. Such uncertainty, together with frequent negative media exposure, leaded the Group to a new severe liquidity stress (about -12 €/bn during 2016 last quarter).

Such dynamics put strong pressure on the short-term liquidity position of the Group throughout 2016, as well as compromised the structure of long term funding. To answer to these events of liquidity crisis, the Group Stress Committee was promptly called, involving the highest level of responsibility within the management, and the Board of Directors was kept informed with frequent updates. The main actions undertaken by the Stress Committee (most of which already planned within the Group Contingency Funding Plan) have been:

- Cut rates in support of commercial funding, trying both to limit commercial outflows and gain new customers;
- New issuances of covered bonds;
- New secured funding of non-eligible assets;
- Pledge of new credit claims in ABACO program;
- New secured funding through ECB auctions, both long and short term.

## 2.1. Liquidity and funding risk

The liquidity and funding position of the Group has been assessed taking into account the whole span of the maturity ladder, from intraday to the very long-term. The analysis aims at evaluating the risk position and the adequacy of liquidity resources to face risks over different time horizons and under different conditions (normal and stressed). With reference to the time horizon, two dimensions have been evaluated, given the different risks that may arise from them. The first dimension, namely short term liquidity risk (typically up to 1 year and with a specific focus up to 1 month), focuses on the ability to meet obligations as they come due, without incurring unacceptable losses. The intraday horizon represents a sub-dimension of the short term liquidity risk: it deals with the ability to withstand shocks occurring on an intraday basis, generating a cumulated cash need that may put into question the ability of the bank to abide by its obligations. This becomes even more relevant the more the bank operates in payment and settlement systems. The second dimension concerns the longer-term time horizon (conventionally over 1 year), with a focus on the sustainability of the funding profile, meaning the ability to fund banking activities with stable sources of funding. An unbalanced funding structure increases the risk of instability even in the short term.

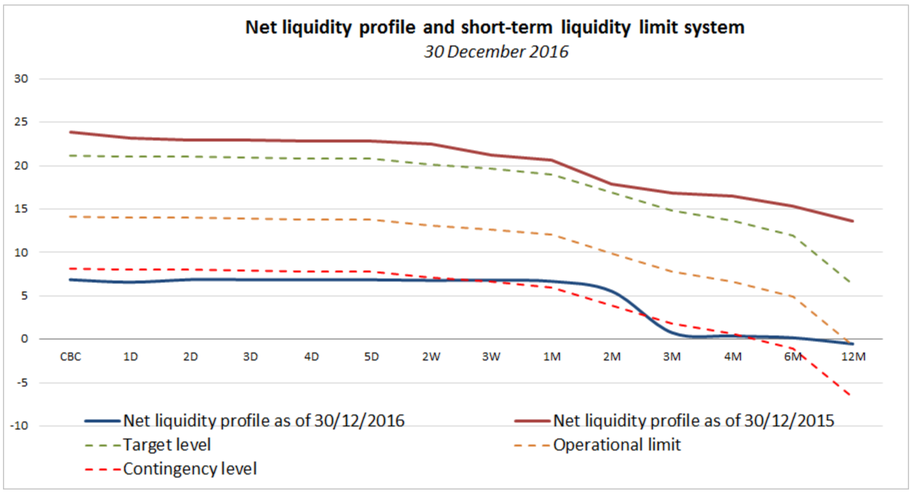
As a matter of fact, some of the risks arising from lending and funding activities may impact on both the short term and the structural funding profile, making these two notions inherently interconnected. Hence, for the purpose of this assessment, liquidity risk means the short term horizon, while funding risk refers to the longer-term, even if, for the sake of clarity, they can sometimes be used interchangeably.

## 2.2. Short term liquidity position

The Group adopts the maturity ladder periodically produced for supervisory reporting as a reference for short term liquidity daily monitoring. The maturity ladder construction methodology in normal conditions is already mildly "stressed", considering a number of prudential assumptions on interbank market, wholesale funding/loans renewal, institutional bonds tax repayments and non-eligible asset funding. Thus, maturity ladder defines the time to survival "on going concern" in terms of net liquidity position.

Following the dynamic of the liquidity position and its consistency with the limit system in force:

| *Reference date 31/12/2016 (€/mln)* | Stock | 1g | 2g | 3g | 4g | 5g | 2s | 3s | 1m | 2m | 3m | 4m | 6m | 12m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cumulated net balance positions | | 786 | 62 | -10.818 | -10.322 | -10.432 | -12.799 | -14.897 | -16.625 | -21.755 | -27.387 | -28.300 | -27.790 | -26.915 |
| Counterbalancing capacity | 6.870 | 5.787 | 6.817 | 17.684 | 17.173 | 17.288 | 19.588 | 21.697 | 23.299 | 27.276 | 28.146 | 28.690 | 27.971 | 26.393 |
| **Cumulative net liquidity position** | **6.870** | **6.573** | **6.879** | **6.866** | **6.851** | **6.856** | **6.789** | **6.800** | **6.675** | **5.521** | **760** | **389** | **181** | **-522** |

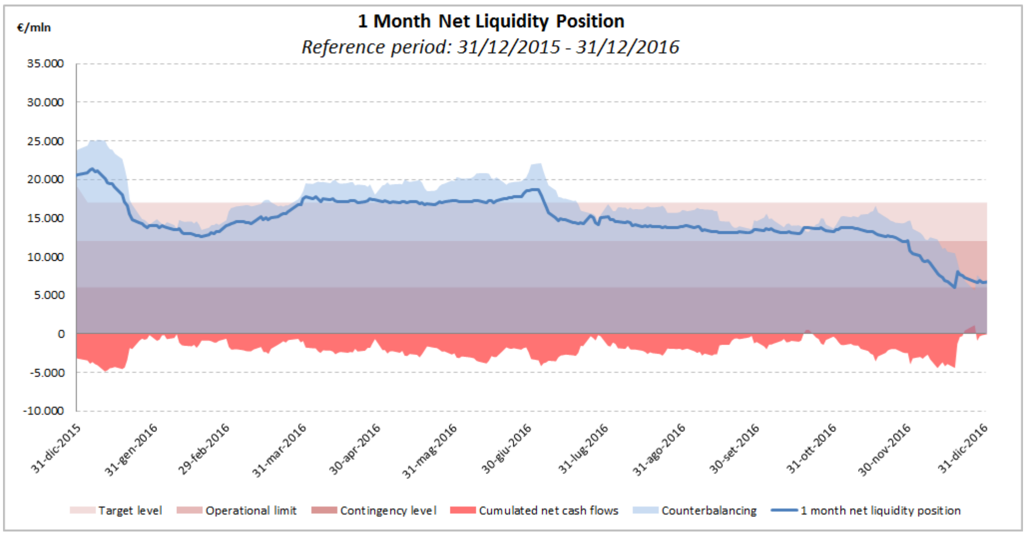



- **counterbalancing capacity** in normal conditions amounts to **6,9 €/bn**, lower than the **8,1 €/bn** set as **contingency level**; the CBC stock is enough to guarantee any short-term need in a horizon beyond 3 months in a going concern situation, but not sufficient in a stress scenario;
- as of 31/12 maturity ladder presents a **1 month net liquidity position of 6,7 €/bn, barely beyond the contingency level** (the contingency limit is set at 6 €/bn). However, the whole maturity ladder profile

violates contingency limit curve. This amount of 1M net liquidity position is only equal to **4,4% of total MPS Group assets**, far lower than 11,9% of the industry[1];

- both counterbalancing capacity and 1 month net liquidity position benefit by the special actions determined by the Stress Committee to cope with liquidity crises, especially the pledge of new credit claims in ABACO program for about 2,6 €/bn (as planned within the Group Contingency Funding Plan).

The following chart depicts the 1 Month Net Liquidity position over 2016:




While maturity ladder defines the time to survival "on going concern" in terms of net liquidity position, the liquidity stress test allows the calculation of the Stressed time to survival, one of the key metrics of the RAF. The Group performs, on a daily basis, a liquidity stress test analysis in order to calculate the Stressed time to survival and to monitor the evolution of the exposure to stress events. Stresses applied on the maturity ladder are defined through a formal risk identification process taking place every year within the update and revision of stress test scenarios. This process supports the annual definition of Risk Appetite Statement and Liquidity Risk Limits and allows the Group to align the Liquidity Risk Framework with the evolution of market and institution-specific conditions.

The following table represents the results of the Group specific liquidity stress test used as of 31/12/2016, with the reported impact spread all along the maturity ladder.

The specific liquidity stress scenario is composed by:

- a Group idiosyncratic commercial stress;
- a Group idiosyncratic financial stress.

[1] See *Banca d'Italia, Rapporto sulla stabilità finanziaria, 2/2016.*

*Values in €/mios. - reference date 31/12/2016*

| Scenarios | Stock | 1 month % stress | Current portfolio stress test 1D | 2D | 3D | 4D | 5D | 2W | 3W | 1M | 2M | 3M | 4M | 6M | 12M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Scenari Impliciti** | | | | | | | | | | | | | | | |
| Interbank market (no roll-over) | Scenarios already included in the non-stressed maturity ladder | | | | | | | | | | | | | | |
| Institutional bonds (no renewal) | | | | | | | | | | | | | | | |
| Tax repayments | | | | | | | | | | | | | | | |
| Partial renewal ol Large financial transactions | | | | | | | | | | | | | | | |
| **1. Commercial idiosyncratic Group crisis** | | | | | | | | | | | | | | | |
| 1.P.1 Sight deposits run-off | 38.736 | -6% | -2.253 | -2.253 | -2.253 | -2.253 | -2.253 | -2.253 | -2.253 | -2.253 | -2.543 | -2.833 | -3.123 | -3.703 | -5.734 |
| 1.P.2 Repurchase of MPS retail bonds | 11.549 | -4% | -434 | -434 | -434 | -434 | -434 | -434 | -434 | -434 | -492 | -569 | -677 | -834 | -1.319 |
| 1.P.3 Reduction of other liability products | 9.214 | -9% | -808 | -808 | -808 | -808 | -808 | -808 | -808 | -808 | -808 | -808 | -808 | -808 | -808 |
| 1.A.1 Committed credit lines | 2.587 | -17% | -438 | -438 | -438 | -438 | -438 | -438 | -438 | -438 | -875 | -1.313 | -1.750 | -2.587 | -2.587 |
| 1.A.2 Securities lending from customers | 2.342 | -14% | -327 | -327 | -327 | -327 | -327 | -327 | -327 | -327 | -495 | -663 | -831 | -1.167 | -2.342 |
| Cumulative Scenario 1 | | | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-5.212* | *-6.186* | *-7.189* | *-9.099* | *-12.790* |
| **2. Financial idiosyncratic Group crisis** | | | | | | | | | | | | | | | |
| 2.1 Devaluation of retained securities | Discretionary scenario | | -320 | -320 | -320 | -320 | -320 | -320 | -320 | -320 | -320 | -320 | -320 | -320 | -320 |
| 2.2 Downgrade by all rating agencies with BBB alignment of retained secirities | Discretionary scenario | | -1.609 | -1.609 | -1.609 | -1.609 | -1.609 | -5.375 | -5.375 | -5.375 | -5.375 | -6.178 | -6.178 | -6.178 | -6.178 |
| Cumulative Scenario 2 | | | *-1.929* | *-1.929* | *-1.929* | *-1.929* | *-1.929* | *-5.695* | *-5.695* | *-5.695* | *-5.695* | *-6.498* | *-6.498* | *-6.498* | *-6.498* |
| **Cumulative idiosyncratic stress test** | | | **-6.189** | **-6.189** | **-6.189** | **-6.189** | **-6.189** | **-9.955** | **-9.955** | **-9.955** | **-10.908** | **-12.684** | **-13.687** | **-15.597** | **-19.289** |

The commercial idiosyncratic scenario assumes:

- sight deposits run off (6% up to 1 month, with linearized decay up to 1 year according to Basel 3 methodology);
- buy back or non-renewal of commercial own issuances (3,8% up to 1 month with further deterioration up to 1 year);
- non-renewal of main types of term deposits (9% flat);
- sharp draw of committed credit lines and liquidity facilities (17% up to 1 month with total absorption up to 1 year);
- decrease of customer's securities lending (reducing CBC by 14% up to 1 month, with total absorption up to 1 year).

The financial idiosyncratic scenario assumes:

- impact on retained securities price devaluation (2% flat);
- impact of a downgrade of retained securities on the ECB haircut applied and the loss of the cash reserve for covered bond programs (estimated 1,6 €/bn up to 1 week, 3,7 €/bn additional up to 1 month, 0,8 €/bn additional up to 1 year).

The composite effect of the simultaneous application of these specific stress scenarios (as of 31/12/2016) is shown in the last row, with a total liquidity absorption within the 1 month horizon equal to about 10 €/bn and a potential 1 year liquidity absorption equal to 19,3 €/bn.

Alongside specific stress scenarios, the Group also calculates the impact of a generic scenario, further composed (as of 31/12/2016) by:

- Italian sovereign systemic stress;
- market systemic stress with counterparty defaults.

*Values in €/mios. - reference date 31/12/2016*

| Scenarios | Stock | 1 month % stress | Current portfolio stress test 1D | 2D | 3D | 4D | 5D | 2W | 3W | 1M | 2M | 3M | 4M | 6M | 12M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3. Italian sovereign systemic debt crisis** | | | | | | | | | | | | | | | |
| 3.1 Devaluation of Italian government bonds | Historical scenario | | -1.765 | -1.765 | -1.765 | -1.765 | -1.765 | -1.765 | -1.765 | -1.765 | -1.765 | -1.765 | -1.765 | -1.765 | -1.765 |
| 3.2 Downgrade by all rating agencies with BBB alignment of government bond rating | Discretionary scenario | | -1.155 | -1.155 | -1.155 | -1.155 | -1.155 | -1.155 | -1.155 | -1.155 | -1.155 | -1.155 | -1.155 | -1.155 | -1.155 |
| Cumulative Scenario 3 | | | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* |
| **4. Market systemic scenario and counterparty default** | | | | | | | | | | | | | | | |
| 4.1 Adverse derivatives and securities market | Discretionary scenario | | -628 | -628 | -628 | -628 | -628 | -628 | -628 | -628 | -628 | -628 | -628 | -628 | -628 |
| 4.2 Financial guarantees | 6.219 | -20% | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 | -1.269 |
| Cumulative Scenario 4 | | | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* |
| **Cumulative generic stress test** | | | **-4.817** | **-4.817** | **-4.817** | **-4.817** | **-4.817** | **-4.817** | **-4.817** | **-4.817** | **-4.817** | **-4.817** | **-4.817** | **-4.817** | **-4.817** |

The Italian sovereign systemic stress, impacting all along the maturity ladder, assumes:

- "Italian government bonds devaluation": market value impact on CBC and required collateral need for derivatives and repos caused by an increase around 200 bps of the Italian/German government bonds spread (amounting to 1,8 €/bn flat);
- "Downgrade by all rating Agencies of government bond rating": modification of liquidity value in function of an haircut increase (amounting to 1,1 €/bn flat).

The market systemic stress scenario, also impacting all along the maturity ladder, assumes:

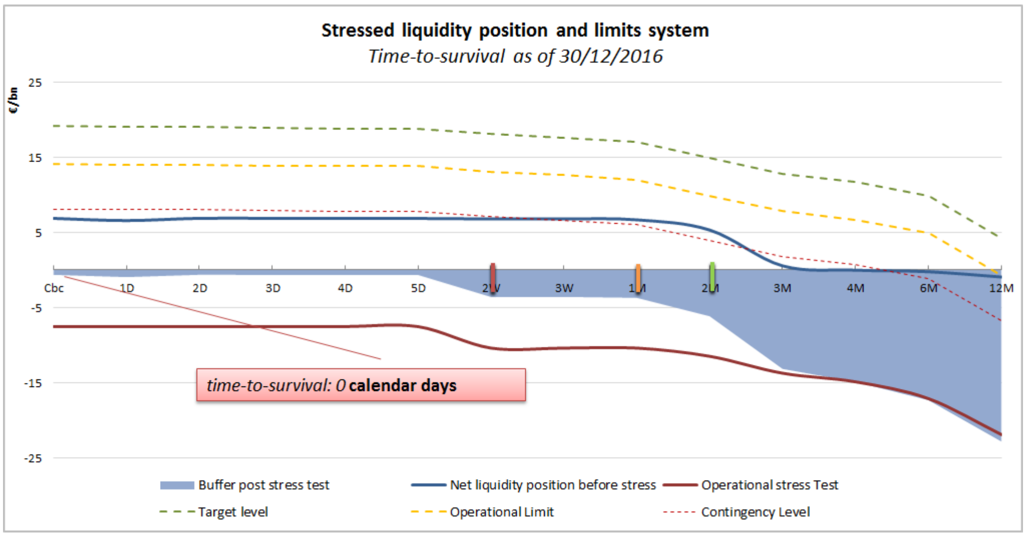
- "Derivatives and securities adverse market": impact of adverse market conditions on derivatives and securities valuation (stressing specific risk factors, resulting in a total that for current portfolio amounts to around 0,6 €/bn flat);
- "Financial guarantees": impact from enforcement of financial guarantees (absorbing 1,2 €/bn flat).

The composite effect of the simultaneous application of these generic scenarios, as of 31/12/2016, amounts to 4,8 €/bn starting from 1 day and spread up to 12 months.

The effect of the simultaneous occurrence of all the scenarios on the Group portfolio as of 31/12/2016 amounts to a 14,8 €/bn liquidity impact on the 1 month horizon, as shown in the following table:

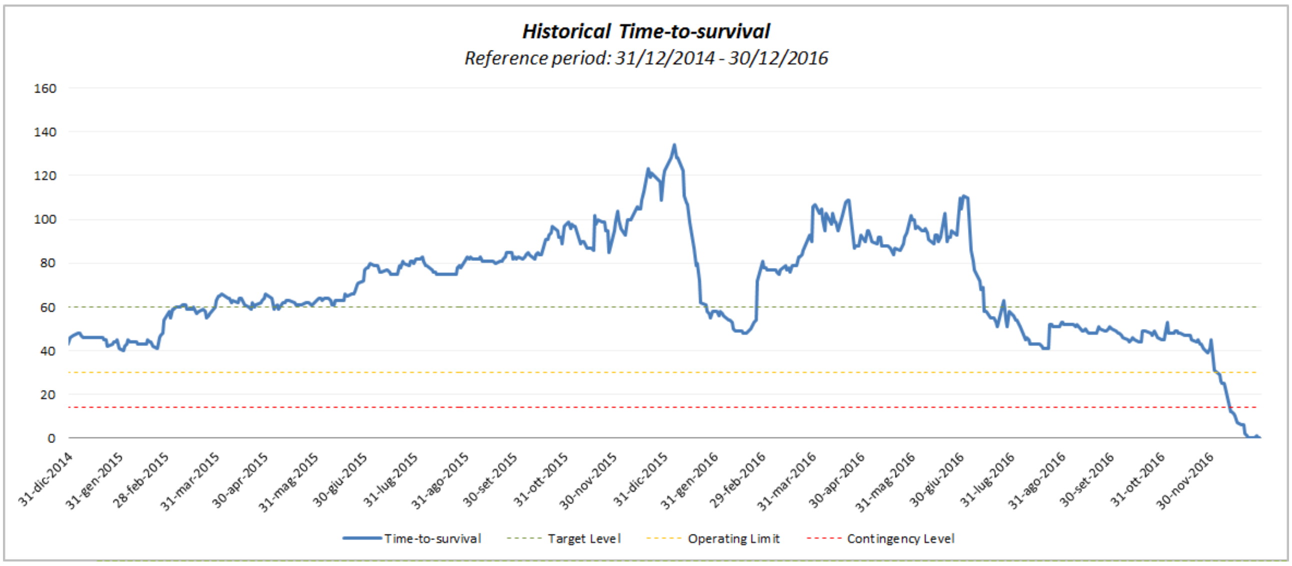
| *Values in €/mln - reference date 31/12/2016* | Current portfolio stress test | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Scenarios** | **1D** | **2D** | **3D** | **4D** | **5D** | **2W** | **3W** | **1M** | **2M** | **3M** | **4M** | **6M** | **12M** |
| 1. Commercial idiosyncratic Group crisis | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-4.260* | *-5.212* | *-6.186* | *-7.189* | *-9.099* | *-12.790* |
| 2. Financial idiosyncratic Group crisis | *-1.929* | *-1.929* | *-1.929* | *-1.929* | *-1.929* | *-5.695* | *-5.695* | *-5.695* | *-5.695* | *-6.498* | *-6.498* | *-6.498* | *-6.498* |
| 3. Italian sovereign systemic crisis | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* | *-2.920* |
| 4. Market systemic scen. and counterp. default | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* | *-1.897* |
| **Cumulative total stress as of 31/12/2016** | **-11.006** | **-11.006** | **-11.006** | **-11.006** | **-11.006** | **-14.771** | **-14.771** | **-14.771** | **-15.724** | **-17.500** | **-18.504** | **-20.414** | **-24.105** |
| **Cumulative total stress as of 31/12/2015** | **-14.553** | **-14.553** | **-14.553** | **-14.553** | **-14.553** | **-15.828** | **-15.828** | **-15.828** | **-17.133** | **-20.169** | **-21.304** | **-23.495** | **-28.715** |

The stressed time to survival is calculated applying the most severe scenario between the bank idiosyncratic stress and the generic one. Here below the results of the stress test applied on the 30/12/2016 maturity ladder.




In a stressed perspective, the available liquidity reserve brings the Group to withstand for **0 days** (target level = 60 days, operational limit = 30 days, contingency level = 14 days).

The following chart depicts the stressed time to survival over 2016:

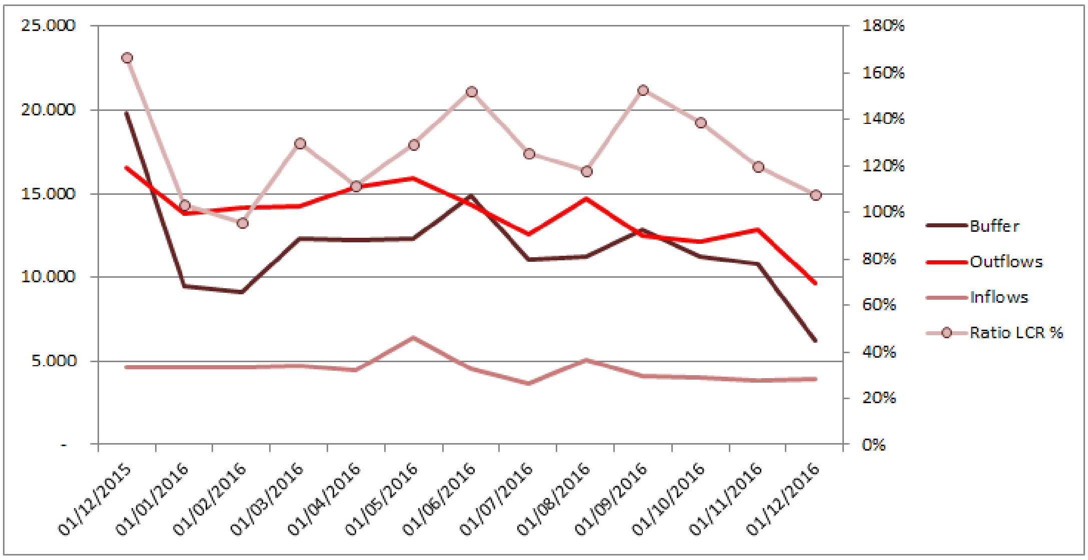



Alongside the managerial liquidity stress test, the Group also calculates a regulatory stressed indicator, the **Liquidity Coverage Ratio** (computed, starting from October 2016, according to the rules set out by the Commission Delegated Regulation issued pursuant to Article 460 of Regulation (EU) 575/2013).

| | 31/12/2015 | | 31/12/2016 | |
|---|---|---|---|---|
| Item | Amount | Weighted | Amount | Weighted |
| **Liquidity buffer** | **19.862** | **19.834** | **7.512** | **6.255** |
| Level 1 assets | 19.803 | 19.803 | 7.473 | 7.472 |
| Level 2 assets | 52 | 26 | 39 | 24 |
| Excess liquid asset amount | | | | -1.241 |
| **Outflows** | **99.426** | **16.765** | **89.015** | **9.703** |
| Outflows from unsecured transactions/deposits | 81.877 | 15.985 | 61.541 | 8.905 |
| Outflows from secured lending and capital market-driven transactions | 17.549 | 780 | 27.474 | 647 |
| Total outflows from collateral swaps | 0 | 0 | 0 | 151 |
| **Inflows** | **24.754** | **4.643** | **20.093** | **3.895** |
| Inflows from unsecured transactions/deposits | 15.520 | 4.570 | 12.881 | 3.715 |
| Inflows from secured lending and capital market-driven transactions | 9.234 | 73 | 7.212 | 28 |
| Total inflows from collateral swaps | 0 | 0 | 0 | 151 |
| **Net liquidity outflow** | **74.672** | **12.123** | **68.922** | **5.809** |
| **Liquidity coverage ratio (%)** | | **164%** | | **108%** |

The **LCR** as of 31/12/2016 is at **108%** calculated according to the **Delegated Act** rules. Target level of 120% and operational limit of 70% are defined by 2016 Liquidity Risk Tolerance; the **regulatory level** at 31/12 amounts to **70%**.

Following an overview of the evolution of the LCR main components over 2016:




As the graph implies, during 2016 the worsening of LCR is deeply connected to the evolution of liquid-assets buffer. Such negative trend is partially mitigated by the reduction of outflows, especially in December, while the dynamic of stressed inflows is quite stable.

In particular, both January-February and July-August periods have been characterized by liquidity crises with drastically negative commercial dynamic. In December, the strong loss of wholesale commercial funding produced a sharp decrease of liquidity buffer, but on the other hand brought to a partial reduction of associated outflows too (outflows rates related to wholesale funding are higher than those related to retail). Despite the outflows fall, only the actions taken by the Stress Committee pledging new credit claims in ABACO program to obtain new secured funding with ECB have preserved level 1 assets, avoiding the drop of the LCR indicator.

If compared to the stressed net liquidity position represented by the stressed time to survival, well under the contingency level, LCR is still over the fully phased-in regulatory limit of 100%. Such difference between internal and regulatory metrics is mainly explained by the different stresses used, with the internal one more severe than that implicit in LCR net outflows. Besides, as shown in the next paragraph, LCR liquidity buffer is slightly higher than counterbalancing capacity because of different approaches in the determination of liquid assets.

LCR is also calculated individually for foreign subsidiaries (Monte Paschi Banque and Monte Paschi Belgio). LCR produced for regulatory purposes is consistent with Commission Delegated Regulation and it amounts at 194% for Monte Paschi Banque and 150% for Monte Paschi Belgio as of 31/12/2016, in both cases higher than the 70% limit.

**The buffer of liquid assets**

The composition of LCR buffer, calculated according to the Delegated Regulation issued pursuant to Article 460 of Regulation (EU) 575/2013, is shown in the following table (excluding adjustments related to the application of caps according to requirements for composition of liquidity buffer under Delegated Act):

## C 72.00 - LIQUIDITY COVERAGE - LIQUID ASSETS

*Values in €/mln*

| ID | Item | Amount/Market value | St.d weight | Applic. weight | Value according to Article 9 (31/12/2016) | Value according to Article 9 (31/12/2015) |
|---|---|---|---|---|---|---|
| 1 | **TOTAL UNADJUSTED LIQUID ASSETS** | **7,512** | | | **7,496** | **19,834** |
| 1.1 | **Total unadjusted level 1 assets** | **7,473** | | | **7,472** | **19,803** |
| 1.1.1 | **Total unadjusted LEVEL 1 assets excluding extremely high quality covered bonds** | **7,465** | | | **7,465** | **19,798** |
| 1.1.1.1 | Coins and banknotes | 862 | 1.00 | 1.00 | 862 | 990 |
| 1.1.1.2 | Withdrawable central bank reserves | 3,213 | 1.00 | 1.00 | 3,213 | 2,308 |
| 1.1.1.3 | Central bank assets | 8 | 1.00 | 1.00 | 8 | 135 |
| 1.1.1.4 | Central government assets | 3,367 | 1.00 | 1.00 | 3,367 | 16,355 |
| 1.1.1.5 | Regional government / local authorities assets | 3 | 1.00 | 1.00 | 3 | 0 |
| 1.1.1.6 | Public Sector Entity assets | 6 | 1.00 | 1.00 | 6 | 6 |
| 1.1.1.9 | Multilateral development bank and international organisations assets | 6 | 1.00 | 1.00 | 6 | 4 |
| 1.1.2 | **Total unadjusted LEVEL 1 extremely high quality covered bonds** | **8** | | 0.93 | **8** | **5** |
| 1.1.2.1 | Extremely high quality covered bonds | 8 | 0.93 | 0.93 | 8 | 5 |
| 1.2 | **Total unadjusted level 2 assets** | **39** | | 0.62 | **24** | **32** |
| 1.2.1 | **Total unadjusted LEVEL 2A assets** | **14** | | 0.85 | **12** | **6** |
| 1.2.1.1 | Regional government / local authorities or Public Sector Entity assets (Member State, RW20%) | 0 | 0.85 | 0.85 | 0 | 0 |
| 1.2.1.2 | Central bank or central / regional government or local authorities or Public Sector Entity assets (Third Country, RW20%) | 13 | 0.85 | 0.85 | 11 | 5 |
| 1.2.1.3 | High quality covered bonds (CQS2) | 1 | 0.85 | 0.85 | 1 | 1 |
| 1.2.2 | **Total unadjusted LEVEL 2B assets** | **25** | | 0.50 | **12** | **26** |
| 1.2.2.5 | Corporate debt securities (CQS2/3) | 21 | 0.50 | 0.50 | 11 | 21 |
| 1.2.2.7 | Shares (major stock index) | 4 | 0.50 | 0.50 | 2 | 5 |

The bulk of liquidity buffer is composed by level 1 assets (99,7% of total buffer) entailing no haircut or a limited haircut (7% for Extremely High Quality Covered Bonds) to their market value. Of these assets, the bulk is made by cash or cash equivalents (55%) and assets issued or guaranteed by the central government (45%). This consideration allows the Group to judge positively its ability to liquidate assets upon stress conditions (given the assets liquidity and broad market availability for them) even if the scarcely diversified liquid-assets buffer (with a strong concentration in national treasury bonds) poses some questions around the consequences of fire sales and market panic eventually unleashed by a sovereign crisis. Other residual items (other public entities assets, other high quality covered bonds, corporate bonds and equities) represent only a small fraction of the total buffer amount.

Some considerations about the consistency between the Liquidity Buffer produced according to regulatory rules and the CBC used within the ongoing daily monitoring (excluding regulatory adjustments on LCR Buffer) can be drawn, based on the reconciliation table provided below:

| *€/mln* | LCR Buffer | CBC | Δ |
|---|---|---|---|
| **Coins and banknotes** | **855** | **-** | **855** |
| **Central bank reserves** | **3.201** | **3.567** | **(366)** |
| ECB Mandatory Reserve | (581) | - | (581) |
| RTGS Account | 3.567 | 3.567 | - |
| Foreign branches | 215 | - | 215 |
| **ECB pooling credit line** | **565** | **545** | **20** |
| Level 1 | 565 | 543 | 22 |
| Level 2 | - | - | - |
| Level 3 | - | 2 | (2) |
| **MIC pledged (eligible assets)** | **13** | **17** | **(4)** |
| Level 1 | 13 | 17 | (4) |
| Level 2 | - | - | - |
| Level 3 | - | - | - |
| **ECB eligible assets** | **2.716** | **2.742** | **(26)** |
| Level 1 | 2.707 | 2.616 | 91 |
| Level 2 | 9 | 15 | (6) |
| Level 3 | - | 111 | (111) |
| **Equities** | **2** | **-** | **2** |
| Level 2 | 2 | - | 2 |
| **Foreign entities** | **145** | **-** | **145** |
| MPS Banque | 44 | - | 44 |
| MPS Belgio | 101 | - | 101 |
| **Total** | **7.496** | **6.870** | **626** |

The main conceptual difference is certainly due to the treatment of retained covered bonds and securitizations. The ECB eligible assets reported in the managerial CBC, indeed, include retained covered bonds and securitization, excluded in the regulatory stressed approach (Level 3 assets). This difference amounts to 111 €/mln (CBC higher than Liquidity Buffer), but it could be even bigger in relation to the unencumbered part of retained bonds in CBC. The entire part of retained structured bonds conferred to the ECB pooling (2,9 €/bn) is entirely encumbered. It is worth recall that these securities actually represent a source of prompt liquidity in that they are ECB eligible and can be used to obtain secured funding in the market. It should also be underlined that they can lose their market-liquidity in time of stress if compared with central government securities. The Group is well-aware of this and it deals with this risk by performing specific stress scenarios and analyses taking into account downgrade or loss of eligibility for this kind of assets. The liquidity stress test also envisages hypotheses of shocks applied on a few key items included in the CBC, as securities lending, devaluation of retained securities, sovereign crisis (see par. 4.1 for more details).

Other major differences are attributable to the following:

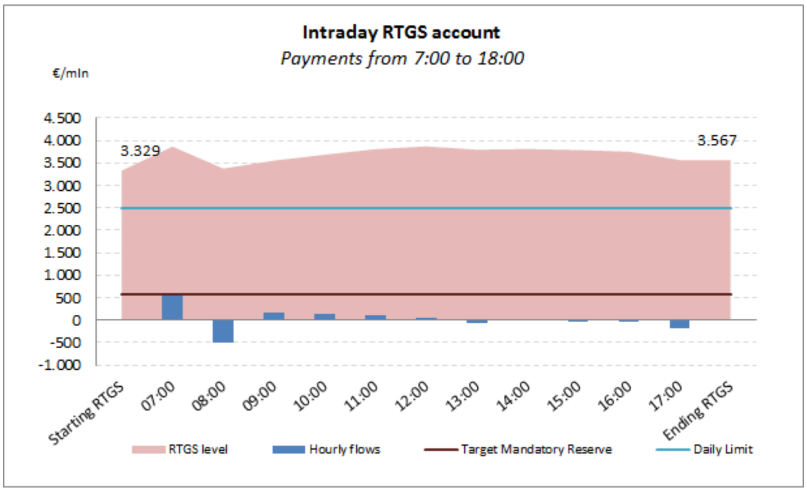
- The LCR considers the cash available in the form of coins and banknotes (CBC lower by 0,85 €/bn), while excludes the mandatory reserve (CBC higher by 0,58 €/bn);
- The CBC computes the ECB haircut on its assets, while the LCR buffer, composed largely by sovereign securities, does not apply any haircut, apart from residual L2 asset (CBC lower by 0,1 €/bn);
- The Group LCR buffer also considers Liquid assets owned by foreign entities and branches, while, as hinted above, the CBC prudentially excludes them (CBC lower by 0,36 €/bn).

The major drivers above reported explain the 0,6 €/bn difference between the managerial Counterbalancing Capacity and the LCR Buffer.

### Intraday Liquidity position

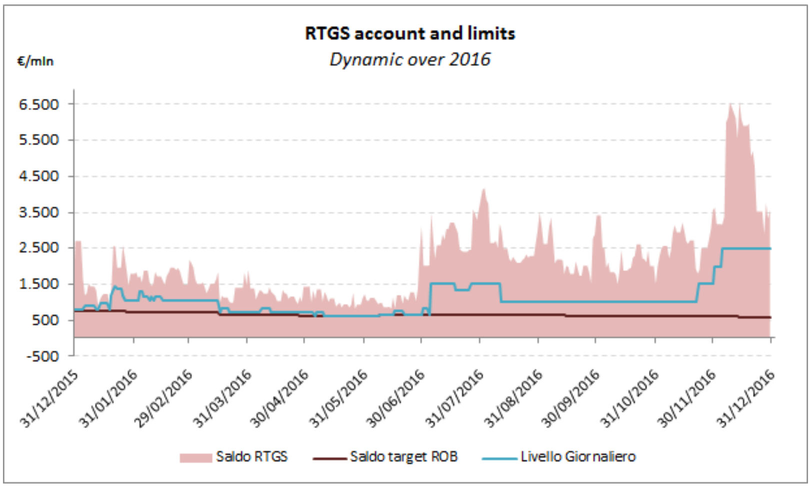
The intraday liquidity exposure is measured through a number of tools, some of which deployed in accordance with the Basel 3 regulatory framework. The measurement of the main liquidity risk indicators is performed on a daily basis, while other forms of first line controls are performed more frequently.

The following figure shows the check on the daily Real Time Gross Settlement (RTGS) account level to maintain according to regulatory and internal requirement:

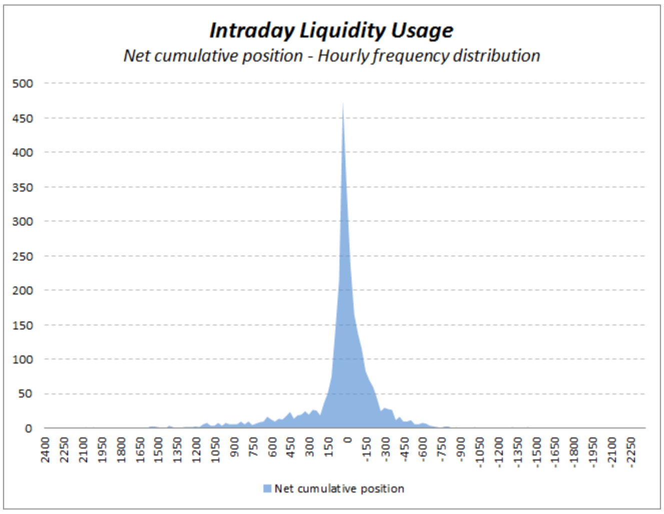


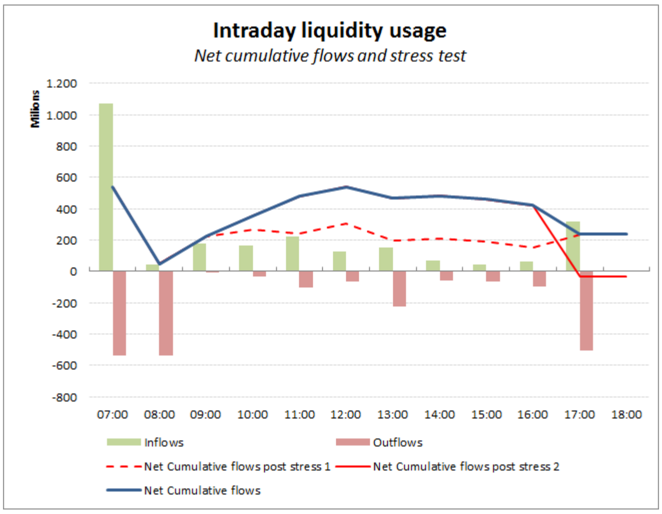
The check shows the respect of the daily limit as of 31/12 with the end-of-day level equal to about 3,6 €/bn and the evidence of the dynamic over the day. The daily level to maintain was set at 2,5 €/bn, composed by 436 €/mln (minimum level for the TARGET day, set-up based on the Mandatory Reserve for the period) and about 2,1 €/bn of additional prudential buffers (1 €/bn based on the level of 1 Month Net Liquidity Position and 1,1 €/bn determined at discretion of the Liquidity Management Function Responsible).

Hereby a representation of the RTGS account dynamic over the mandatory reserve period that highlight the continuous respect of the limit during 2016.




The **potential daily liquidity**, monitored to check the intraday counterbalancing capacity, amounts to **2,54 €/bn, close to the 2,5 €/bn operational limit**. The worst intraday liquidity usage (hourly) in the last year amounted to less than 2,4 €/bn, a result confirming the prudent approach of the Group for intraday liquidity.

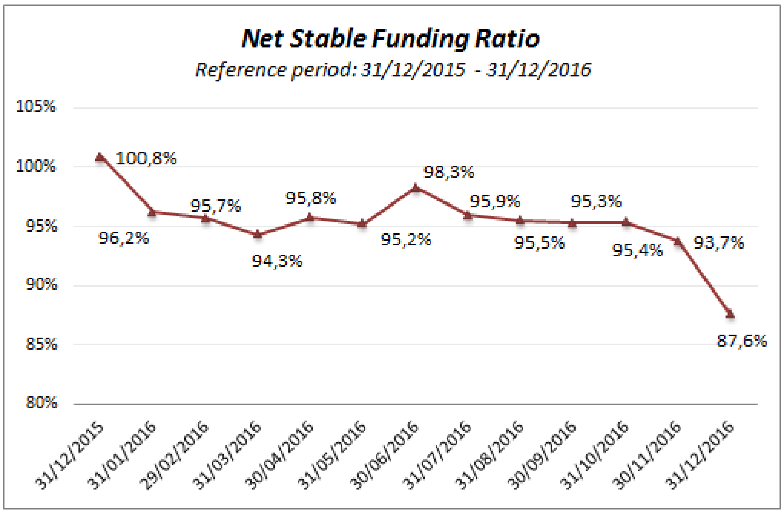



The Group performs two different stress tests on intraday liquidity usage: at 31/12 the exposure was quite important but the cash available to the treasury has always been largely over the intraday liquidity need, even in stress conditions.

## 2.3. Medium/long term liquidity position

Funding risk is primarily monitored through the regulatory indicator NSFR, which has been included within the 2016 Risk Appetite Framework as a Key Risk Indicator.



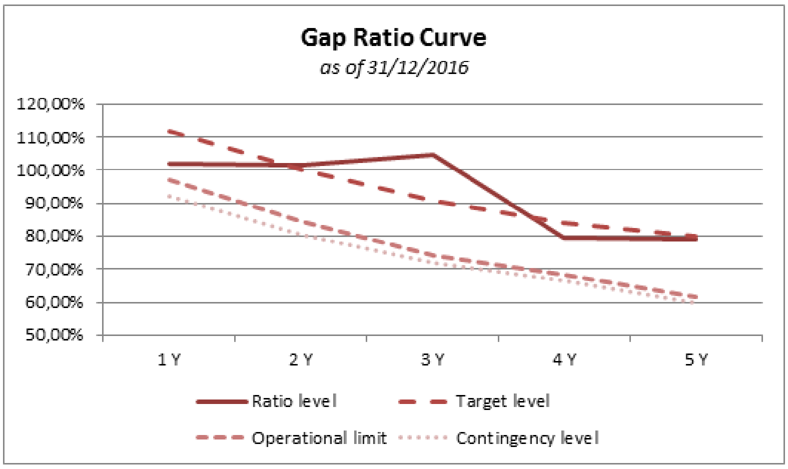

The NSFR amounts to 87,6%, lower than the operational limit of 96% limits established for 2016, but slightly higher than the contingency level of 86%; the dynamic over 2016 shows a steady worsening trend (-13%) due to the liquidity crises that, as said before, brought to a very strong loss of commercial funding.

The most important events explaining this dynamic are:

- in the first quarter of 2016 NSFR was affected by liquidity crises which lead to severe deposits run-off with a consequent decrease of Available Stable Funding due to loss of both retail funding (-3,8 €/mld), wholesale funding (-0,45 €/bn) and secured funding (-1,3 €mld). In the same period an increase of Required Stable Funding occurred due to a higher level of asset encumbrance (+2,2 €/bn), because the loss of deposits had to be replaced, at least partially, by new secured funding;
- during the second quarter the Group restored a part of the liquidity reserves lost in the first quarter and consolidated liabilities structure increasing long-term funding with ECB (TLTRO auctions);
- over the third quarter the new liquidity crisis put the structural equilibrium of the Group under pressure again, with a strong decrease of unsecured stable funding (retail -3,2 €/bn and wholesale -3€/bn) only partially limited by the increase of secured funding (+6,5 €/bn from new long-term ECB auctions). NSFR was also negatively affected by a capital loss due to credits devaluation required by the business plan for the disposal of non-performing loans, and by an increase of Required Stable Funding due to a higher level of encumbrance related to residential mortgages.
- in the final quarter of 2016, with the sharpening of the liquidity crisis, there was a second loss for credits devaluation and a strong decrease of Available Stable Funding due to unsecured stable funding both from retail (-5,3 €/bn) and wholesale customers (-3,1 €/bn). Over the same period the Required Stable Funding showed a reduction of long term loans (-4,3 €/bn) that partially made up for the decrease of funding.

While NSFR measures funding risk from a regulatory point of view, Gap Ratios do the same from a managerial perspective. The following figure shows Gap Ratios level as of 31/12/2016, compared to the internal limit system:

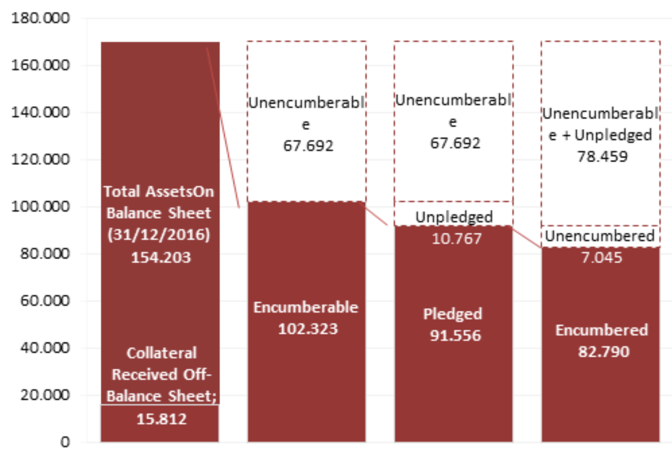
| Gap Ratios | Comm. Gap R. | 1 Y | 2 Y | 3 Y | 4 Y | 5 Y |
|---|---|---|---|---|---|---|
| **Ratio level** | **63,33%** | **102,03%** | **101,41%** | **104,83%** | **79,67%** | **78,98%** |
| Target level | 85% | 112% | 100% | 91% | 84% | 80% |
| Operational limit | 70% | 97% | 84% | 74% | 68% | 62% |
| Contingency level | - | 92% | 80% | 72% | 67% | 60% |




- the Gap Ratio 1Y, calculated as [(∑ outflows $_{T > 1\ year}$) / (∑ inflows $_{T > 1\ year}$)], amounts to 102%, between the target level (112%) and the operational limit (97%); coherently with NSFR, the dynamic over 2016 has been worsening (109,3% as of December 2015);
- the Gap Ratio 3Y, (calculated as [(∑outflows $_{T > 3\ year}$) / (∑ inflows $_{T > 3\ year}$)], amounts to 104,8%, above the target level (91%); notwithstanding liquidity crises, the dynamic over 2016 has been improving (79,7% as of December 2015), mainly thanks to the need to replace commercial funding with long term ECB funding (TLTRO auctions);
- the Commercial Gap Ratio (Commercial funding / Commercial lending) amounts to 63,3%, far lower than the target level (85%); the dynamic over 2016 has also been worsening (80,9% as of December 2015) because of the multiple negative events on commercial funding.

Alongside NSFR and Gap Ratios, the Group monitors several additional metrics related to the structure of funding, like concentration and asset encumbrance ratios.

Here below a representation of asset encumbrance:




| Gross Asset Encumbrance Ratio | Dec.15 | Dec.16 | Δ |
|---|---|---|---|
| Total Assets Encumbered | 59.379 | 82.790 | 23.411 |
| Total Assets + Total collateral Received | 188.150 | 170.015 | -18.135 |
| | **31,56%** | **48,70%** | **17,14%** |

| Net Asset Encumbrance Ratio | Dec.15 | Dec.16 | Δ |
|---|---|---|---|
| Total Assets Encumbered | 59.379 | 82.790 | 23.411 |
| Total Assets Encumberable | 107.369 | 102.323 | -5.046 |
| | **55,30%** | **80,91%** | **25,61%** |

The net asset encumbrance ratio conveys an important message: as of 31/12/2016, more than 80% of total encumberable assets is currently used to raise cash (81% from 55% at the end of 2015, well over the operational limit of 56%), therefore the capacity to raise additional liquidity through secured funding is very limited. Similarly the gross asset encumbrance ratio has grown with respect to 2015 with almost 49% of total assets that have already been used to raise cash. This dynamic highlights clearly how the Group has covered the loss of commercial deposits with secured sources of funding to face liquidity crises.

Starting from April 2016, the Group calculates and reports to the competent authorities with a monthly frequency the Additional Liquidity Monitoring Metrics (ALMM), a set of new liquidity risk indicators defined by European Supervisor. The ALMM aims to provide supervisory authorities a comprehensive view of the Group liquidity risk profile through information which integrate LCR and NSFR. The ALMM package currently includes the following templates:

- Concentration of funding by counterparty
- Concentration of funding by product type
- Price of funding
- Roll-over of funding
- Concentration of Counterbalancing

Besides concentration templates reported within the ALMM, the Group analyzes concentration of funding through an internal approach, which results are detailed below:

| | | | Concentration by maturity buckets | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Stock | % /total | SIGHT | 1 M | 3 M | 6 M | 1 Y | 2 Y | 3 Y | 4 Y | 5 Y | 7 Y | 10 Y | 15 Y | 20 Y | 30 Y | BEYOND |
| **Conc. in markets/channels** | **72.657** | **54%** | **55%** | **15%** | **7%** | **3%** | **4%** | **7%** | **4%** | **2%** | **1%** | **0%** | **0%** | **1%** | **0%** | **0%** | **1%** |
| Retail funding | 46.006 | 34% | 66% | 19% | 4% | 2% | 2% | 4% | 2% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Wholesale funding | 16.480 | 12% | 58% | 12% | 4% | 5% | 4% | 4% | 3% | 2% | 2% | 1% | 1% | 1% | 1% | 1% | 0% |
| *Wholesale Non-Financial* | *10.689* | *8%* | *80%* | *3%* | *6%* | *5%* | *2%* | *1%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *1%* | *0%* | *0%* |
| *Wholesale Financial* | *5.791* | *4%* | *16%* | *29%* | *1%* | *5%* | *8%* | *10%* | *8%* | *6%* | *4%* | *3%* | *2%* | *2%* | *2%* | *2%* | *0%* |
| *Inter-bank market* | *0* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* |
| Institutional debt issuance | 10.172 | 8% | 0% | 0% | 26% | 3% | 14% | 25% | 13% | 8% | 0% | 0% | 2% | 5% | 0% | 0% | 4% |
| *Subordinates bonds* | *4.702* | *3%* | *0%* | *0%* | *0%* | *0%* | *8%* | *49%* | *11%* | *16%* | *0%* | *0%* | *0%* | *8%* | *0%* | *0%* | *9%* |
| **Conc. in secured funding sourc** | **62.243** | **46%** | **0%** | **44%** | **13%** | **2%** | **2%** | **5%** | **0%** | **27%** | **2%** | **2%** | **4%** | **0%** | **0%** | **0%** | **0%** |
| Repos Market | 31.047 | 23% | 0% | 64% | 25% | 3% | 3% | 6% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Repos ECB | 24.054 | 18% | 0% | 31% | 0% | 0% | 0% | 0% | 0% | 69% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Structured products | 7.142 | 5% | 0% | 0% | 4% | 2% | 5% | 19% | 2% | 1% | 15% | 14% | 33% | 2% | 0% | 0% | 3% |
| *Covered Bond* | *5.194* | *4%* | *0%* | *0%* | *0%* | *0%* | *0%* | *18%* | *0%* | *0%* | *19%* | *14%* | *46%* | *2%* | *0%* | *0%* | *0%* |
| *Asset-backed securities* | *1.948* | *1%* | *0%* | *0%* | *15%* | *9%* | *19%* | *19%* | *7%* | *3%* | *3%* | *13%* | *0%* | *0%* | *0%* | *0%* | *12%* |
| **Total Funding** | **134.901** | | **30%** | **28%** | **10%** | **2%** | **3%** | **6%** | **2%** | **14%** | **1%** | **1%** | **2%** | **1%** | **0%** | **0%** | **0%** |

Overall, funding is not that concentrated in terms of funding channels, even if there is a significant share of ECB funding. In terms of concentration by maturity, the next three years present a fairly important amount of maturing issuances and other financial operations, both secured and unsecured, while ECB auctions are going to expire by the fourth year.

Due to the persistent liquidity crisis, during 2016 the funding position of the Group presents an increasing grade of concentration by counterpart. The largest wholesale funding provider (Cassa Depositi e Prestiti) weights for about the 19% of total wholesale funding but can be considered less risky than a typical wholesale counterpart due to its role of pass-through financing provider. On the other hand, CSEA, a public entity collecting fees related to energy provision, weights for about the 17% of total wholesale funding. Other wholesale funding providers have a negligible weight compared to the Group total funding.

Regarding currencies, the Group does not have a significant liquidity exposure in foreign currencies: the most important currency other than Euro is the US Dollar, with a weight on total funding amounting to just 1,7%.

## 2.4. Evolution of liquidity and funding position following the relevant facts occurred after 31/12/2016

### Liquidity actions for the first quarter of 2017

As highlighted before, during 2016 several events of liquidity crises brought the Group to a deteriorated liquidity position which was not adequate with respect to the limits set up by the previous Risk Appetite Statement.

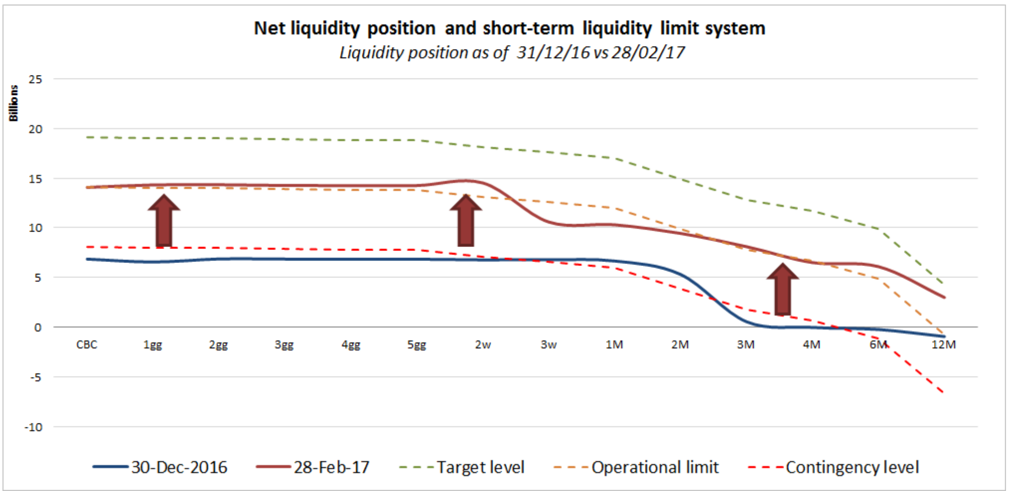
On 23 December 2016, as granted by the Government Law Decree n. 237, BMPS immediately started a request for the guarantee on new bonds to be issued. The required guarantee was accepted by the Government, with official communication to the Group on 19 January 2017. In particular, the guarantee was granted on a maximum amount of 15 €/bn of bonds within the first half of 2017 on already fixed sizes and maturities:

- 27 December 2016 - 1 March 2017 3 €/bn with maturity 1 year and 4 €/bn with maturity 3 years;
- 1 March 2017 - 1 June 2017 4 €/bn with maturity 3 years;
- 1 June 2017 - 31 December 2017 4 €/bn with maturity 3 years.

Thus, the Group immediately started procedures for the first issues, which led on 25 January 2017 to two retained GGB for a total amount of 7 €/bn to be sold or used as collateral for financing operations. On 1 February 2017, the Group obtained both the quotation on the TLX market and the ECB eligibility for the new GGB. Even if ECB eligibility is not "usable" by the Group itself, but only by external subscriber, it represents an important element for the marketability of this instruments. Between 31 January and 6 February 2017 the Group also obtained ratings for GGB by DBRS and Fitch.

From a commercial point of view, once the guarantee was granted by the Government, deposits run-off gradually stopped, decreasing the pressure over liquidity reserves. After selling/funding of the new GGB (4,5 €/bn sold on the market and 2,5 €/bn financed by repos), from February 2017 the liquidity position of the Group has significantly improved, also showing a positive commercial contribution, clear proof of a new trust from customers.

The figure below shows the Net Liquidity Position at the end of February 2017 compared with the situation at the end of 2016.




The main metrics show that:

- the Counterbalancing capacity increased to 13 €/bn from a minimum of around 6 €/mld;

- the 1 month net liquidity position increased to 9 €/bn, despite the 1 month time bucket is affected by the expiring of the old GGB for almost 4 €/bn;
- the stressed time to survival significantly improved in area 30 days from 0 days as of 31/12/2016 (over 12 months without stress);
- the potential daily liquidity available intraday increased by 6 €/bn to 8,5 €/bn (2,5 €/bn as of 31/12/2016), above the 2,5 €/bn limit;
- the LCR increased to 136% from 119% at the end of 2016, above the target level (120%);
- the Gap Ratio 1Y increased to 103,1% from 102,2% (above the operational limit of 97%) and the Commercial Gap Ratio increased to 66% from 63,3% (closer to the operational limit of 70%);
- due not only to issuing and financing of new GGB, but also to the recovering of unsecured deposits, even NSFR was up to 94% from the previous 88%, a level close to the operational limit (96%);
- due to the reduction of secured funding, the Gross asset encumbrance ratio was down to 44,5% (limit 30%) and the Net asset encumbrance ratio to 71,2% (limit 56%).

## The liquidity funding strategy 2017-2019

The next three years are going to be a challenging period for the Group from a point of view of the liquidity actions to undertake, especially 2017. The liquidity funding strategy 2017-2019, drawn according to the current version of the Restructuring Plan, still under discussion with competent authorities and hence subject to be modified, defines the guidelines of the funding of the Group over a three-year time horizon, in compliance with the limits set up on risk indicators, both internal and regulatory.

In order to restore liquidity position to an adequate level, increase the structural funding and cope with any worsening of the position, the liquidity funding strategy includes the following main actions for 2017:

- New Government Guaranteed Bond (GGB) for total 11 €/bn (of which 7 €/bn already issued) are planned to be issued in the first half of 2017.
- Capital increase for 4,5 €/bn of liquidity impact in the first half of 2017.
- NPLs disposal for 6,3 €/bn of liquidity impact by the end of 2017.
- Restoring of the commercial funding. In 2017 the net funding contribution is expected to be +5,2 €/bn, with the aim to reduce the level of asset encumbrance.

In particular, old Government Guaranteed Bond (GGB) are expiring next March for an amount of 4 €/bn (-3,7 €/bn of counterbalancing impact). For this purpose, the first tranche of new GGB (about 6,7 €/bn of liquidity) aims not only to support liquidity balances, but also to renew the maturing funding. Moreover, in 2017 the Group have to start a process for eliminating the reliance of liquidity position on ECB's short-term auctions (MRO).

Besides, in the next years the liquidity funding strategy includes other action for reinforcing the funding structure.

- Renewal of unsecured issuances (new unsecured bonds for 2 €/bn against 1,8 €/bn expiring).
- Increase of secured issuances (new covered bonds for 3,5 €/bn against 1 €/bn expiring).
- Substitution of secured retained bonds (pledged as collateral for Eurosystem's auctions) with new covered bonds to be issued on the market.

Finally, ABACO credit claims are going to be restored for 2,6 €/bn, in order to be used as liquidity reserves and to guarantee an adequate contingency liquidity buffer in case of new events of stress.

The funding position and the liquidity risk profile of the Group are expected to return to an adequacy area in the next three years under the full execution of the liquidity funding strategy. The liquidity adequacy is defined by the Key Risk Indicators projections, as described on the table below:

| | | Risk Appetite Statement 2017 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Profile FY 2016 | **Appetite FY 2017** | Appetite FY 2018 | Appetite FY 2019 | | **Tolerance 1Y** | Tolerance 2Y | Tolerance 3Y | **Capacity 1Y** | Capacity 2Y | Capacity 3Y |
| **Liquidity Adequacy** | Net Cash Position 1M / Total Assets | 4% | 12% | 12% | 12% | > | 8% | 8% | 8% | 5% | 5% | 5% |
| | LCR | 108% | 182% | 193% | 161% | > | 130% | 130% | 130% | 100% | 100% | 100% |
| | NSFR | 88% | 111% | 111% | 113% | > | 105% | 105% | 105% | 100% | 100% | 100% |

Net Cash Position 1M over Total Assets is expected to grow up to 12% over the three years, due to liquidity profile taking direct advantage from the new GGB, capital increase, disposal of NPLs and increase of commercial deposits.

Also, LCR is expected to show an improvement to 182% in 2017, above the Risk Tolerance level of 130% over the next three years. Increase of the forecasts on liquidity coverage ratio for 2017 are not only based on new GGB to be issued, but also on the next capital increase that is followed by the NPLs disposal.

Through the RAS / budget projections the Group performs an implicit estimate of the minimum required liquidity buffer over the next three years. In particular, starting from the expected net cash outflows, the Group determines its minimum required volumes of liquid assets as shown below:

| *(€/mln)* | 2017 | 2018 | 2019 |
|---|---|---|---|
| Net cash outflows (RAF projection) | 6.400 | 6.675 | 7.221 |
| LCR Risk Appetite Level | 182% | 193% | 161% |
| **Minimum volume of liquid assets (consistent with LCR Risk Appetite Level)** | **11.661** | **12.905** | **11.603** |
| LCR Risk Tolerance Level | 130% | 130% | 130% |
| **Minimum volume of liquid assets (consistent with LCR Risk Tolerance Level)** | **8.320** | **8.678** | **9.388** |
| LCR Risk Capacity Level | 100% | 100% | 100% |
| **Minimum volume of liquid assets (consistent with LCR Risk Capacity Level)** | **6.400** | **6.675** | **7.221** |

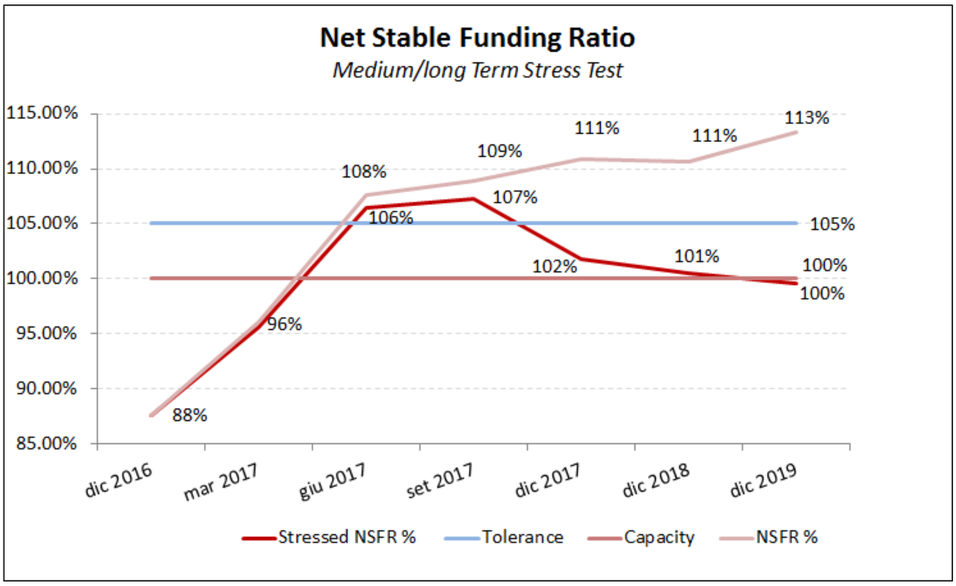
The minimum required level of liquid assets to reach the LCR Risk Appetite level range from 11,6 €/bn in 2017 and 2019 to 12,9 €/bn in 2018. Targeting the Risk Tolerance level, the minimum required liquidity buffer range from 8,3 €/bn in 2017 to 9,4 €/bn in 2019. Referring to the LCR Risk Capacity level (set in line with the regulatory full phase-in limit) the minimum required liquidity buffer must range from 6,4 €/bn in 2017 to 7,2 €/bn in 2019.

From a long-term perspective, according to the liquidity funding strategy NSFR is expected to increase to 111% in 2017, up to 113% over the next three years, mainly thanks to secured and unsecured issuances.

In order to understand the feasibility of the liquidity funding strategy with regard to the limit system set up by the Risk Appetite Statement, the Group performs a medium/long stress test analysis on NSFR. The stress test consists of several scenarios, each assuming a partial or complete failure of the main actions of the liquidity funding strategy. In details, the risk factors used for the medium/long term stress test have been:

- Unsecured issuances
- Commercial funding
- NPLs disposal

Each scenario is composed by a likely combination of these risk factors, with the most severe of them assuming a strong reduction of commercial funding (-50%) and a complete failure of NPLs disposal. The results for the aforementioned scenario are described by the figure below:




As shown, even the most severe of the scenarios used in the medium/long term stress test brings to a NSFR level of about 100%, in line with the Risk Capacity level established within the Risk Appetite Statement.

## 2.5. Concluding remarks and challenges

The 2016 has been characterized by severe and persistent liquidity crises. The final remarks and the main challenges arisen from the analysis are shown below:

- Overall, in a short term perspective, the Group presents a strongly stressed liquidity position, deeply deteriorated if compared to the end of last year. All liquidity risk indicators stand well far off the target level at 31/12/2016, in most cases breaching the limits. Even if at the beginning of the year the amount of liquidity reserves have proved to be adequate to withstand liquidity crises, liquidity stress experimented in January, in July and in the whole second half of 2016 have largely dried counterbalancing capacity. From January 2017 the Group has activated several actions in defense of short term liquidity position, in particular the program for issuing new Government Guaranteed Bonds.
- Despite 2016's liquidity crises, structural liquidity position does not show excessive weakness because the Group was able to accede to long term ECB auctions to compensate deposits run-off. Moreover, from January 2017 NSFR and other medium-long term metrics are expected to further improve thanks to the new long term funding operated through new GGB. Despite the ECB refunding support may make easier the process of re-balancing the funding position, in a longer term perspective the Group is well aware that funding profile should be balanced in the absence of extraordinary monetary measures: the funding strategy 2017-19 has the important role of coping with this issue, replacing ECB funding with unsecured funding.
- The CBC is very concentrated in Italian Treasury bonds: this is a widespread situation over the banking system, but still remains an issue in a perspective view since the CBC is vulnerable to a single risk factor. However, in consideration of the Group's typical funding channels, the availability of a large reserve in Italian Treasury bonds proved to be advantageous in terms of prompt funding capacity during the liquidity stress occurred during 2016.

- In 2016 liquidity crises have driven asset encumbrance to a very stressed level. In particular, the Group made large use of secured funding in order to compensate deposits run-off. In a medium term perspective asset encumbrance has to be mitigate so that liquidity reserves could be reconstituted in terms of encumberable assets. The funding strategy already addresses this issue defining a strong increase of unsecured funding that should enable the Group to reduce the asset encumbrance.

# 3. Liquidity and funding risk management

## 3.1. Overview of liquidity management and risk processes

Processes and controls regarding risks to liquidity and funding cover the whole span of the Group's business cycle. From a managerial perspective, the highest level of responsibility is encompassed and all key processes having an impact on liquidity and funding risk are taken into consideration within the Internal Liquidity Adequacy Assessment Process. The MPS organizational framework is based on the overarching responsibility of the Board of Directors regarding the main features of liquidity risk management. This involvement is defined in the "Directive on ILAAP" that requires the Board of Directors to determine the strategic approach to liquidity risk and approve each component of the liquidity risk management system (policies, responsibilities, risk framework); the management bodies (CEO, Committees), on the other hand, with the support of operating functions, are responsible for implementing the liquidity risk management system. The Directive on ILAAP is one of key element of the comprehensive revision of the liquidity documental framework carried out during 2016 which leaded to a new formalization of policies, processes and methodologies regarding liquidity risk management, ILAAP and their link with every other relevant aspect of Group business (strategic planning, budget, fund planning, risk allocation).

A first consideration about risk processes regards the impact on liquidity coming from the strategic plan and the resulting budget/funding plan definition. Liquidity risk strategies have been defined for a twofold purpose: on the one hand, the commitment to pursue the Institution's business model in an effective manner, on the other hand, the need to bring back the liquidity profile within the boundaries of a sustainable level of liquidity risk, as is determined at the RAS level. The Risk Appetite Statement, defined within the wider Risk Appetite Framework, and the Liquidity Risk Limits guarantee this consistency, establishing the key metrics to monitor and the consequent limit system to preserve the business model both in normal times and in stress conditions.

It's important to notice that the stress test framework is integrated into the key managerial processes: most of the limits established within the RAS have been calibrated through stress tests and the stress test framework has also a strong link with processes like the Liquidity Contingency Plan and the Group Liquidity Funding Strategy. The stress test calculation is also a reliable tool to assess the current stressed liquidity position of the Group, being based on a wide variety of stress scenarios. Intraday and short term stress tests are performed on a daily basis and give the Group the depiction of the stressed time to survival, one of the key metrics included in the Liquidity Risk Limits, while reverse stress test and medium/long term stress test are carried out at specific times during the year.

Starting from the described approach to liquidity and funding risks, the entire span on internal operational processes moves down (organization, methodologies, procedures), forming the subject of the ILAAP reporting package.

Among the key elements of the liquidity risk framework, it is worth to mention the following:

- the overarching structure of risk limits at Group level is defined within the Risk Appetite Statement and the subsequent Liquidity Risk Limits: key metrics have been formally defined with reference to intraday liquidity (potential daily liquidity), short term liquidity (stressed TTS, net cash position at 1 month over total asset, LCR) medium/long term liquidity (gap ratio curve, commercial gap ratio, asset encumbrance, NSFR) and concentration (concentration of funding and concentration of counterbalancing);
- measures and methodologies have been defined from a prudential perspective and stricter rules have been adopted to measure risks. In particular, the Group Risk Appetite Statement 2017-19 marks a step forward in designing the framework within which liquidity management must be carried out, introducing, besides Risk Capacity and Risk Tolerance, the new Risk Limit level. Another important addition to this strengthened framework are backtesting procedures, which are now regularly performed across a variety of internal models and procedures.

- the overall system of internal controls can be deemed as sound and effective: limits control and specific risk analyses are performed with an adequate frequency and results are properly reported to the relevant functions and committees. Key control processes have also been reinforced with a deep review and a new formalization of specific processes related to ILAAP, risk mitigation, stress testing, escalation, remediation and reporting;
- key processes impacting the Group liquidity position, as the funding strategy and the funding plan process, are now part of a wider, interconnected framework. The approach encompasses the RAF definition, strategic planning and budget constraints and the determination of consequent funding strategies. These elements, taken together, form a circular process that allows the group to monitor, on a periodic basis, the impact of funding plan execution or budget objectives fulfillment on liquidity risk.

## 3.2. Concluding remarks and challenges

As for the liquidity risk management and control assessment, a few concluding remarks and points of improvement have been identified, as follows:

- the liquidity risk framework and measurement system can be deemed as sound and effective. Liquidity related processes are part of a governance and organizational framework where risk taking and risk monitoring functions are clearly separated, responsibilities are identified and procedures are well known to the involved actors;
- key decisions on funding strategies, limits definition, measurement methodologies, contingency actions and other governance arrangements are taken after discussion in the appropriate managerial committees and presented to the Board for approval;
- the liquidity cost-benefit allocation mechanism is fully integrated within the Group key processes and formally defined by methodological and organizational documents which describe in details the functioning of liquidity transfer pricing. Nevertheless, a wider policy describing the interlinkages between the liquidity cost-benefit allocation mechanism and the risk management and overall management of the Group is still lacking.
- while processes regarding stress testing have been already formally documented, a methodological manual for liquidity stress tests is going to be published by the end of May 2017. It should detail, compared to the current framework, at least the following aspects:
  - ✓ formal definition of the approach to determine the reverse stress test;
  - ✓ integration of specific stresses on budget/funding plan hypotheses, extending the scope of stress testing to the longer term horizon;
- notwithstanding the Group monitors market conditions on a continuous basis, a policy document on maintaining presence in markets in order to ensure and periodically test market access and fund raising capacity is not available;
- despite analyses on funding concentration have been set up and now constitute part of the periodic internal and external reporting flows, a policy document on funding concentration management has still to be defined.

## 4. Areas of intervention

In order to meet the main identified weaknesses and enhance the liquidity risk framework, the Group has planned a series of intervention to be enacted by the end of 2017. In particular

- a comprehensive cost-benefit allocation mechanism framework policy will be formalized and approved by 31/12/2017;
- a methodological manual for liquidity stress test will be completed and approved by 31/05/2017;
- a policy document on maintaining presence in markets in order to ensure market access and fund raising capacity will be defined by 31/12/2017;
- a formalization of rules and processes governing funding concentration risk will take place by 31/12/2017.