# QUANTITATIVE UPDATE OF THE EBA MREL REPORT (DECEMBER 2016 DATA)

20 December 2017



EUROPEAN BANKING AUTHORITY



# Summary

The EBA has previously produced quantitative analysis on MREL in its June 2016 interim MREL Report<sup>1</sup> and December 2016 Final report on MREL<sup>2</sup>. These two analyses were respectively based on data as of 30 June 2015 and 31 December 2015. The EBA has now updated the **quantitative analysis** of the Final report on MREL. This update covers the analysis of MREL ratios, MREL capacity, MREL quality and estimated MREL funding needs of the **full sample of 112 EU banks as of end December 2016**. In addition, a consistent sample of 100 banks is used to compare the evolution of MREL over the year 2016.

To ensure comparability, analysis in this note is conducted using the same methodology as outlined in the Final report on MREL. As a result, interpretation of the findings is subject to the same limitations and caveats, including the absence of actual bank-specific MREL decisions by resolution authorities and data quality considerations. As in the previous exercises this analysis provides aggregate averages that must be read with caution as there is significant variance across individual banks. High variance of MREL ratios across banks is illustrated by the median and quartile MREL values presented in box plot diagrams. Key data analysis caveats are summarised in the annex to this document.

#### Full sample – December 2016 data

The average MREL ratio of 112 EU banks in the sample as of end December 2016, representing approximately 60% of the EU banks' assets, was 37.9% of RWAs, while the median value stood lower at 29.3% of RWAs.

		LA buj	ffer		Buffer/8%			
	Without	With partial subordination			Without	With	partial subordin	ation
	subordination	Total	Of which	% of	subordination	Total	Of which	% of
	Suborumation	Total	subordinated	RWAs	Suborumation	10101	subordinated	RWAs
G-SIIs	5.3	92.2	<u>87.7</u>	1.7%	61.8	111.7	<u>87.7</u>	1.7%
O-SIIs	104.2	105.5	<u>32.6</u>	1.0%	153.1	154.0	<u>32.6</u>	1.0%
Other*	22.1	9.2*			35.9	18.9*		
Total	131.5	206.8	<u>120.3</u>	1.5%	250.9	284.6	<u>120.3</u>	1.5%

\* **Other banks** (non-G-SIIs and non-O-SIIs): no subordination assumption and 50% partial recapitalisation requirement Source: EBA QIS data (December 2016)

The estimated MREL funding needs to reach the hypothetical LA buffer<sup>3</sup> and the buffer/8%<sup>4</sup> MREL calibration scenarios under the baseline assumptions<sup>5</sup> in the steady-phase range between **EUR 206.8 billion and EUR 284.6 billion**. The actual impact of MREL will depend on the capacity of

<sup>4</sup> Buffer/8% scenario = Max [2 x (Pillar 1 + Pillar 2 requirement + CBR); 8% of TLOF]

<sup>&</sup>lt;sup>1</sup> EBA-Op-2016-12 (19 July 2016). Report on implementation and design of the MREL framework. <u>https://www.eba.europa.eu/documents/10180/1360107/EBA+Interim+report+on+MREL</u>

<sup>&</sup>lt;sup>2</sup> EBA-Op-2016-21 (14 December 2016). Report on the Implementation and design of the MREL Framework. <u>https://www.eba.europa.eu/documents/10180/1695288/EBA+Final+MREL+Report+(EBA-Op-2016-21).pdf</u>

<sup>&</sup>lt;sup>3</sup> LA buffer scenario = 2 x (Pillar 1 + Pillar 2 requirement) + combined buffer requirement (CBR)

<sup>&</sup>lt;sup>5</sup> The baseline assumptions entail a partial subordination requirement G-SIIs (14.5% of RWA + CBR) and O-SIIs13.5% of RWA + CBR), and a 50% partial recapitalisation strategy for banks that are neither G-SIIs nor O-SIIs.



markets to absorb the volumes of MREL issuances needed for the build-up of MREL, and the corresponding capacity of banks (especially deposit-funded banks) to access markets, including to access to deep, developed markets.

There is a significant variance of MREL ratios across individual banks, especially among non G-SIIs. Individual bank results vary depending on systemic importance, size and cross-border activity, as well as funding models (namely deposit-taking intensity):

- 1) The average MREL ratio for G-SIIs is lower than the sample average (33.6% of RWAs) and slightly higher for O-SIIs (41.9% of RWAs). The average MREL ratio for other banks (non G-SIIs and non O-SIIs) is significantly higher (50.6% of RWAs) than the sample average.
- 2) However, median MREL ratios provide a different insight: for half of the G-SIIs MREL ratios are below 29.9% of RWAs. The median ratio is lower for O-SII (29.0% of RWAs) and lowest for the other banks (23.0% of RWAs). High variance across the sub-samples is present.
- 3) From a funding profile perspective, retail deposit-funded banks have lower than average MREL ratios, with almost half exhibiting MREL ratios below 21% of RWAs.

In order to assess the minimum subordination requirements stemming from the TLAC term sheet, as in the *Final report on MREL*<sup>6</sup> the EBA has assumed a partial subordination requirement of 14.5% of RWAs + CBR for G-SIIs. With a view to an improved resolvability of O-SIIs and a level playing field with G-SIIs, a partial subordination requirement of 13.5% of RWAs + CBR has also been tested in relation to O-SIIs, assuming that it would only enter into force (hypothetically) in 2022.

The minimum partial subordination requirement would result in a need for G-SIIs in the sample to issue an additional EUR 87.7 billion in subordinated debt in either LA buffer or buffer/8% scenario, which would account for 1.7% of their all G-SIIs' RWAs. The minimum partial subordination requirement would result in a need for O-SIIs in the sampleto issue and additional EUR 32.6 billion in subordinated debt. This would account for 1.0% of O-SIIs' RWAs. Given the heterogeneity across the O-SIIs subsample, resolution authorities may need to set MREL targets and transitional periods on a case-by-case basis, taking into account the resolution strategy for the institution, the relevant debt market for that bank, and its liability structure.

In relation to other banks (non-G-SIIs and non-O-SIIs), no automatic subordination requirement has been assumed. In addition, for those banks a 50% recapitalisation requirement rather than 100% has been tested, which further reduced estimated MREL funding needs.

When applying the buffer/8% scenario<sup>7</sup>, the analysis shows that, for G-SIIs and O-SIIs, in 10 cases (out of 63) the 8% of TLOF benchmark is higher than the general MREL requirement in the Buffer scenario. It is higher than the institutions' current MREL eligible resources in only 4 cases.

The impact of an 8% benchmark and assessed estimated MREL funding needs may be higher if resolution authorities exclude from MREL some of the liabilities governed by the law of a third-country<sup>8</sup> or if consider that part of MREL-eligible liabilities are likely to be excluded from bail-in<sup>9</sup>.

#### Consistent sample – December 2016 and December 2015 data

<sup>&</sup>lt;sup>6</sup> EBA-Op-2016-21 (14 December 2016). Report on the Implementation and design of the MREL Framework.

<sup>&</sup>lt;sup>7</sup> In which banks in the sample should meet the higher of twice capital requirements and buffers and 8% of total liabilities and own funds (TLOF).

<sup>&</sup>lt;sup>8</sup> Article 45(5) of the BRRD

<sup>&</sup>lt;sup>9</sup> Under Article 3 of the RTS on MREL.



A like-for-like analysis of a **consistent sample of 100 EU banks** with reference dates as of December 2015 and December 2016 reveals that, on aggregate, banks slightly **improved** both the **quantity and quality** of available MREL eligible instruments. As can be seen in the table that follows, aggregate estimated MREL funding needs under both baseline scenarios have decreased.

Consistent sample (100 banks)	Dec 2016 data		Δ	%Δ	Dec 2015 data
Number of banks	100	$\rightarrow$	-	-	100
Of which: G-SIIs	11	$\rightarrow$	-	-	11
Of which: O-SIIs	46	7	7	-	39
Of which: Other	43	Ы	7	-	50
# of banks with funding needs	42 – 56				42 – 53
MREL (EUR bn)	3169.6	7	4.5	0.1%	3165.1
MREL as % of RWA	37.8%	7	1.9%	5.3%	35.9%
Of which subordinated MREL (EUR bn)	1789.8	7	33.0	1.9%	1756.8
Subordinated MREL as % of RWA	21.3%	7	1.4%	7.0%	19.9%
RWA (EUR bn)	8386.6	И	-431.1	-4.9%	8817.7
TLOF (EUR bn)	21993.4	$\rightarrow$	-46.6	-0.2%	22040.0
Average Pillar 2 requirement	3.30%	$\rightarrow$	0.03%	0.9%	3.27%
Funding need under LA buffer scenario	201.6	$\downarrow$	-25.8	-11.4%	227.4
Funding need under buffer/8% scenario	266.0	$\downarrow$	-119.0	-30.9%	385.0
Of which subordinated (EUR bn)	<u>120.3</u>	$\checkmark$	-15.2	-11.3%	135.5

Estimated funding needs (in EUR billion; % of RWAs of the respective G-SIIs/O-SIIs/total samples)

Although results differ a lot across banks and categories, on average in 2016, banks in the consistently monitored sample:

- Improved their risk profile as measured by risk weighted assets (RWAs) by EUR 431.1 billion (-4.9%), which significantly contributed to the improved (lowered) estimated MREL funding needs.
- Only marginally increased the stack of MREL eligible instruments, both in absolute and relative amounts

   nominal MREL increased by EUR 4.5 billion (+0.1%), while the share of MREL as a percentage of RWAs improved by 1.9 percentage points to 37.8% of RWA<sup>10</sup>. This was largely driven by G-SIIs which have been actively issuing MREL in 2016 and early 2017.
- Slightly improved the quality of MREL, as captured by the increase of the stock of subordinated MREL instruments (EUR 33 billion, +1.9%).



 $<sup>^{10}</sup>$  This is an average value. High variance across the banks is depicted in Figure 1 and Figure 2 on page 9.



Mitigated total estimated MREL funding needs by EUR 25.8 billion (-11.4%) and EUR 119.0 billion (-30.9%) under LA buffer and buffer/8% baseline scenarios respectively. Aggregated subordinated estimated MREL funding needs have decreased by EUR 15.2 billion (-11.3%).



# QUANTITATIVE UPDATE OF THE EBA MREL REPORT (December 2016 data)

#### Import data analysis caveats

The results in this document have been produced in line with the methodology underpinning the original December 2016 Report and must be read in conjunction with the important data analysis caveats presented in further details in the Annex.

In particular, MREL decisions are to be determined and calibrated by resolution authorities for each and every institution according to the specific characteristics of the firm. However, given that to this date no MREL decision has yet been taken, assumptions had to be made as to resolution strategies, scope and calibration of MREL. These assumptions are in line with the EBA RTS on MREL<sup>11</sup> but are, by definition, different from the actual levels of MREL that will ultimately be determined for each institution and group.

The methodology follows current broad MREL eligibility criteria, including senior debt and deposits. Hypothetical MREL funding needs are estimated on a consolidated basis. Own funds counting towards consolidated capital requirements, and liabilities issued at all levels in the group (excluding intragroup liabilities) are included towards meeting the consolidated MREL requirement.

The funding needs of institution in the sample are estimated against the following main assumptions:

- → An LA buffer scenario Twice capital requirements + combined buffer requirement. No market confidence layer is considered for the recapitalisation amount.
- → A buffer/8% scenario Higher of i) twice capital requirements including the combined buffer requirement (CBR), and ii) 8% of total liabilities and own funds (TLOF). When calculating the recapitalisation amount, the scenario assumes that the resolution authority includes the CBR and also assesses, for all banks, the potential impact of the requirement for burden sharing to be imposed on at least 8% of an institution's TLOF in order to ensure access to resolution funding arrangements. This could be required to implement the resolution scheme. This scenario cannot be assumed to be a likely outcome for all banks in the sample.
- → A partial subordination requirement for G-SIIs (13.5% of RWA) and O-SIIs (12.5% of RWA).
- → A partial recapitalisation assumption for banks that are neither G-SIIs not O-SIIs For those banks the resolution strategy is less likely to entail full recapitalisation and therefore funding needs have been assessed under a 50% recapitalisation assumption instead of the full recapitalisation tested for G-SIIs and O-SIIs.

While funding needs are expressed as average aggregates, high variance of MREL ratios is present across institutions.

 $<sup>^{11}</sup>$  Commission Delegated Regulation (EU) 2016/1450 of 23 May 2016, OJ L 237, 3.9.2016, p. 1–9 .



## 1. The purpose

This note provides a **quantitative update on the EBA MREL report** with regards to the analysis of MREL ratios, MREL capacity, MREL quality and estimated MREL funding needs of the sample of EU banks as of end December 2016. It does not comprise any new macroeconomic impact assessment or MREL policy discussions.

The EBA has previously produced a quantitative analysis on MREL in the *Final report on MREL*<sup>12</sup> published in December 2016 (using December 2015 data as a reference), and in the *Interim report on MREL*<sup>13</sup> published in July 2016 (June 2015 data).

It is important to note that the estimated MREL funding needs presented in the said MREL reports provide comprehensive point-in-time overview, but <u>cannot</u> be directly compared across the different reference dates. Variations in the results are partly attributable to change in sample, assumed MREL calibration targets due to changing Pillar 2 requirement and combined buffer requirement, and MREL eligibility assumptions.

## 2. The context

Bail-in is a crucial element of the resolution reforms but its efficiency depends on whether banks have issued, at the point of failure, enough instruments that are eligible to be bailed-in and that can be bailed-in effectively and credibly without threatening financial stability. This is why the BRRD requires resolution authorities to determine a minimum requirement for own funds and liabilities eligible for bail-in, also known as MREL. In that sense, MREL is an essential complement to the bail-in tool.

The EBA analyses data on a wide sample of banks in order to assess the situation of banks operating in the EU in relation to the MREL requirement, depending on different options for the scope of MREL-eligible instruments and different hypothetical scenarios for the calibration of the MREL requirements.

## 3. Brief overview of the methodology applied

All analyses in this note are conducted using the same methodology as outlined in the *Final Report on MREL* and the Annex 1 of this document. As a result, interpretations of the findings are subject to the same limitations and caveats, including the absence of actual MREL decisions by resolution authorities and data quality considerations.

In the absence of MREL decisions, the calibration of MREL targets relies on two hypothetical scenarios that are sensitive to applicable capital requirements (Pilar 1, Pillar 2 and combined buffer

<sup>&</sup>lt;sup>12</sup> EBA-Op-2016-21 (14 December 2016). Report on the Implementation and design of the MREL Framework. <u>https://www.eba.europa.eu/documents/10180/1695288/EBA+Final+MREL+Report+(EBA-Op-2016-21).pdf</u>

<sup>&</sup>lt;sup>13</sup> EBA-Op-2016-12 (19 July 2016). Report on implementation and design of the MREL framework. <u>https://www.eba.europa.eu/documents/10180/1360107/EBA+Interim+report+on+MREL</u>



requirement) and agnostic as far as the institution-specific preferred resolution strategy is concerned.

The detailed analysis of Pillar 2 requirements (at reporting date) as of December 2015 and December 2016 revealed a number of material differences and inconsistencies over time. At the beginning of September 2017, in order to improve data quality the EBA together with the Task Force on Impact Assessment has conducted an additional data validation exercise and requested all competent authorities to verify Pillar 2 data ('at reporting date') provided as of December 2015 and December 2016. As a result, it is assumed that the figures reported by competent authorities for Pillar 2 applicable at the reporting date as of December 2016 and December 2015 correctly reflect the bank-specific Pillar 2 requirement and excludes any Pillar 2 guidance component. No adjustments to Pillar 2 requirement are made<sup>14</sup>.

## 4. Quantitative update

#### The sample

This report draws on data on external MREL issuance and balance sheet information collected through the EBA's regular CRD –CRR/Basel III monitoring exercise<sup>15</sup> as of December 2016.

The sample comprises 112 banks<sup>16</sup> from 18 EU Member States and covers approximately 60% of the total EU banking sector's assets.<sup>17</sup> The sample includes almost all EU G-SIIs<sup>18</sup> and a fair proportion of EU O-SIIs. The sample also includes banks that are neither G-SIIs nor O-SIIs, referred to as 'other' banks. For the present analysis, the sample of O-SIIs excludes G-SIIs. The participation of banks in the monitoring exercise is voluntary.

Beyond the classification of banks into G-SIIs, O-SIIs and other (non G-SIIs and non O-SIIs banks), the respective subsamples are still heterogeneous. In terms of banks' total risk weighted assets (RWAs), G-SIIs banks' RWA range between EUR 131.9 billion and EUR 810.4 billion, O-SIIs range between EUR 1.8 billion and EUR 283.9 billion, while other banks' RWAs range from as low as EUR 0.2 billion to EUR 59.5 billion.

The sample decomposition per different funding model reveals that 50 banks rely significantly on retail deposit funding, i.e. they have at least 40% of total liabilities and own funds (TLOF) composed of retail deposits.

<sup>&</sup>lt;sup>14</sup> In the Final Report on MREL (<u>14 December 2016</u>) the Pillar 2 component of the capital requirement applied was a bankspecific number reduced by 1 percentage point (100 basis points (bps)) in order to proxy the anticipated introduction of the distinction between Pillar 2 requirement (P2R) and the Pillar 2 guidance (P2G).

<sup>&</sup>lt;sup>15</sup> For more information on the EBA's Basel II monitoring exercise, see <u>https://www.eba.europa.eu/risk-analysis-and-</u> <u>data/quantitative-impact-study/basel-iii-monitoring-exercise</u>. <sup>16</sup> This compares to 133 banks that voluntarily provided data as of December 2015.

<sup>&</sup>lt;sup>17</sup> Data source: ECB Consolidated Banking Data database.

<sup>&</sup>lt;sup>18</sup> The sample covers 12 out of 13 EU G-SIIs.



# Table 1: Number of G-SIIs, O-SIIs, and other (non G-SIIs and non-O-SIIs) banks; number of banks based on their funding structure across countries

	Total	Of which: G-SIIs	Of which: O-SIIs	Of which: Other	Mainly retail deposits- funded banks	Other banks
Austria	7	_	5	2	3	4
Belgium	5	_	4	1	4	1
Denmark	4	_	4	_	_	4
France	5	3	1	1	1	4
Germany	<b>26</b>	1	6	19	8	18
Greece	4	_	4	_	3	1
Hungary	1	—	1	_	1	—
Ireland	4	—	4	_	3	1
Italy	14	1	2	11	6	8
Luxembourg	3	_	1	2	_	3
Malta	2	—	1	1	2	—
Netherlands	5	1	4	_	2	3
Norway	2	—	1	1	1	1
Poland	5	—	3	2	4	1
Portugal	2	—	2	_	2	—
Spain	10	1	4	5	6	4
Sweden	5	1	3	1	_	5
United Kingdom	8	4	1	3	4	4
Total	112	12	51	49	50	62

Source: EBA QIS data (December 2016)



#### **MREL capacity**

The median MREL ratio is lower than the average MREL ratio. Heterogeneity is present across the sample considering systemic importance, size, cross border activity and funding profile of a respective bank. Based on the current MREL eligibility criteria, the average MREL ratio of a sample of 112 EU banks as of end December 2016 stands at approximately at 37.9% of RWAs, while the median MREL value is 29.3% of RWAs.

The results are heterogeneous across the sample. To illustrate this, the results are further broken down on the basis of systemic importance and funding profile.

Table 2: Average and median MREL ratios by systemic importance

	All banks	G-SIIs	O-SIIs	Other	Mainly retail deposits- funded banks	Other banks
Average MREL (% of RWA)	37.9	33.6	41.9	50.6	28.0	40.6
Median MREL (% of RWA)	29.3	29.9	29.0	23.0	21.1	41.4
Source: EBA OIS data (December 2016)						

Source: EBA QIS data (December 2016)

On average, the MREL ratios are slightly below average for G-SIIs (33.6% of RWAs), slightly above average for O-SIIs (41.9% of RWAs), and significantly higher (50.6% of RWAs) for the other banks (non-G-SIIs and non-O-SIIs).

However, the median results illustrate the opposite decreasing trend – for half of the G-SIIs MREL ratios are below 29.9% of RWAs, this ratio is lower for O-SII (29.0% of RWAs) and smallest for the other banks (23.0% of RWAs). Mainly retail deposit-funded banks, on average, also exhibit lower MREL ratios – median value is 21.1% RWAs. This means that for half of the mainly retail depositfunded banks in the sample, MREL ratios are below 21.1% of RWAs.

Significant variance across individual banks is illustrated in Figure 1 and Figure 2. The interquartile range<sup>19</sup> of MREL ratios for G-SIIs is approx. 29% – 41% of RWAs. It is much wider for O-SIIs (approx. 19% – 59% RWAs) and other (non G-SIIs, non O-SIIs) institutions (approx. 18% – 50% RWAs).

MREL ratios of the middle 50% deposit-funded banks are concentrated around 17% – 30% RWAs, while the interquartile range of MREL ratios for the remaining banks is wider at approx. 26% – 66% RWAs.

<sup>&</sup>lt;sup>19</sup> Interquartile range is a measure of statistical dispersion, being equal to the difference between 75th and 25th percentiles, i.e. the middle 50%.





Figure 1: Distribution of MREL ratios<sup>20</sup> by systemic importance

Figure 2: Distribution of MREL ratios by reliance on deposits<sup>21</sup>

Analysis of MREL ratios expressed in terms of total liabilities and own funds (TLOF) depicts a similar pattern (see Figure 3 and Figure 4). The interquartile range of MREL ratios is narrow for G-SIIs, but much wider for O-SIIs and other (non G-SIIs non O-SIIs) institutions. The median MREL value is well below the average MREL value for O-SIIs and other institutions. Deposit funded banks have lower MREL ratios than other banks.



The actual impact of MREL introduction will depend on the capacity of markets to absorb the volumes of MREL issuances needed for the build-up of MREL, and the corresponding capacity of banks (especially deposit funded banks) to access markets, including access to deep, developed markets.

<sup>&</sup>lt;sup>20</sup> The box-and-whisker plots contained in this section show the interquartile range (blue box), the 95<sup>th</sup> and 5<sup>th</sup> percentile, the median (red line) and 'x' average values of the distribution. <sup>21</sup> Defined as house with the distribution.

Defined as banks with at least 40% of TLOF composed of retail deposits.

<sup>&</sup>lt;sup>22</sup> The box-and-whisker plots contained in this section show the interquartile range (blue box), the 95<sup>th</sup> and 5<sup>th</sup> percentile, the median (red line) and 'x' average values of the distribution.  $^{\rm 23}$  Defined as banks with at least 40% of TLOF composed of retail deposits.



#### **MREL composition**

Analysis of the composition of MREL-eligible instruments reveals that capital instruments (CET1, AT1, T2) constitute a significant proportion of EU banks' MREL-eligible stack—on average, 43.4% of total MREL. Subordinated debt instruments account for 13.8%, while senior debt instruments amount to 32% of MREL. Decomposition of the MREL stack across banks of different systemic importance is provided in the Figure 5.







#### **Summary of estimated MREL funding needs**

#### Overall funding needs and differences across banks

**Based on the current MREL eligibility criteria and without a subordination requirement** the estimated MREL funding needs of the 112 EU banks as of end December 2016 would range from **EUR 131.6 billion** (under the LA buffer calibration scenario) to **EUR 250.8 billion** (under the buffer/8% scenario).

While these figures reflect results obtained when applying identical scenarios for all banks, they would benefit from a differentiation from at least two perspectives:

- First, these scenarios do not reflect the fact that a systematic subordination requirement will be applied to G-SIIs and, may also be extended to some other banks (e.g. O-SIIs);
- Second, this scenario is likely to be too conservative for some other banks that are likely to be liquidated or may not be subject to full recapitalisation requirement.

For these reasons, a partial subordination scenario has been calibrated for G-SIIs and O-SIIs, including a specific assumption of funding needs for other banks (non G-SIIs and non O-SIIs) under a partial (50%) recapitalisation requirement (see below).

Under the baseline scenario (LA buffer<sup>24</sup> and the buffer/8%<sup>25</sup> MREL with calibration а partial subordination requirement for G-SIIs<sup>26</sup> and O-SIIs<sup>27</sup>, and a partial recapitalisation<sup>28</sup> requirement for other banks that are non G-SIIs and non O-SIIs) estimated MREL funding needs in the steadyphase would range between EUR 206.8 billion EUR and 284.6 billion.

Figure 6: Estimated funding needs under no subordination and baseline scenarios by banks' systemic importance (EUR billion)



 $<sup>^{24}</sup>$  LA buffer scenario = 2 x (Pillar 1 + Pillar 2 requirement) + combined buffer requirement (CBR)

<sup>&</sup>lt;sup>25</sup> Buffer/8% scenario = Max [2 x (Pillar 1 + Pillar 2 requirement + CBR); 8% of TLOF]

<sup>&</sup>lt;sup>26</sup> 14.5% + CBR for G-SIIs

<sup>&</sup>lt;sup>27</sup> 13.5% + CBR for O-SIIs

<sup>&</sup>lt;sup>28</sup> 50% partial recapitalisation for other banks (non G-SIIs and non O-SIIs)



#### Impact on other banks (non-G-SIIs and non-O-SIIs) under the alternative scenario

Systemic importance and/or preferred resolution strategies will be the key drivers in determining MREL requirements. Indeed, there will be no 'one size fits all' MREL calibration and both the loss absorption amount and the recapitalisation amount will have to be tailor-made by resolution authorities for every bank based on the preferred institution-specific resolution strategy.

As a result, the full recapitalisation may not be applicable for all banks in the sample. To estimate this scenario, it is assumed that for other banks (non G-SIIs and non O-SIIs) a partial recapitalisation amount of 50% and no subordination requirement will be requested.

This potentially lower required recapitalisation amount would significantly reduce MREL impact on other banks. Estimated MREL funding needs would decrease from EUR 22.1 billion to EUR 9.2 billion under the LA buffer and from EUR 35.9 billion to EUR 18.9 billion under the buffer/8% scenarios.

This is a significant reduction by around 60% under the LA buffer calibration and by almost half under the buffer/8% calibration scenario. In relative terms, funding needs decrease from



M Source: EBA QIS data (December 2016)

3.2% and 5.1% to **1.3%** and **2.7%** of the all other banks' (non G-SIIs and non O-SIIs) RWAs under the LA buffer and the buffer/8% scenarios respectively.

#### Impact of a partial subordination, partial recapitalisation requirement

To test the impact of subordination requirements on banks' estimated MREL funding needs, a partial subordination requirement for G-SIIs (14.5% of RWAs + CBR) and for O-SIIs (13.5% of RWAs + CBR) has been assumed. A partial (50%) recapitalisation requirement has been considered for other banks that are non G-SII and non O-SII entities.

The findings suggest that **total estimated funding needs** would **increase by EUR 75.3 billion** (from EUR 131.5bn to EUR 206.8bn) **under the LA buffer scenario**, and **by EUR 33.7 billion** (from EUR 250.9bn to EUR 284.6bn) **under the buffer/8% scenario**. The increase in total estimated MREL funding needs in subordinated debt is the same under both scenarios—i.e. EUR 120.3 billion.

With regard to the different types of banks, under the **LA buffer scenario**, a partial subordination requirement increases total estimated MREL funding needs the most for G-SIIs – by EUR 86.9 billion (from EUR 5.3bn to EUR 92.2bn), out of which EUR 87.7 billion is to be met with subordinated



instruments. Estimated MREL funding needs for O-SIIs increase by EUR 1.3 billion (from EUR 104.2bn to EUR 105.5bn), out of which EUR 32.6 billion MREL funding needs are to be met by subordinated MREL-eligible instruments. Given the heterogeneity across the O-SIIs subsample, careful consideration will have to be given when calibrating actual MREL targets and setting any transitional periods.

No subordination requirement is assumed for other banks. However, because of the assumed partial 50% recapitalisation amount, estimated MREL funding needs for other banks (non G-SII and non-OSIIs) decrease by EUR 12.9 billion (from EUR 22.1bn to EUR 9.2bn).

Under the **buffer/8% scenario**, the impact of a partial subordination requirement is the same but of a different magnitude. G-SIIs are affected the most – total estimated MREL funding needs increases by EUR 49.9 billion (from EUR 61.8bn to EUR 111.7bn). Impact on O-SIIs is rather limited – a total increase by EUR 0.9 billion (from EUR 153.1bn to EUR 154.0bn). Partial recapitalisation requirement has a larger impact on other banks (non G-SII and non-OSIIs) – total estimated MREL funding needs go down by EUR 17 billion (from EUR 35.9bn to EUR 18.9bn). MREL funding needs in subordinated debt for G-SIIs and O-SIIs are the same as under the LA buffer scenario.

Figure 8: Change in estimated MREL funding needs under partial subordination, partial recapitalisation (in EUR billion) LA buffer scenario





The tables below provide information how many banks may not meet assumed steady-state MREL requirements based on the hypothetical scenarios — a partial subordination scenario for G-SIIs and O-SIIs, and the partial recapitalisation requirement for other banks (non G-SIIs nor O-SIIs.



		LA buj	ffer			Buffe	r/8%	
	Without	With p	partial subordina	ition	Without	With partial subordination		
	subordination	Total	Of which	% of	subordination	Total	Of which	% of
		10101	subordinated	RWAs		Total	subordinated	RWAs
G-SIIs	5.3	92.2	<u>87.7</u>	1.7%	61.8	111.7	<u>87.7</u>	1.7%
O-SIIs	104.2	105.5	<u>32.6</u>	1.0%	153.1	154.0	<u>32.6</u>	1.0%
Other*	22.1	9.2*			35.9	18.9*		
Total	131.5	206.8	<u>120.3</u>	1.5%	250.9	284.6	<u>120.3</u>	1.5%

#### Table 3: Estimated funding needs (in EUR billion; % of RWAs of the respective G-SII/O-SII/total samples)

\* Other banks (non-G-SIIs and non-O-SIIs): no subordination assumption and 50% partial recapitalisation requirement Source: EBA QIS data (December 2016)

#### Table 4: Number of banks that may not meet assumed steady-state MREL requirements

		LA buffer		Buffer/8%			
	Without	With partial subordination		Without	With partial subordination		
	subordination	Total	Of which subordinated	subordination	Total	Of which subordinated	
G-SIIs	2 out of 12	7 out of 12	6 out of 12	5 out of 12	8 out of 12	6 out of 12	
O-SIIs	24 out of 51	27 out of 51	22 out of 51	29 out of 51	31 out of 51	22 out of 51	
Other*	19 out of 49	10 out of 49		28 out of 49	21 out of 49		
Total	45 out of 112	44 out of 112	28 out of 112	62 out of 112	60 out of 112	28 out of 112	

\* **Other banks** (non-G-SIIs and non-O-SIIs): no subordination assumption and 50% partial recapitalisation requirement Source: EBA QIS data (December 2016)

To illustrate the magnitude of the estimated MREL funding needs, Table 5 provides MREL funding needs as a percentage of RWAs.

#### Table 5: Estimated funding need (in EUR billion) for partial subordination, partial recapitalisation - 2022

		L	A buff	er			Buffer/8%			
		G-SIIs		O-SIIs	Other		G-SIIs		O-SIIs	Other
	Total	Of which subordinated	Total	Of which subordinated	Total	Total	Of which subordinated	Total	Of which subordinated	Total
Estimated funding needs (EUR bn)	92.2	87.7	105.5	32.6	9.2	111.7	87.7	154	32.6	18.9
Banks with funding needs	7	6	27	22	10	8	6	31	22	21
Average MREL target (% RWA)	26.5	18.7	27.3	17.5	18.4	30.7	18.7	31.7	17.5	25.7
Average MREL target of banks with funding needs (% RWA)	26.7	18.6	26.9	16.8	19.9	30.9	18.6	31.3	16.8	24.4
Estimated funding needs in % of RWA of all banks	1.8%	1.7%	3.3%	1.0%	1.3%	2.2%	1.7%	4.9%	1.0%	2.7%
Estimated funding needs in % of RWA of banks with funding needs	3.1%	3.2%	8.2%	3.1%	5.1%	2.9%	3.2%	9.0%	3.1%	7.3%

Source: EBA QIS data (December 2016)



#### Estimated MREL funding needs under the unlikely hypothetical full subordination scenario

It is realistic to expect that some banks will be subject to systematic subordination requirements and that some will not be subject to a full recapitalisation or may be liquidated.

Under a hypothetical full subordination scenario for all banks, estimated MREL funding needs would be equal to between EUR 678.5 billion and EUR 1031.5 billion under the LA buffer or the buffer/8% calibration scenarios. However, the full subordination scenario is not considered to be a likely outcome and results provided are for illustrative purposes only.

## 5. Comparison of December 2016 and December 2015 results

Estimated MREL funding needs estimated using full sample of banks as of December 2015 and December 2016 data are not directly comparable because of differences in the size and composition of a monitored sample and calibration of hypothetical MREL targets. Between 2015 and 2016 assumed MREL target levels have changed, largely, due to applied Pillar 2 requirement as well as the combined buffer requirement. Some changes can also be attributed to a change of systemic importance status of some banks.

Full sample:	December 2016 data		December 2015 data
Number of banks in the sample	112	И	133
MREL (EUR bn)	3379.9	$\checkmark$	3820.2
MREL as % of RWA	37.9%	7	37.0%
Of which subordinated MREL:	1932.4	Ы	2086.6
Subordinated MREL as % of RWA	21.7%	7	20.2%
RWA (EUR bn)	8915.8	$\checkmark$	10336.4
TLOF (EUR bn)	23701.9	$\checkmark$	25550.5
Average <sup>29</sup> Pillar 2 requirement	3.27%	$\mathbf{\uparrow}$	1.76%
Estimated funding needs under LA			
buffer scenario (baseline scenario)	206.8	7	186.1
(EUR bn)			
# of banks with funding needs	44	И	49
Estimated funding needs under			
buffer/8% scenario (baseline	284.6	7	276.2
scenario) (EUR bn)			
# of banks with funding needs	60	И	65
Of which subordinated:	<u>120.3</u>	$\checkmark$	<u>154.4</u>

However, a comparison can be made using information on a consistent sample of **100 banks** with a reference to data as of December 2015 and December 2016.

Please note that for the purposes of a comparative sample analysis, bank-specific Pillar 2 requirement was used as reported and revised by the competent authorities. As a result, contrary

<sup>&</sup>lt;sup>29</sup> Weighted average (based on the RWA)



to the approach taken in the Final report on MREL, no adjustments to the reported Pillar 2 values have been made.

Consistent sample:	December		۸	%Λ	December
	2016 data		Δ	704	2015 data
Number of banks	100	$\rightarrow$	-	-	100
Of which: G-SIIs	11	$\rightarrow$	-	-	11
Of which: O-SIIs	46	7	7	-	39
Of which: Other	43	Ы	7	-	50
# of banks with funding needs	42 to 56				42 to 53
MREL (EUR bn)	3169.6	7	4.5	0.1%	3165.1
MREL as % of RWA	37.8%	7	1.9%	5.3%	35.9%
Of which subordinated MREL (EUR bn)	1789.8	7	33.0	1.9%	1756.8
Subordinated MREL as % of RWA	21.3%	7	1.4%	7.0%	19.9%
RWA (EUR bn)	8386.6	Ы	-431.1	-4.9%	8817.7
TLOF (EUR bn)	21993.4	$\rightarrow$	-46.6	-0.2%	22040.0
Average Pillar 2 requirement	3.30%	$\rightarrow$	0.03%	0.9%	3.27%
Funding need under LA buffer scenario	201.6	J.	25.0	11 40/	227 4
(baseline scenario) (EUR bn)	201.0	•	-25.8	-11.4%	227.4
Funding need under buffer/8% scenario	266.0	J.	110.0	20.0%	385.0
(baseline scenario) (EUR bn)	200.0	•	-119.0	-30.9%	365.0
Of which subordinated (EUR bn)	120.3	$\downarrow$	-15.2	-11.3%	135.5

Aggregate figures reveal that EU banks in the consistent monitored sample slightly improved both the quantity and the quality of available MREL-eligible instruments. They have marginally increased the stack of MREL eligible instrument both in absolute and relative amounts. The nominal amount of MREL eligible instruments increased by EUR 4.5 billion (+0.1%), while the share of MREL as a percentage of RWAs improved by 1.9 percentage points to 37.8% of RWA. On aggregate, the quality of MREL slightly improved as the stock of subordinated MREL instruments increased by EUR 33 billion (+1.9%).

The MREL stack increase was largely driven by G-SIIs which have been actively issuing MREL in 2016 and early 2017. For non G-SIIs, the picture is less conclusive. In 2016,, the total MREL stock of non G-SIIs declined in spite of an increase in the subordinated MREL stock.

The MREL funding need results are not only linked to issuing behaviour. Across the sample, RWAs have also decreased, which helped to reduce funding needs for all banks. Over 2016, banks reduced RWAs by EUR 431.1 billion (-4.9%). This significant reduction in RWAs materially contributed to the improved (lowered) estimated MREL funding needs – by EUR 25.8 billion (-11.4%) under LA buffer scenario or by EUR 119.0 billion (-30.9%) under buffer/8% baseline scenario. Aggregated subordinated MREL funding needs declined by EUR 15.2 billion (-11.3%).

Table 6 illustrates the dynamics between RWAs and MREL eligible instruments between December 2015 and December 2016 across different types of banks (G-SIIs, O-SIIs and other). To illustrate relative amounts of MREL eligible instruments, Table 7 provides a breakdown of aggregated MREL amounts in terms of RWAs of all respective samples (G-SIIs, O-SIIs or other banks).



More detailed information on MREL funding needs in terms of RWAs of i) a sample of banks that have MREL funding needs and ii) in terms of aggregated amount of all respective sample (G-SIIs, O-SIIs or other banks) is provided in the Annex 2.

# Table 6: Change in RWAs and MREL eligible stack (in EUR billion); Consistent sample (100 banks)

RWAs	December 2016		Δ	%Δ	December 2015
G-SII	4,786.6	Ы	- 305.4	-6.0%	5,092.1
Non G-SII:	3,599.9	Ы	- 125.6	-3.4%	3,725.6
Of which: O-SII*	2,957.0	7	520.5	21.4%	2,436.5
Of which: Other*	643.0	$\checkmark$	- 646.1	-50.1%	1,289.1
Total	8,386.6	Ы	- 431.1	-4.9%	8,817.7
MREL eligible(total)	December 2016		Δ	%Δ	December 2015
G-SII	1,629.5	7	33.2	2.1%	1,596.2
Non G-SII:	1,540.1	N	- 28.7	-1.8%	1,568.9
Of which: O-SII*	1,208.1	$\uparrow$	261.7	27.7%	946.4
Of which: Other*	332.1	$\checkmark$	- 290.4	-46.7%	622.5
Total	3,169.6	$\rightarrow$	4.5	0.1%	3,165.1
MREL eligible (subordinated)	December 2016		Δ	%Δ	December 2015
G-SII	943.1	7	13.2	1.4%	929.9
Non G-SII:	846.7	7	19.7	2.4%	826.9
Of which: O-SII*	610.9	$\uparrow$	102.3	20.1%	508.6
Of which: Other*	235.8	$\downarrow$	- 82.6	-25.9%	318.3
Total	1,789.8	7	32.9	1.9%	1,756.8

\*The aggregate figures across the sub-samples of O-SIIs and other banks (non G-SIIs and non O-SIIs) have been affected by reclassification of banks' systemic importance between 2015 and 2016.

# Table 7: MREL eligible stack in % RWAsConsistent sample (100 banks)

MDEL aligible (total)	December	% of RWA	Change in	December	% of RWA
WIKEL ENGINE (LOLAI)	2016	(total)	%RWA	2015	(total)
G-SII	1,629.5	34.0%	7	1,596.2	31.3%
Non G-SII:	1,540.1	42.8%	N	1,568.9	42.1%
Of which: O-SII*	1,208.1	40.9%	7	946.4	38.8%
Of which: Other*	332.1	51.6%	7	622.5	48.3%
Total	3,169.6	37.8%	N	3,165.1	35.9%
MREL eligible	December	% of RWA		December	% of RWA
MREL eligible (subordinated)	December 2016	% of RWA (total)		December 2015	% of RWA (total)
MREL eligible (subordinated) G-SII	<b>December</b> 2016 943.1	% of RWA (total) 19.7%	7	<b>December</b> 2015 929.9	% of RWA (total) 18.3%
MREL eligible (subordinated) G-SII Non G-SII:	<b>December</b> <b>2016</b> 943.1 846.7	% of RWA (total) 19.7% 23.5%	ת ת	December 2015 929.9 826.9	% of RWA (total) 18.3% 22.2%
MREL eligible (subordinated) G-SII Non G-SII: Of which: O-SII*	December 2016 943.1 846.7 610.9	% of RWA (total) 19.7% 23.5% 20.7%	א א ע	December 2015 929.9 826.9 508.6	% of RWA (total) 18.3% 22.2% 20.9%
MREL eligible (subordinated) G-SII Non G-SII: Of which: O-SII* Of which: Other*	December 2016 943.1 846.7 610.9 235.8	% of RWA (total) 19.7% 23.5% 20.7% 36.7%	א א ע א	December 2015 929.9 826.9 508.6 318.3	% of RWA (total) 18.3% 22.2% 20.9% 24.7%

\*The aggregate figures across the sub-samples of O-SIIs and other banks (non G-SIIs and non O-SIIs) have been affected by reclassification of banks' systemic importance between 2015 and 2016.



## **ANNEX 1**

# Methodology and estimates of MREL target ratios under different scenarios

#### **Methodology and limitations**

At the time of publication this note, there has been progress in developing the policy approach on MREL that resolution authorities in the EU will adopt when implementing the MREL requirement. However, no formal MREL decisions have been taken. As a result, in order to assess estimated MREL funding needs, assumptions had to be made on MREL calibration scenarios (i.e. what level of loss-absorbing amounts and recapitalisation amounts would be set by resolution authorities). Obviously, these are only proxies for the bank-specific and currently unknown resolution strategies that are going to be determined. Regarding the scope of MREL-eligible instruments, a limited number of policy options have been considered.

#### Important data analysis caveats

A number of data analysis caveats (summarised in Table 8) should be also taken into account when interpreting the results of the estimated MREL funding needs analysis.

	Issue	Explanation
1	MREL calculation methodology	MREL is calculated on a consolidated level. A consolidated approach does not represent a preferred resolution strategy under an SPE or MPE approach, but this is pragmatic approach in the first phase of MREL determination, since, at this point in time, resolution authorities intend to set MREL at a consolidated level first. It must be noted that, for G-SIIs, the TLAC term sheet sets requirements in terms of resolution entities.
	Sample	Despite a relatively high number of small banks included in the December 2016
2	composition	sample, the assessed impact may only be seen as a rather imperfect proxy for the
	(small banks)	real impact on all small banks due to the significant diversity in the sector.
С	Definition of	'Small banks' are defined in the analysis as institutions with Tier 1 capital below
5	small banks	EUR 1.5 billion. This threshold may be relatively high in certain Member States.
4	Static balance sheet assumption	For the purpose of the analysis, a static balance sheet approach has been used—i.e. it is assumed that the entity after resolution would have the same size and risks as prior to the resolution. This is possibly unrealistic assumption, as banks may end up being smaller entities following resolution. As such, this assumption is an imperfect proxy for some resolution tools.
5	No MREL decisions	While a number of resolution authorities have developed their MREL policies, no MREL decision has been taken to this date. Against this backdrop, to calibrate MREL requirements a number of assumptions had to be made on the scope of eligible liabilities to be included in MREL and on likely scenarios.

#### Table 8: Data analysis caveats



#### Scenarios regarding the calibration of MREL

It is not possible, at this stage, to determine with certainty how much MREL institutions would need to meet their MREL requirement because, as previously mentioned, this will depend on actual bank-specific MREL decisions by resolution authorities (which have not yet been taken). However, to obtain a view of the magnitude of possible needs, two MREL calibration scenarios were considered taking into account the provisions of the BRRD and the RTS on MREL, as well as the draft and final policies communicated by a few resolution authorities:

- → An LA buffer scenario Twice capital requirements + CBR, i.e. [2 x (P1 + P2) + CBR]. Buffers are not included in the recapitalisation amount. No market confidence layer is considered.
- → A buffer/8% scenario Higher of twice capital requirements including the CBR, and 8% of TLOF, i.e. [max {2 x (P1 + P2 + CBR); 8% of TLOF}]. When calculating the recapitalisation amount, the scenario assumes that the resolution authority includes the CBR and also assesses, for all banks, the potential impact of the requirement for burden sharing to be imposed on at least 8% of an institution's TLOF in order to ensure access to resolution funding arrangements. This could be required to implement the resolution scheme. The calculation of the 8% benchmark is based on own funds and liabilities at the moment of measurement, without taking into account historical losses which may, at the point of failure, may not be counted towards the 8%. This scenario cannot be assumed to be a likely outcome for all banks in the sample.

In addition, MREL calibration scenarios do not take into account the upcoming leverage ratio requirement, which resolution authorities will have to take into account when setting the MREL requirement. Table 9 below provides an overview of the two aforementioned scenarios for MREL calibration.

Scenarios	Threshold denomination	Explanation of threshold				
LA buffer	Capital requirements (including Pillar 2) without considering buffers for the RCA	<ul> <li>Minimum MREL = Loss absorption + Recapitalisation</li> <li>Loss absorption = Pillar 1 (8%) + Pillar 2<sup>30</sup> + CBR<sup>31</sup></li> <li>Recapitalisation = Pillar 1 (8%) + Pillar 2</li> </ul>				
Buffer/8%	Higher of twice capital requirements (including buffers) and 8% of TLOF	Minimum MREL = Max {TLOF * 8%; 2 x (Pillar 1 (8%) + Pillar 2 + CBR)				

#### Table 9: Assumptions regarding the calibration of MREL

<sup>&</sup>lt;sup>30</sup> Pillar 2 requirement, excluding any Pillar 2 guidance component.

<sup>&</sup>lt;sup>31</sup> The CBR is the sum of a capital conservation buffer set as 2.5%, any applicable countercyclical capital buffer and a systemic buffer that is a bank-specific number.



#### **Scope of MREL-eligible instruments**

In terms of the scope of instruments eligible for MREL, **MREL** covers all currently MREL-eligible instruments<sup>32</sup>—i.e. without excluding MREL-eligible deposits not covered by DGSs (i.e. deposits with a residual maturity of more than 1 year). Deposits might possibly be excluded from MREL if resolution authorities consider this necessary to maintain the critical functions of the resolved institutions or to avoid contagion. Structured notes are considered to be MREL eligible.

#### Table 10: Assumptions regarding the scope of eligible liabilities and the MREL ratio

MREL numerator	MREL definition	MREL ratio (calibration)
Current MREL	Regulatory capital + Total unsecured subordinated debt > 1 year	Current MREL/TLOF <sup>33</sup>
(MREL)	<ul> <li>+ Total senior unsecured debt &gt; 1 year</li> <li>+ MREL-eligible deposits &gt; 1 year</li> </ul>	Current MREL/RWA

#### Additional alternative recapitalisation requirement for Group 2 and other banks

For some banks, and particularly for smaller ones, if liquidation is both feasible and credible then the required MREL recapitalisation amount would be zero in principle.<sup>34</sup> For banks where resolution authorities assess that liquidation is not credible and feasible, and where the preferred resolution strategy considers that some assets and liabilities would be transferred, a recapitalisation amount would be set at a lower level than what a full balance sheet recapitalisation would necessitate.

To illustrate the impact of such potentially lower MREL recapitalisation requirements, a variant of the LA buffer and the buffer/8% scenarios is also included. More precisely, for other banks (non G-SII, non O-SII), additional analysis has been conducted assuming a 50% recapitalisation requirement instead of the full recapitalisation under the LA buffer and the buffer/8% scenarios.

Table 11:	Alternative	scenario	for	other	(non	G-SII,	non	O-SII)	banks,	variant	of	the	LA	buffer	and	the	buffer/8%	ś
scenarios																		

Partial	Variant of the LA buffer scenario	<ul> <li>Minimum MREL = Loss absorption + Recapitalisation x 50%</li> <li>Loss absorption = Pillar 1 (8%) + Pillar 2 + CBR</li> <li>Recapitalisation x 50% = (Pillar 1 (8%) + Pillar 2) * 50%</li> </ul>
recapitalisation requirement	Variant of the Buffer/8% scenario	<ul> <li>Minimum MREL = Max {TLOF * 8%; Loss absorption + Recapitalisation x 50%}</li> <li>Loss absorption = Pillar 1 (8%) + Pillar 2 + CBR</li> <li>Recapitalisation x 50% = (Pillar 1 (8%) + Pillar 2 + CBR) * 50%</li> </ul>

 $<sup>\</sup>frac{32}{32}$  As defined in Article 45(4) of the BRRD.

<sup>&</sup>lt;sup>33</sup> After full netting.

<sup>&</sup>lt;sup>34</sup> Unless, as per Article 2(2) of the RTS on MREL, the resolution authority determines that a positive amount is necessary on the grounds that liquidation would not achieve the resolution objectives to the same extent as an alternative resolution strategy.



#### **Partial subordination requirement**

In order to estimate the potential impact of a subordination requirement in relation to MREL, an assumption has been made with respect to its perimeter and calibration: **Table 12: Partial subordination scenarios** 

Subordination	G Sile		Other
requirement for:	9-5115	0-5115	(non G-SIIs, non O-SIIs)
2022	14.5% of RWAs + CBR	13.5% of RWAs + CBR	Not applicable

As a starting point, it is assumed that—as per the TLAC term sheet—G-SIIs will at least be subject to a subordination requirement of 14.5% of RWAs<sup>36</sup> (+ CBR).

In addition, with a view to assessing the impact of a potential recommendation to extend subordination beyond G-SIIs, the 'partial subordination' scenario also measures the impact of a subordination requirement of 13.5% of RWAs (+ CBR) for O-SIIs. The rationale for this is aimed at ensuring that MREL is readily available, limiting the risk of breaching the NCWO requirement, facilitating the task of the resolution authorities and ensuring a level playing field. A longer transitional phase-in period was assumed to acknowledge the different levels of preparedness of these banks (O-SIIs but not G-SIIs) to meet this subordination requirement. This additional preparation may be needed to access the markets and eventually to build the required lossabsorbing capacity.

Finally, a number of assumptions regarding subordination were made. Due to the retroactive effect of the German statutory subordination law (which entered into force on 1 January 2017), senior unsecured debt instruments<sup>37</sup> issued by banks in Germany have been treated as subordinated. Senior unsecured debt instruments issued from non-operating holding companies (HoldCos) in the United Kingdom have also been treated as subordinated.

With the exception of senior unsecured structured notes.

<sup>&</sup>lt;sup>35</sup> The entry into force of a partial subordination requirement for O-SIIs is assumed to be 2022 for the purposes of the quantitative analysis. However, resolution authorities may set different transitional periods and/or a different calibration for this requirement on a case-by-case basis.

<sup>&</sup>lt;sup>36</sup> G-SIIs would be required to meet their MREL with subordinated instruments, at least to a level of 16% of RWAs in 2019, 18% of RWAs in 2022, in line with the TLAC term sheet. Subordination would not be required to the extent that the amount of excluded liabilities that rank pari passu or junior to MREL-eligible liabilities does not exceed 5% of MRELeligible instruments. As a result, resolution authorities should be able to set a subordination requirement for G-SIIs not lower than 13.5% of RWAs in 2019 and 14.5% of RWAs in 2022.



## ANNEX 2

Table 13: Change in RWAs, MREL eligible stack and estimated MREL funding needs (in EUR billion);

#### Consistent sample (100 banks)

RWAs	December 2016		Δ	%Δ	December 2015
G-SII	4,786.6	Ы	- 305.4	-6.0%	5,092.1
Non G-SII:	3,599.9	К	- 125.6	-3.4%	3,725.6
Of which: O-SII*	2,957.0	7	520.5	21.4%	2,436.5
Of which: Other*	643.0	$\checkmark$	- 646.1	-50.1%	1,289.1
Total	8,386.6	Ы	- 431.1	-4.9%	8,817.7
MREL eligible (total)	December 2016		Δ	%Δ	December 2015
G-SII	1,629.5	7	33.2	2.1%	1,596.2
Non G-SII:	1,540.1	R	- 28.7	-1.8%	1,568.9
Of which: O-SII*	1,208.1	$\uparrow$	261.7	27.7%	946.4
Of which: Other*	332.1	$\downarrow$	- 290.4	-46.7%	622.5
Total	3,169.6	$\rightarrow$	4.5	0.1%	3,165.1
MREL eligible (subordinated)	December 2016		Δ	%Δ	December 2015
G-SII	943.1	N	13.2	1.4%	929.9
Non G-SII:	846.7	7	19.7	2.4%	826.9
Of which: O-SII*	610.9	$\uparrow$	102.3	20.1%	508.6
Of which: Other*	235.8	$\checkmark$	- 82.6	-25.9%	318.3
Total	1,789.8	7	32.9	1.9%	1,756.8
Estimated MREL funding needs (total) <u>LA BUFFER</u>	December 2016		Δ	%Δ	December 2015
G-SII	87.7	$\checkmark$	- 36.9	-29.6%	124.6
Non G-SII:	113.9	7	11.1	10.8%	102.8
Of which: O-SII*	105.5	7	12.4	13.3%	93.1
Of which: Other*	8.5	Ы	- 1.3	-13.1%	9.8
Total	201.6	Ы	- 25.8	-11.3%	227.4
Estimated MREL funding needs (total) <u>BUFFER/8%</u>	December 2016		Δ	%Δ	December 2015
G-SII	96.0	$\checkmark$	- 120.2	-55.6%	216.1
Non G-SII:	170.1	7	1.2	0.7%	168.9
Of which: O-SII*	154.0	7	6.2	4.2%	147.8
Of which: Other*	16.0	R	- 5.0	-23.9%	21.0
Total	266.0	$\downarrow$	- 119.0	-30.9%	385.0
Estimated MREL funding needs (subordinated)	December 2016		Δ	%Δ	December 2015
G-SII	87.7	И	- 17.8	-16.9%	105.5
Non G-SII:	32.6	7	2.6	8.7%	30.0
Of which: O-SII*	32.6	7	2.6	8.7%	30.0
Of which: Other*	-	-	-	-	-
Total	120.3	$\downarrow$	- 15.2	-11.2%	135.5

\*The aggregate figures across the sub-samples of O-SIIs and other banks (non G-SIIs and non O-SIIs) have been affected by reclassification of banks' systemic importance between 2015 and 2016.



#### Table 14: MREL eligible stack and estimated funding needs in % RWAs

#### Consistent sample (100 banks)

MREL eligible (total)	December 2016	% of RWA (total)	Change in %RWA	December 2015	% of RWA (total)	
G-SII	1,629.5	34.0%	7	1,596.2	31.3%	
Non G-SII:	1,540.1	42.8%	7	1,568.9	42.1%	
Of which: O-SII*	1,208.1	40.9%	7	946.4	38.8%	
Of which: Other*	332.1	51.6%	7	622.5	48.3%	
Total	3,169.6	37.8%	7	3,165.1	35.9%	

MREL eligible (subordinated)	December 2016	% of RWA (total)		December 2015	% of RWA (total)	
G-SII	943.1	19.7%	7	929.9	18.3%	
Non G-SII:	846.7	23.5%	7	826.9	22.2%	
Of which: O-SII*	610.9	20.7%	R	508.6	20.9%	
Of which: Other*	235.8	36.7%	7	318.3	24.7%	
Total	1,789.8	21.3%	7	1,756.8	19.9%	

Estimated MREL funding needs (total) <u>LA BUFFER</u>	December 2016	% of RWA (total)	% of RWA (banks with funding needs)	December 2015	% of RWA (total)	% of RWA (banks with funding needs)
G-SII	87.7	1.8% 뇌	3.2% →	124.6	2.4%	3.2%
Non G-SII:	113.9	3.2% 🔼	7.8% <b>7</b>	102.3	2.7%	7.0%
Of which: O-SII*	105.5	لا 3.6%	8.1%	93.1	3.8%	6.8%
Of which: Other*	8.5	ע 1.3%	5.2%	9.8	0.8%	6.6%
Total	201.6	لا %2.4	4.8%	227.4	2.6%	4.2%

Estimated MREL funding needs (total) <u>Buffer / 8%</u>	December 2016	% of RWA (total)	% of RWA (banks with funding needs)	December 2015	% of RWA (total)	% of RWA (banks with funding needs)
G-SII	96.0	2.0% 뇌	2.7% 🎽	216.1	4.2%	5.2%
Non G-SII:	170.1	4.7% 7	8.8% 뇌	168.9	4.5%	10.4%
Of which: O-SII*	154.0	5.2%	9.0%	147.8	6.1%	10.2%
Of which: Other*	16.0	2.5%	7.2%	21.0	1.6%	12.1%
Total	266.0	3.2%	4.9%	385.0	4.4%	6.6%

Estimated MREL funding needs (subordinated)	December 2016	% of RWA (total)	% of RWA (banks with funding needs)	December 2015	% of RWA (total)	% of RWA (banks with funding needs)
G-SII	87.7	1.8% 뇌	3.2% →	105.5	2.1%	3.2%
Non G-SII:	32.6	0.9% 7	3.1% 🔼	30.0	0.8%	2.8%
Of which: O-SII*	32.6	1.1%	3.1%	30.0	1.2%	2.8%
Of which: Other*	-	-	-	-	-	-
Total	120.3	1.4%	3.2%	135.5	1.5%	3.1%

\*The aggregate figures across the sub-samples of O-SIIs and other banks (non G-SIIs and non O-SIIs) have been affected by reclassification of banks' systemic importance between 2015 and 2016.