Prudential data report

EU GSIBs prudential capital and liquidity

Q1: 2017

Association for Financial Markets in Europe
www.afme.eu

Contents

Highlights

EU headquartered systemically important banks (or EU GSIBs[1]) continued to improve their solvency positions during the first quarter of 2017.

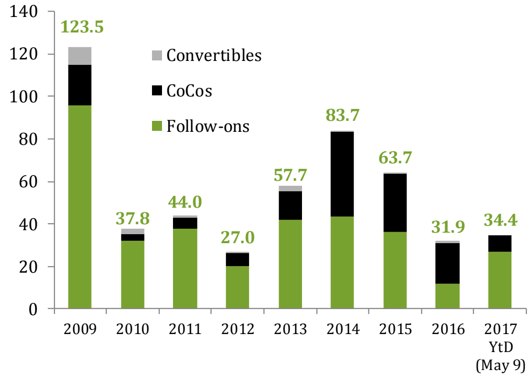
All EU GSIBs increased their individual end-point Common Equity Tier 1 capital ratio (CET1 ratio) during 1Q17, with a weighted average increase of 51bps against the reported in December 2016 (from 12.4% to 12.9% at the end of 1Q17).

"All EU GSIBs improved their end-point CET1 ratios during the quarter"

The aggregate increase was driven by a combination of profits retention and accumulation of external capital raised from markets, although with significant differences in the respective contributions between banks. Further detail in chart 1.6 of the report.

The improved market sentiment, compared to that of 1Q16, also facilitated external capital raising from markets for all EU banks. EU banks have raised a total of €34.4bn in fresh capital from markets as of May 2017 (€22.7 in 1Q17), above the level raised for the full year in 2016 (€31.9bn). Two rights issues by two EU GSIBs contributed €20.9bn to the total amount raised by EU banks during the year so far, equivalent to 61% of the total. See chart on left panel.

Fresh capital raised by EU banks (€ bn)



Source: *Dealogic. Follow-ons refer to issuance of stock of existing publicly traded banks. Excludes capital raised from IPOs.*

The improvement in European bank solvency is also illustrated by the main findings of this report:

- EU GSIBs increased their end-point CET1 ratio to 12.9% in 1Q17, from 12.4% in 4Q16.
- End-point Tier 1 ratios increased to 14.3% in 1Q17, from 13.8% in 4Q16.
- End-point Leverage ratios stood at 4.7% in 1Q17, the same ratio of 4Q16.
- Available information indicates the weighted average[2] Liquidity Coverage Ratio (LCR) stood at 138.9% in 1Q17, from 132.1% in 4Q16.

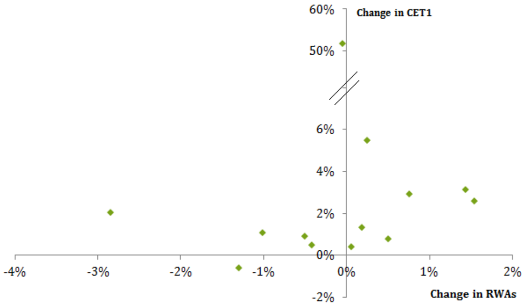
Capital and liquidity ratios and fresh capital raised by EU banks (as at 1Q17)[3]

		2013	2014	2015	2016	2017 Q1
EU GSIBs	CET1 ratio (end-point)	10.0%	11.1%	11.9%	12.4%	12.9%
	T1 ratio (end-point)	10.8%	11.8%	13.0%	13.8%	14.3%
	Leverage ratio (end-point)	3.6%	4.2%	4.6%	4.7%	4.7%
	LCR	-	127.5%	128.2%	132.1%	138.9%
EU banks	Fresh capital raised (€bn)	57.7	83.7	63.7	31.9	22.7
	of which CoCos (€bn)	13.7	40.0	27.4	19.5	6.1

Source: *EU GSIBs balance sheets, EBA and Dealogic*

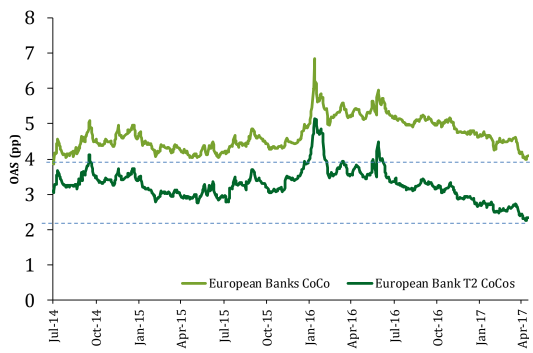
[1] The Banks aggregated in this report are the 13 EU GSIBs as designated by the FSB in November 2016.
[2] Weighted by end-point RWAs with information of 7 of the 13 EU GSIBs that reported LCRs in 1Q17 earnings reports and Pillar 3 disclosure documents.
[3] 2014 LCR is sourced from the EBA's September 2015 Basel III monitoring exercise. Ratios are rounded to 1 decimal.

Change in CET1 capital and RWAs by EU GSIB (QoQ, %, end-point)[4]



Source: *EU GSIBs balance sheets*

CoCo risk premia (option-adjusted spreads)



Source: *Barclays capital*

Robust CET1 ratios

During 1Q17, the 13 EU GSIBs in this report increased their end-point CET1 ratios from the reported in 4Q16.

The large majority of banks (12 of the 13) increased their CET1 end-point capital during the quarter, while there was significant heterogeneity in the quarterly variation of RWAs by banks in a range of between -2.8% QoQ to 1.5% QoQ. See chart on top left panel.

By banks, seven of the 14 EU GSIBs increased[5] their RWAs and CET1 capital from 4Q16, five increased CET1 capital and decreased RWAs, and one decreased CET1 capital and RWAs.

On aggregate, the quarterly increase in end-point CET1 ratio was driven by contributions of 31bps from external capital raising, FX and "other" factors, 17bps from retained earnings, and 3bps from lower RWAs (see chart 1.6 in the report). The breakdown of the CET1 ratio build up varied by GSIBs, with one bank contributing 26bps to the total 31bps variation in external capital raising and other factors, after a successful €13bn rights issue increasing 51% its individual CET1 capital. All EU GSIBs had positive contributions from earnings retention, ranging from 33bps to 6bps by bank.

Notwithstanding the increase in CET1 and T1 capital in 1Q17, the weighted average leverage ratio stood almost unchanged during the quarter at 4.7%. The increase of 4% QoQ in end-point T1 capital was offset by an increase of the same magnitude in exposure measure. The increase in exposure measure was partly driven by an increase of 19% QoQ of cash and central bank deposits, which have a 0% risk weight but contribute in full to the total leverage exposure measure. The increase in cash holdings and central bank deposits is concurrent with the changes in market expectations on European and US monetary policy and the future trajectory of sovereign yield curves.

CoCo issuance with strong risk performance

European banks[6] issued €7.7bn in CoCos during 1Q17 (€6.1bn by EU banks). The volume issued by European banks was above the originated in the same quarter of last year (€5.5bn), representing an annual increase of 40%.

Average coupons of fixed-rate instruments issued by European banks decreased 28bps from 7.54% in 2016FY to 7.26% in 1Q17. A decline in the risk premia of CoCo instruments was partly behind the lower coupons of new issuances, reducing to levels not seen since July 2014. See chart on left panel.

[4] The quarterly changes are in the original reporting currencies (USD, EUR or GBP) to isolate for FX effects.

[5] On the basis of the values reported in the original currencies of the financial statements.
[6] Including EU, EFTA, Turkish and other Eastern European Banks.

European risk premia (measured as option-adjusted spreads against benchmark rates) stood on average at 460bps during 1Q17, compared with 520bps in 2016 on average and 526bps during 1Q16. Most recently, European banks' CoCo spreads have fallen even further to 410bps in May 2017.

CoCo prices accumulated gains over the year, consistent with the improvement in risk perception for these loss-absorbing securities. European banks' CoCo index prices rose 6%YtD (as of May) and 11%YoY.

"The improved risk perception towards CoCo instruments is consistent with the sustained build-up of capital cushions by banks, (...) and stronger solvency positions to absorb economic shocks and unexpected losses."

The improved risk perception towards CoCo instruments is consistent with the sustained build-up of capital cushions by banks, continued internal restructuring and deleveraging, and stronger solvency positions to absorb economic shocks and unexpected losses.

Liquidity Coverage Ratio (LCR) above end-point 2018 requirements

EU GSIBs increased[7] their LCR from 132.1% at the end of 2016, to 138.9% in 1Q17, in part supported by an increase in cash holdings and central bank deposits during the quarter. The existing ratio provides a comfortable gap for banks to comply with the end-point requirements of 100% due to be met in January 2018.

Major upcoming regulatory, legislative and policy initiatives

There are several regulatory initiatives that are currently being considered at both the global and European level. These will potentially impact the basis of calculations for the metrics covered in this report for future iterations. Some of the key initiatives are:

- Review of the Leverage Ratio
- Fundamental Review of the Trading Book
- Credit Valuation Adjustment
- IRB models, revised Standardised Approaches & capital floors
- Interest Rate Risk in the Banking Book

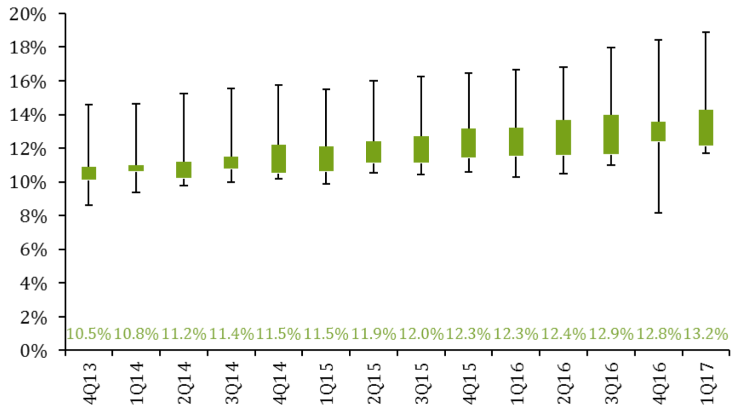
AFME is actively contributing to each initiative.

[7] These figures are based on data from 8 of the 13 banks that disclosed their LCR ratios during the quarter.

1 Capital and liquidity ratios[8]

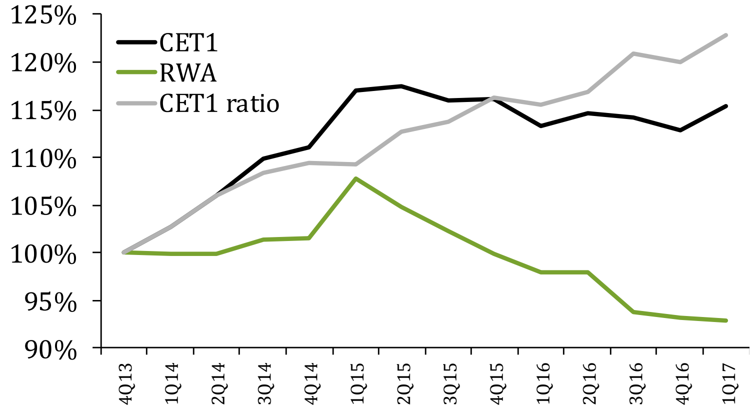
1.1 CET1 ratio: phased-in

Maximum, minimum and 25th-75th percentiles in boxes



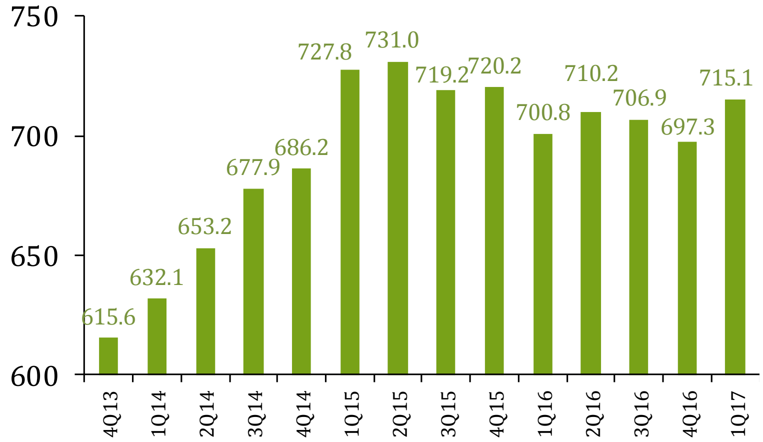
Source: EU GSIBs balance sheets

1.2 Cumulative percentage change of CET1, RWAs and CET1 ratio (phased-in)[9]



Source: EU GSIBs balance sheets

1.3 CET1: phased-in (€ bn)



Source: EU GSIBs balance sheets

[8] The Banks aggregated in this report are the 14 EU GSIBs as designated by the FSB in 2014 which was in force in 4Q16.
[9] The lines represent the cumulative percentage change of aggregate RWAs, CET1 capital and the weighted average CET1 ratio.

CET 1 ratio: phased-in

Increase of 40bps in CET1 phased-in ratio during 1Q17

EU GSIBs improved their capital ratios during the first quarter of 2017, in compliance with the CRDIV rules which came into force in 1 January 2014.

The weighted average phased-in CET1[10] ratio accumulated an increase of 40bps during the 1Q17, from 12.8% in December 2016 to 13.2% in March 2017.

The CET1 phased-in ratio stands above the minimum required in 2017 by CRDIV of 5.75% (excluding GSIB and countercyclical buffers).

Since December 2013, the phased-in CET1 ratio has accumulated an increase of 270bps, from 10.5% to 13.2% in March 2017. See chart 1.1.

CET1 capital accumulation during 1Q17 with slightly lower RWAs

The increase in phased-in CET1 ratio during the latest quarter was driven by a build-up of CET1 capital and a minor decrease in Risk-Weighted Assets (RWA) against the volume of last quarter. See chart 1.2.

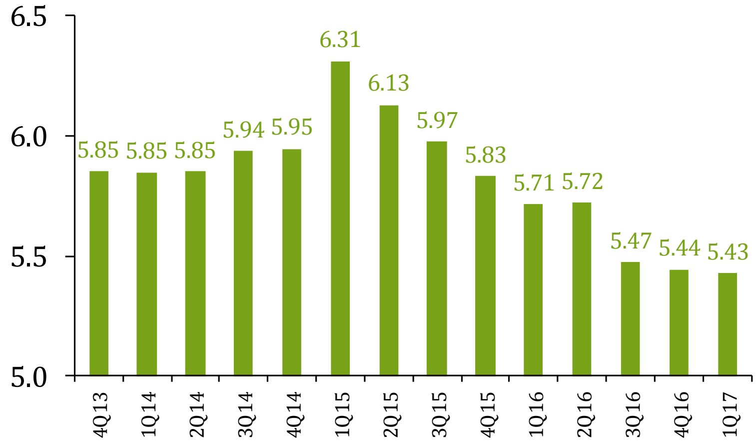
Banks increased their CET1 phased-in capital during the quarter by 2.6% from €697.3tn in 4Q16 to €715.1tn in 1Q17 (or an increase of 4% excluding the fluctuation of the Euro against the currencies in which banks report their financial statements). See chart 1.3.

RWAs stood relatively unchanged against the volume of last year, with a total of €5.43tn, only 0.3% below the total of €5.44tn observed at the end of 2016. See chart 1.4.

After the rights issue of €13bn of one bank during 1Q17, which resulted in an increase of 43.1% in its CET1 phased-in capital (51.8% on an end-point basis), the max-min range in CET1 ratios between banks tightened compared to the abnormal gap observed at the end of 2016.

[10] CET1 ratios are the amount of CET1 capital that banks hold as proportion of risk-weighted assets (RWA). On a phased-in approach, certain transitional provisions are applied to the calculation of capital related to the treatment of deferred taxes, securitisation, and unrealised losses, amongst others.

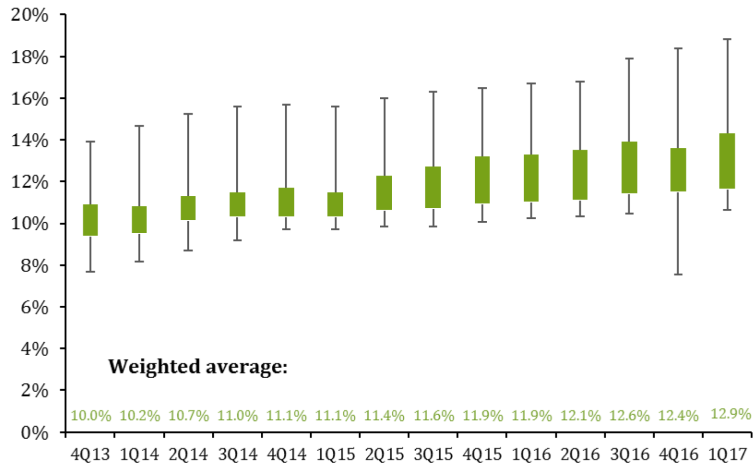
1.4 RWAs: phased-in (€ tn)



Source: *EU GSIBs balance sheets*

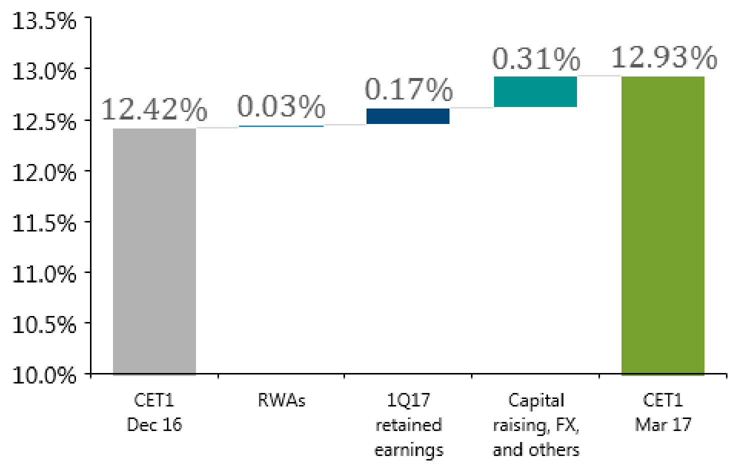
1.5 CET1 ratio: end-point

Maximum, minimum and 25th-75th percentiles in boxes



Source: *EU GSIBs balance sheets*

1.6 Change in end-point CET1 by components



Source: *EU GSIBs balance sheets*

Increase of 51bps in CET1 end-point ratio during 1Q17

Over the last quarter, end-point[11] CET1 ratios increased from 12.42% in 4Q16 to 12.93% in March 2017, an increase of 51 bps.

The quarterly increase adds to the continued improvement in capital solvency since 2013. The weighted average CET1 ratio has increased by 295bps from 10.0% in December 2013 to 12.9% in March 2017.

The March 2017 CET1 ratios are in excess of the minimum required CET1 ratio of between 5.75%-7.0% in 2017 on the basis of Pillar 1 requirements and between 8%-12% required from 2019 onwards, depending on factors such as the size of the bank, the phased-in process of the capital conservation buffer, and the countercyclical buffer applied in the bank's domicile[12].

All the 13 EU GSIBs increased their CET1 end-point ratios during the last quarter. Likewise, all the EU GSIBs have improved their CET1 ratio since December 2013.

Earnings retention and capital raising contributed to the CET1 ratio increase

On an aggregate basis, the quarterly CET1 ratio increase was driven by a contribution of 17bps from the quarterly earnings reported in 1Q17, 3bps from lower RWAs and 31bps from fresh capital raised, FX and other factors. See chart 1.6.

This breakdown, however, varied by banks. The substantial rights issue by one of the GSIBs signified an increase in 361bps in its CET1 ratio, which in turn contributed to 26bps of the 31bps in the "other" component in the change of CET1 of chart 1.6. For the remaining banks, earnings retention contributed by between 33bps and 6bps to the CET1 ratio build-up.

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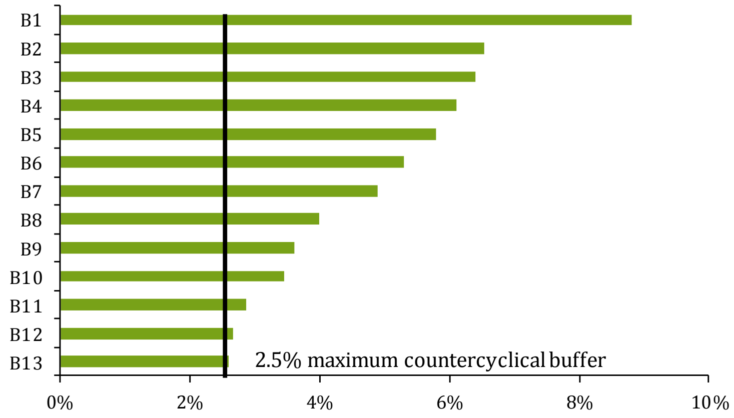
[11] Under the end-point approach, the proportion of CET1 capital to risk weighted assets is calculated as if the rules due to apply at the end of the transition period were in force.

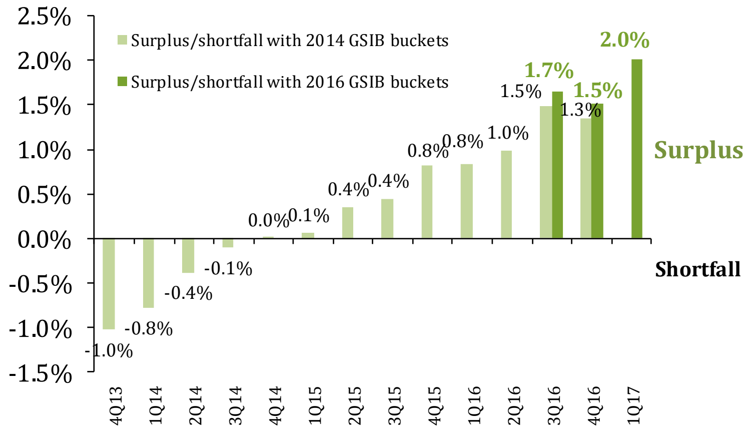
[12] The minimum required ratio in 2019 depends on the bucket in which the GSIB is allocated to, which ranges from 1-2.5% (0% for non-GSIBs), and the Countercyclical Buffer implemented by the NCAs which ranges from 0-2.5%. See Annex for further details.

1.7 Difference between current CET1 ratios and 2019 minimum requirement incl. GSIB buffer by bank (1Q17, end-point, absolute difference in %)



Source: EU GSIBs balance sheets

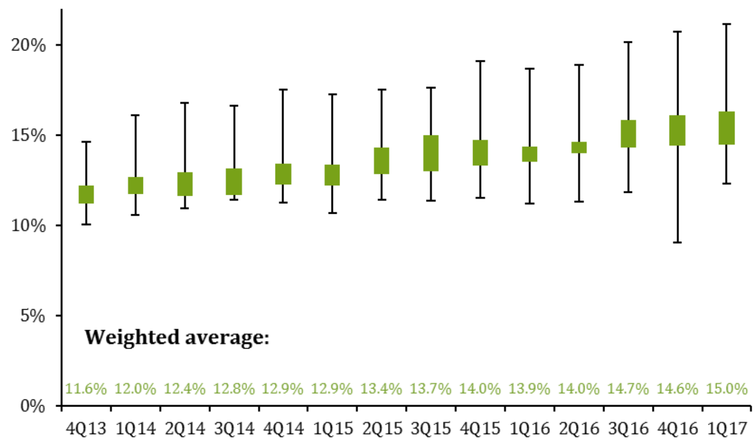
1.8 Weighted average of EU GSIBs' CET1 ratios relative to end-point target assuming a 2.5% countercyclical buffer (absolute difference in %)



Source: EU GSIBs balance sheets

1.9 Tier 1 ratio: phased-in

Maximum, minimum and 25th-75th percentiles in boxes



Source: EU GSIBs balance sheets

Surplus in minimum requirements[13]

Assuming no changes to current FSB GSIB bucket allocations[14] and a 0% countercyclical buffer[15], data as of 1Q17 suggest that all banks complied with the 2019 ratios required due to their systemic importance (bars in chart 1.7).

With an additional assumption that the maximum 2.5% Countercyclical Buffer (vertical line in chart 1.7) is applied to all EU GSIBs in 2019, all banks are also found to be above this requirement, with surplus gaps by banks of between 10bps and 630 bps (excluding bank-specific Pillar 2 guidance and requirements).

Aggregate surplus of 2% on CET1 ratio assuming a 2.5% CCyB

On an aggregate basis, the weighted-average[16] of EU GSIB's CET1 ratios stood in 1Q17 at 200bps above the maximum Pillar I requirements due to be in force in 2019. This measure (chart 1.8) assumes the maximum countercyclical buffer is set at 2.5% for all EU GSIBs and that banks are allocated in their current individual GSIB bucket (based on the 2016 GSIB list).

Taking a step further and assuming i) banks' Pillar I requirements due to be met by 2019; ii) Pillar 2R/ SREP individual bank-level requirements that have to be met with CET1 end-point capital[17]; and iii) the current GSIB buffer is maintained, estimations indicate a weighted average surplus on CET1 ratios of 2.7% if the countercyclical buffer is set at 0% in all jurisdictions (and an aggregate surplus of 0.2% assuming a stressed scenario if the buffer is set at 2.5%).

[13] EU GSIBs shall comply with minimum CET1 ratios of between 8% and 12% from January 2019. The required ratio will depend on the G-SIB bucket the bank is assigned to (additional capital buffer between 1% and 2.5%) and the Countercyclical Buffer approved by national authorities which can reach a maximum of 2.5%.

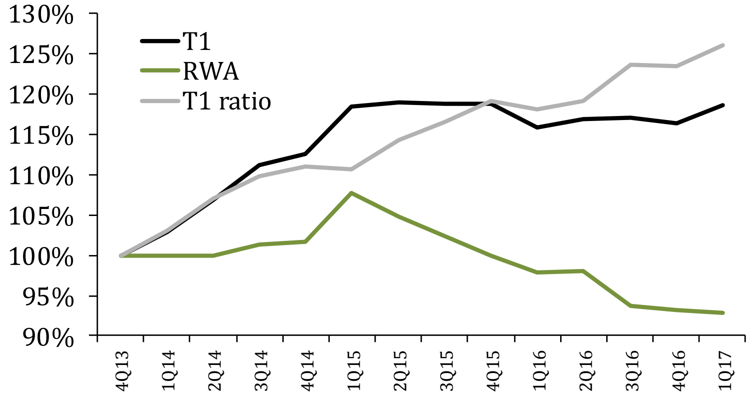
[14] 2016 FSB GSIB list and bucket allocation available here. The latest FSB GSIB bucket allocation assigned a buffer of between 2% and 1% to EUGSIBs.

[15] The Swedish national authority set in Mar 2017 a 2% CCyB rate for SE banks.

[16] Weighted by RWAs value.

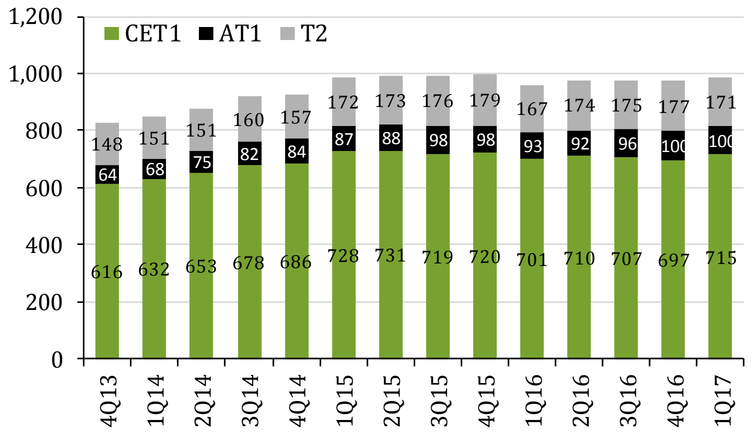
[17] As disclosed in the latest earnings reports, Pillar 3 documents and other publicly available financial reports by banks. For Nordea, this stressed scenario includes a 3% systemic risk buffer as per domestic regulations. See page 55 here.

1.10 Cumulative percentage change of T1, RWAs and T1 ratio (phased-in)[18]



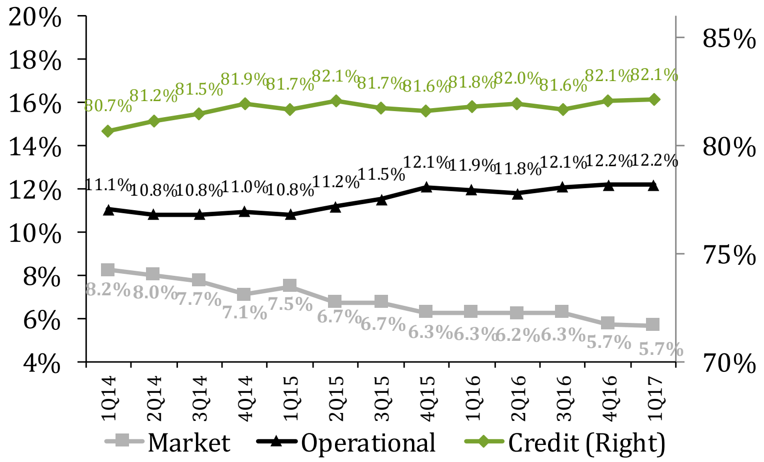
Source: EU GSIBs balance sheets

1.11 Structure of regulatory capital (€ bn, phased-in)



Source: EU GSIBs balance sheets

1.12 RWAs by risks



Source: EU GSIBs balance sheets

[18] The lines represent the cumulative percentage change of aggregate RWAs, T1 capital and the weighted average T1 ratio.

Tier 1 and total capital

EU GSIBs have also complied with the requirements on T1 capital ratios[19].

EU GSIBs increased their phased-in T1 ratios during 1Q17 from 14.6% in December 2016 to 15.0% in March 2017 (chart 1.9). On a fully-loaded basis, banks improved their T1 capital ratio by 54bps from 13.78% in December 2016 to 14.32% in March 2017.

These ratios are comparable with a minimum required ratio of between 9.5% and 13.5% due to be in force by 2019[20], considering only Pillar I requirements.

The increase in T1 phased-in ratio during the quarter is explained by a slight decrease of 0.3% in RWAs and an increase of 2% in T1 phased-in capital (4% increase on an end-point basis).

Total phased-in regulatory capital increased from €974.2bn in 4Q16 to €986.0 bn in 1Q17 (1.2% QoQ), mostly due to an increase of €18bn (2.6% QoQ) in CET1-phased in capital partially offset by a decrease of €0.8bn (-3.4% QoQ) in phased-in T2 capital.

AT1 capital stood relatively unchanged during the last quarter, with a total of €100bn on a phased-in basis. Since 2013, however, the proportion of AT1 on total capital has increased from 7.8% (€64bn) to 10.1% (€100bn) in 1Q17, in part due to the continued issuance of hybrid loss-absorbing instruments (AT1 CoCos) by banks. See chart 1.11.

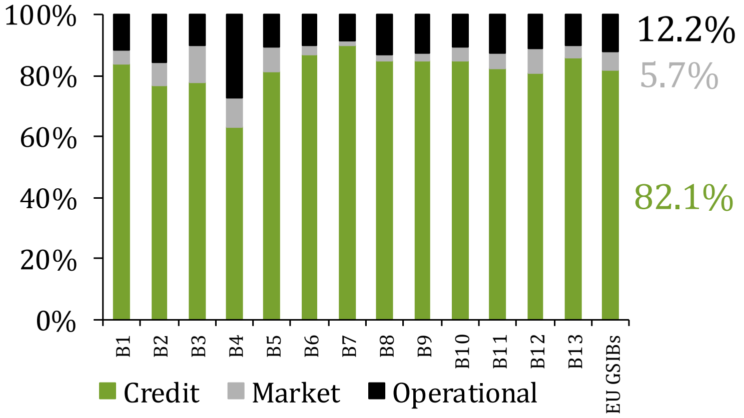
Risk-weighted assets

The proportion of market risks on total RWAs stood relatively unchanged during the quarter, with 5.7% of RWAs corresponding to market risks, 12.2% to operational risks and 82.1% to credit risks. This is notwithstanding the observed declining trend in market risks since 2014, with growing participation of both credit and operational risks.

[19] T1 capital is a comprehensive measure of capital that encompasses CET1 capital and Additional Tier 1 (AT1) capital. Contingent Convertible bonds, subject to conditions, are included in AT1 capital. This market is discussed in Section II of this report.

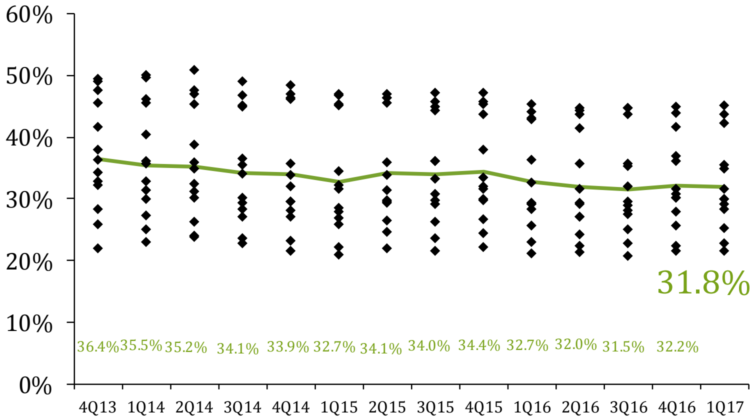
[20] As with CET1 capital ratios, the minimum required ratio in 2019 depends on the bucket in which the GSIB is allocated to, which ranges from 1-2.5% (0% for non-GSIBs), and the countercyclical buffer implemented by the NCAs which ranges from 0-2.5%. Further details of the implementation timetable are in the Annex.

1.13 RWAs by risks and EU GSIB[21]



Source: *EU GSIBs balance sheets*

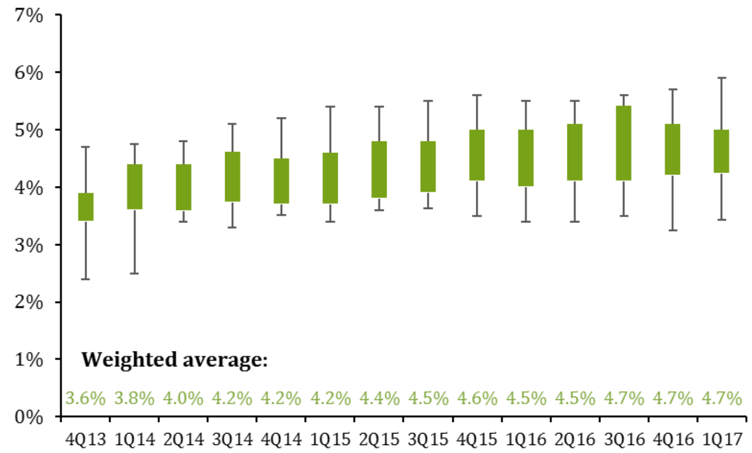
1.14 RWA densities (weighted average)[22]



Source: *EU GSIBs balance sheets*

1.15 Leverage ratio: end-point

Maximum, minimum and 25th-75th percentiles in boxes



Source: *EU GSIBs balance sheets*

The proportions in the RWA mix will continue to change through the implementation of the remainder of the Basel package, with the final trading book proposals pushing up market risk assets to around 10% before other changes are taken into account.

By banks, 10 of the 13 EU GSIBs reported an exposure to credit risks above 80% of RWAs (with a maximum of 90% and a minimum of 63%), while only one bank reported an exposure above 10% of RWAs to market risks (range of between 1.5% and 12%) and 12 of the 13 EU GSIBs reported an exposure at or above 10% of RWAs to operational risks (in a range of between 27% and 8.6% between banks).

RWA densities

The ratio of RWAs relative to total assets only slightly decreased from 32.2% in 4Q16 to 31.8% in 1Q17.

Since 2013, a decreasing trend has been observed in this ratio, in part explained by the continued balance sheet restructuring of banks, with the de-risking of high risk-weight activities by some banks.

Notwithstanding the decreasing trend in RWA densities, the aggregate ratio is expected to increase with the implementation of new Basel initiatives such as the IRB models, revised Standardised Approaches & capital floors.

Leverage ratio

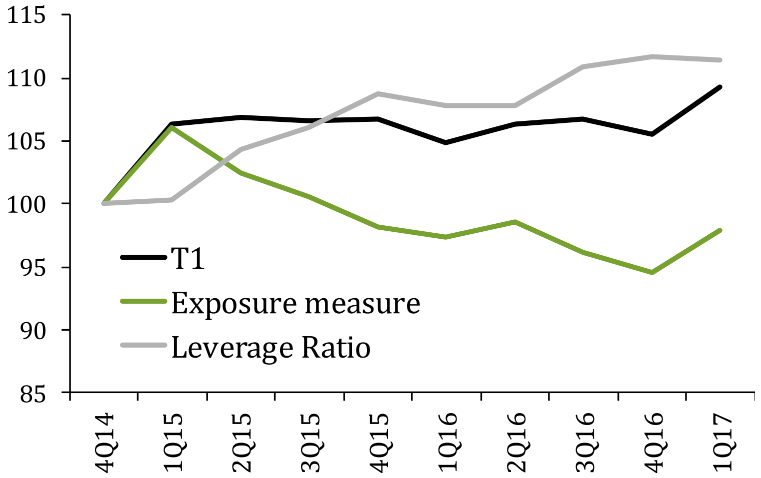
The weighted average EU GSIBs leverage ratio stood unchanged during the quarter at 4.7%. Leverage ratios are a measure of Tier 1 capital as a proportion of the bank's total exposure (on- and off-balance sheet assets.)

These ratios are comparable with a global minimum standard of 3% according to the Basel III accord.

The stability in the leverage ratio was notwithstanding the increase in T1 end-point capital of 4% QoQ, offset by an increase of equal magnitude in the exposure measure.

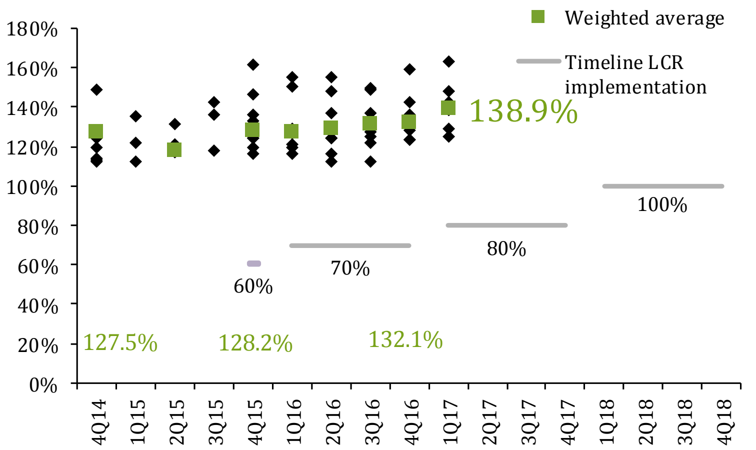
[21] Breakdown as of 4Q16 for 11 of the 14 EU GSIBs. Others are presented as of latest available (2Q16).
[22] Phased-in RWAs as proportion of total assets.

1.16 Cumulative percentage change of T1 capital, exposure measure and leverage ratio



Source: *EU GSIBs balance sheets*

1.17 Liquidity Coverage Ratio (LCR)



Source: *EU GSIBs balance sheets*

The increase in exposure measure was mostly driven an increase of 19% QoQ in banks' cash holdings and central bank deposits, which is concurrent with the changing market expectations on the US and EU yield curves and the substantial increase of 16% QoQ in bond trading during the quarter.

By banks, 3 of the 13 GSIBs improved their leverage ratio from 4Q16, 8 banks saw a decrease and 2 banks saw no change.

Liquidity Coverage Ratio (LCR)

CRDIV requires banks to have a sufficient level of High Quality Liquid Assets (HQLA) to withstand a stressed funding scenario of 30 days[23]. More specifically, it requires that HQLA relative to total net cash outflows over a 30-day time period are greater than or equal to 100%.

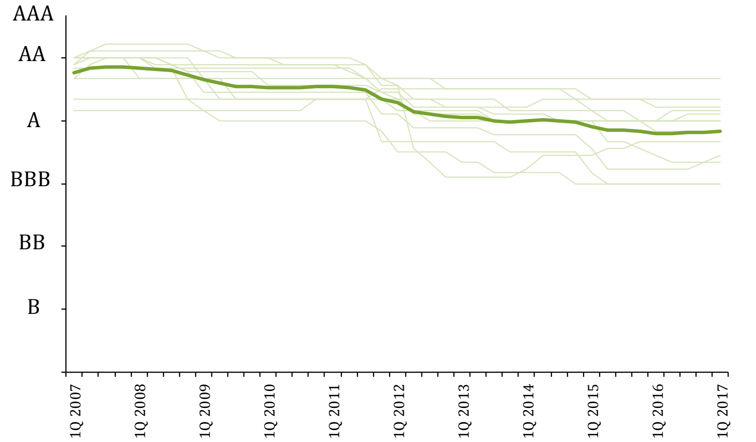
Banks must meet at least 80% of the LCR requirement from 1 January 2017, and 100% from 1 January 2018 (timescale in chart 1.17).

Available information[24] on the basis of the fully-loaded requirement indicates that the weighted average LCR is already above the 2018 minimum required ratio (100%). The weighted average LCR stood at 138.9% in 1Q17, above the ratio observed in 4Q16 (132.1%)[25] and 127.52% in 4Q14.

[23] See EBA Basel III monitoring exercise here.
[24] Information was available for seven of the 14 EU GSIBs. Among the banks not included in this calculation, two reported that their LCRs stood above 110% while three banks reported that their ratios stood above 100%.
[25] According to the 2016 EBA Basel III monitoring exercise, as of June 2016, Group 1 banks reported an LCR ratio of 127.7%. As of June 2015, The EBA reported that Group 1 banks had a weighted average LCR of 121.1% of which GSIBs had a ratio of 118.1%. Only 9 EU GSIBs were covered in the EBA report. In the 2014 Basel III monitoring exercise, the average LCR for GSIBs was reported by the EBA at 127% (see here).

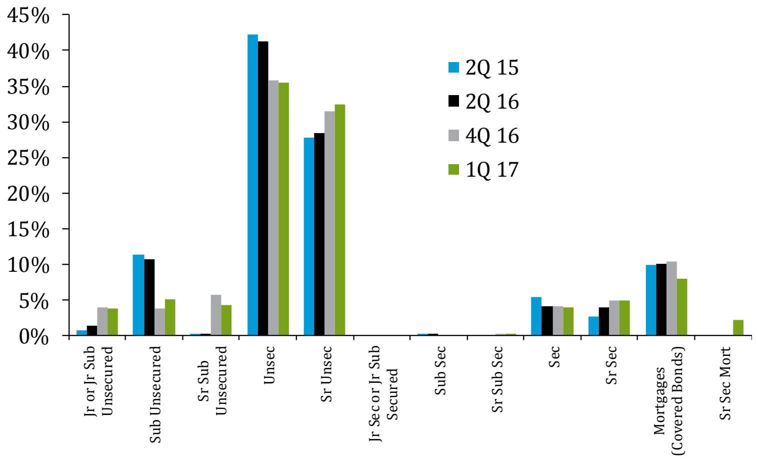
2 Debt securities and contingent convertibles

2.1 EU GSIBs simple average long-term credit rating



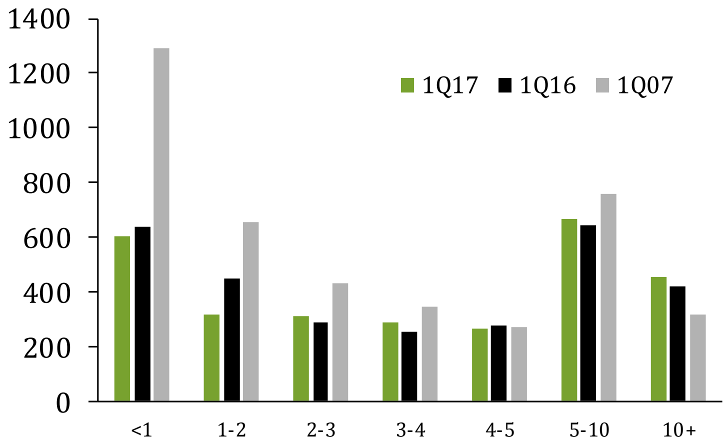
Source: *Thomson Reuters Eikon with information of Moody's, Fitch and S&P*

2.2 EU GSIBs debt outstanding by seniority



Source: *Thomson Reuters Eikon*

2.3 Maturity profile of EU 28 Banks' outstanding debt securities (€ bn, maturity in years)



Source: *ECB*

Credit ratings

During 1Q17, only one bank saw a change in its long-term credit quality assessment with a notch upgrade by one credit rating agency.

The credit upgrade was driven by the "enlarged additional loss absorbing capacity buffer" by the bank, also supported by recent legal changes in the bank's country of domicile that was deemed at protecting "more-senior creditors".

As of 1Q17, the average EU GSIB long-term credit stood at A (or A2 in the Moody's scale), the same rating observed in 1Q16. See chart 2.1.

Debt securities

EU GSIBs have increased the proportion of subordinated unsecured bonds in their funding mix. In Dec-2015, subordinated unsecured bonds accounted for 11.2% of banks' outstanding market debt, which rose to 13.1% in March-2017 as banks continue to prepare for the implementation of MREL and TLAC rules.

Future changes to the debt structure will be driven by the preparation for the implementation of MREL and TLAC, ahead of the finalisation of the legal text of the provisions, although awaiting further clarity from regulators on the eligibility criteria for certain debt securities.

Maturity profile

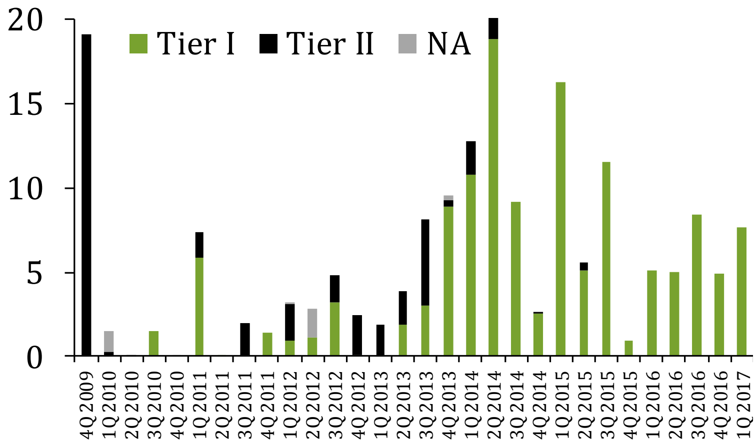
EU banks have continued to issue bonds at longer term maturities, with market yields still below long-term average levels and expectations of an upcoming reversal in the accommodative monetary stance in the Euro area and the US.

The proportion of short-term debt (<1Y maturity) relative to outstanding debt securities has decreased from 30% in 1Q07 to 20% in 1Q17. Likewise, the proportion of long-term debt (>10Y maturity) increased from 11% of total market debt to 15% in 1Q17.

The average maturity of outstanding debt securities has increased from 3.8 years in 1Q07 to 5.4 years in 1Q17[26].

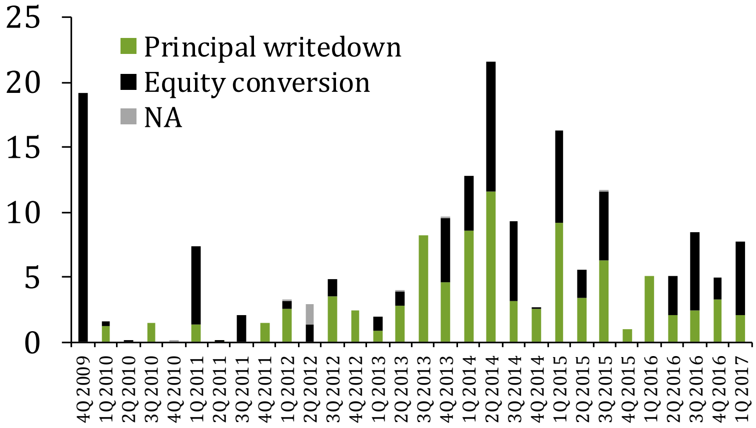
[26] This calculation assumes that bonds with maturities above 10 years (including perpetual) have a weighted average maturity of 15 years.

2.4 CoCos by capital tiering (€ bn)



Source: Dealogic and Thomson Reuters Eikon

2.5 CoCos by loss absorbing mechanism (quarterly, € bn)



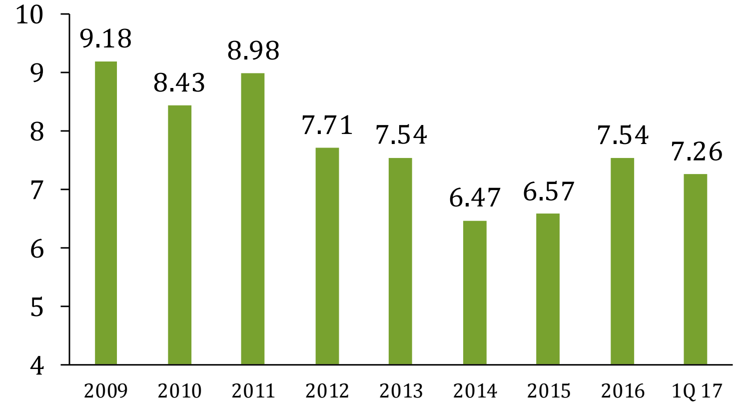
Source: Dealogic and Thomson Reuters Eikon

2.6 CoCos by loss absorbing mechanism (€ bn)

	2010	2011	2012	2013	2014	2015	2016	Q1 2017
Writedown	2.8	2.8	8.4	16.4	25.8	19.7	12.9	2.1
Conversion to Equity	0.4	8.0	3.4	7.1	20.4	14.5	10.6	5.6
Not Available	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0
Writedown (%)	87%	26%	63%	70%	56%	58%	55%	27%
Conversion to Equity (%)	13%	74%	26%	30%	44%	42%	45%	73%
Total European	3.2	10.9	13.3	23.5	46.2	34.3	23.5	7.7

Source: Dealogic

2.7 Weighted average coupons of fixed-rate CoCos



Source: AFME with Dealogic data

Contingent capital

Contingent Convertible (CoCo) bonds are hybrid capital securities that absorb losses when the capital of the issuing bank falls below a certain pre-determined threshold[27].

European banks[28] issued a total of €7.7 bn in CoCo bonds during 1Q17, 51.2% above the issued volume in 1Q16 (€4.9bn) and 56.1% above that of 4Q16 (€5.1bn).

More recently, as of early May, the volume of CoCo issuance during the year reached a total of €9.6bn, with €1.9bn issued in April. See table 2.14 for further details.

A total of €2.1bn of CoCo instruments issued in 1Q17 were structured on the basis of principal write down, representing 27% of the total issued volume. €5.6bn (or 73% of the total) were structured on the basis of equity conversion.

Lower coupon payments for the new originations

Only two of the issued instruments in 1Q17 (€85m of the total issuance) were structured with variable rate coupons, contingent on the performance of Nordic interbank interest rates (NIBOR, and STIBOR).

Average coupons of new fixed-rate issuances[29] stood at 7.26% in 1Q17, slightly below the level of 2016FY (7.54%) on a weighted average basis.

The decline in coupon rates was mostly driven by lower risk premia of European CoCos. Option-adjusted spreads of European banks' CoCos stood on average at 460bps in 1Q17, compared with 520bps in 2016 on average. The decline was not fully offset by the increase in long-term benchmark yields, with an increase of 23bps in 10Y AAA EUR benchmark yields in 1Q17 against the 2016FY average. See chart 2.13 for further details.

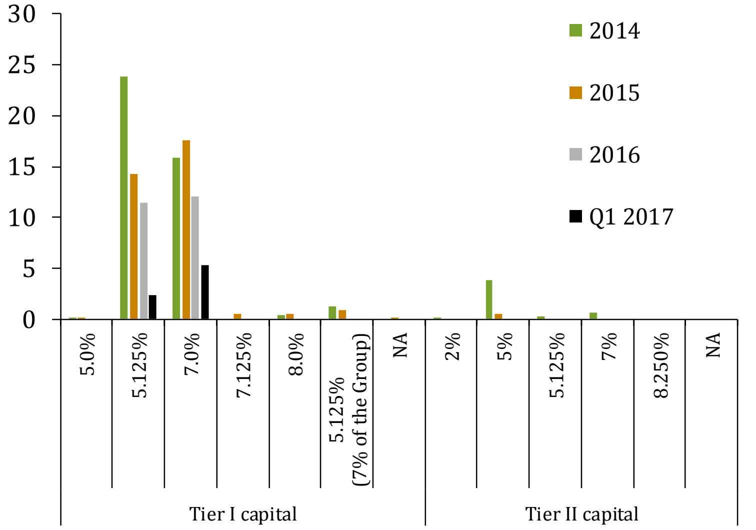
[27] BIS (2013) "CoCos: a primer". BIS Quarterly Review, September 2013.
[28] Including EU, EFTA and other Eastern European Banks.
[29] Weighted average by Euro deal value, taking into account only fixed rate coupon notes.

2.8 CoCos by credit rating at date of issuance (€ bn) 30

	2009	2010	2011	2012	2013	2014	2015	2016	1Q 2017
AAA		1.3							
AA-			6.1				0.05		
A			1.4				0.5	0.04	
A-		0.1	1.4		0.1	0.8	0.03		0.01
BBB+		1.0	1.5			3.0	0.4		
BBB		0.5			4.9	7.0	7.0	3.1	0.6
BBB-				6.1	4.3	0.9	5.8	4.8	0.7
BB+				1.4	2.2	10.2	8.2	5.8	1.0
BB	12.7	0.3			6.4	13.6	6.0	4.0	3.6
BB-	5.6				3.6	4.7	1.0	2.0	1.3
B+						0.3	2.9	2.9	
B	0.9						0.7	0.7	0.5
B-							0.5		
NA/Not rated		0.01	0.5	5.8	2.0	5.8	1.2	0.3	
Total	19.1	3.2	10.9	13.3	23.5	46.2	34.3	23.5	7.7
Investment Grade	0.0	2.9	10.4	6.1	9.3	11.6	13.7	7.9	1.3
High Yield	19.1	0.3	0.0	1.4	12.2	28.8	19.4	15.3	6.4

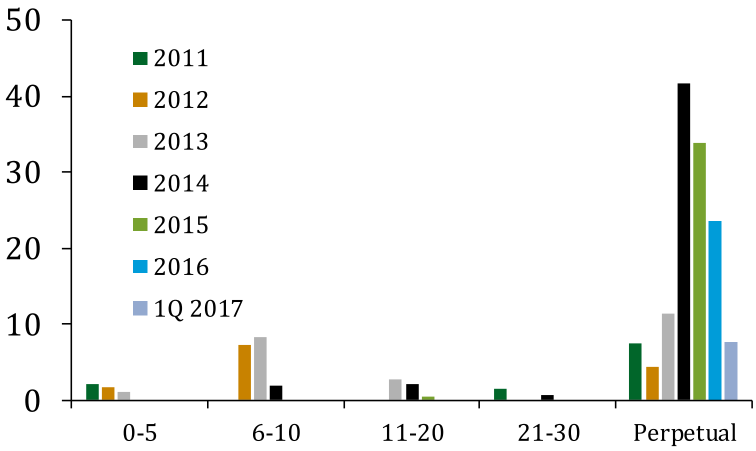
Source: Dealogic

2.9 CoCos by trigger (€ bn)



Source: Dealogic and Thomson Reuters Eikon. * 5.125% of the bank or 7.0% of the Group

2.10 CoCos by maturity at date of issuance (€ bn)



Source: Dealogic

CoCos by credit rating

CoCo securities issued during 1Q17 were assessed with credit ratings of between A- and B (or between A3 and B2 in the Moody's scale).

€1.3 bn of the equivalent value of issued instruments were rated at an investment grade rating of BBB- or above (17% of the total issuance value), while €6.4bn were rated at BB+ or below (83% of the issuance value).

The breakdown is comparable with the credit ratings observed in 2016, when 34% (€7.9bn) of issued CoCos were rated at high grade ratings and 65% (€15.3 bn) at high yield ratings.

Average trigger

CoCo instruments contingent on Tier 1 performance are typically structured with capital triggers of 5.125% and 7%.

During 1Q17, 5 instruments representing 31% of the issuance value (or €2.4bn) were structured with a 5.125% trigger contingent on Tier 1 performance. 6 instruments representing €5.3bn in volume were structured with a trigger of 7%, also contingent on Tier 1 performance.

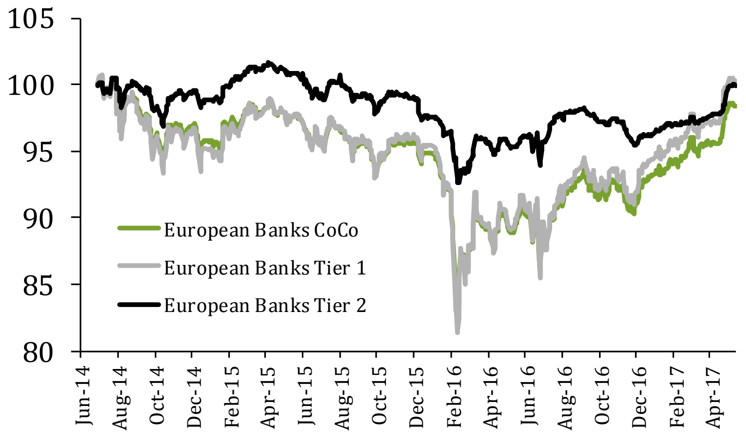
Average maturity

All CoCo instruments issued during 1Q17 were structured in the form of perpetual bonds.

This is broadly consistent with the typical maturity of new issues structured in recent years. In 2016, all the issued instruments were structured in the form of perpetual bonds and 99% of CoCos in 2015.

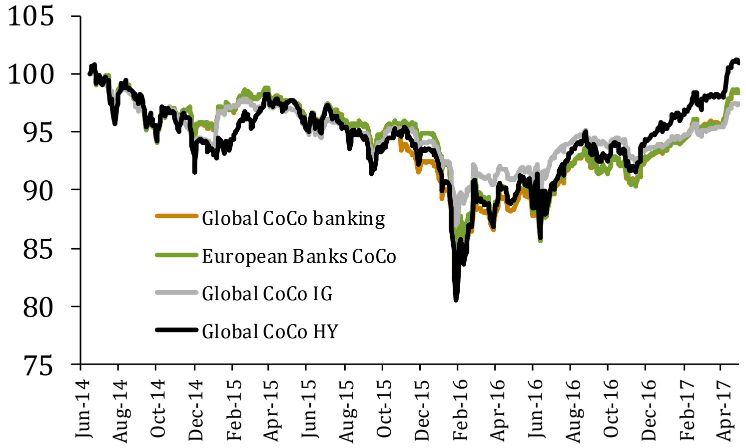
30 Total figures may appear not to add up due to rounding.

2.11 CoCo prices by capital tiering (Jun-14=100)



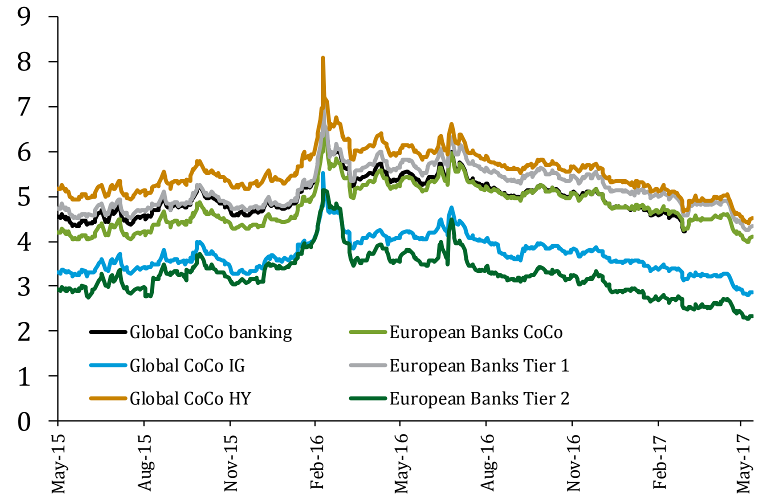
Source: *Barclays*

2.12 CoCo prices by risk and location (Jun-14=100)



Source: *Barclays*

2.13 CoCo option-adjusted spreads (OAS) (%)



Source: *Barclays*

Valuations

CoCo instruments have continued to post gains over the last quarters with an increase in average European CoCo bonds indices of 6% YtD (as of May), 19% above the trough prices reached in 1Q16.

As of May 2017, HY CoCos have generated the largest price gains of the year, with price indices 7% above the levels of the end of 2016. See chart 2.12

Option-adjusted spreads (OAS)

OAS against benchmark risk-free rates (or *risk premium*) have continued to decrease during the year, with average OAS for European banks CoCo in May 2017 reaching the lowest level since July 2014.

OAS of European banks' CoCos stood at 410 bps in mid-May 2017, compared with an average of 460bps in 1Q17, 450bps in December 2016, and a maximum of 685bps reached in 1Q16.

By capital tiering, T2 OAS stood at 226bps, the lowest level reached in sample since January 2014. T2 investors take losses on their instruments only after T1 investors, which explains the lower risk premia for these instruments compared with T1 CoCos.

The improved risk perception is consistent with the continued build-up of capital cushions by banks from markets and internal sources, internal restructuring and deleveraging, and stronger solvency positions to absorb economic shocks and unexpected losses.

2.14 Recently issued CoCos by European Banks (2017 as of April)

Pricing Date	Issuer	Tier Capital	Deal Total Value (Euro)	Trigger	Conversion mechanism	Issue Rate	Effective Rating (Launch)	Maturity	Coupon
04-Jan-17	Intesa Sanpaolo SpA	Tier I	1,250,000,000	5.125%	Writedown	Fixed	BB-	Perpetual	7.75
11-Jan-17	Standard Chartered plc	Tier I	944,688,489	7%	Equity conversion	Fixed	BB+	Perpetual	7.75
24-Jan-17	Credit Suisse Group	Tier I	1,397,624,039	7%	Equity conversion	Fixed	BB	Perpetual	7.125
28-Feb-17	Barclays plc	Tier I	1,468,571,932	7%	Equity conversion	Fixed	BB	Perpetual	7.25
15-Mar-17	Credit Suisse Group	Tier I	186,428,039	7%	Writedown	Fixed	BB	Perpetual	3.875
16-Mar-17	Skandinaviska Enskilda Banken AB - SEB	Tier I	564,360,626	5.125%	Equity conversion	Fixed	BBB	Perpetual	5.625
21-Mar-17	Danske Bank A/S	Tier I	697,512,206	7%	Equity conversion	Fixed	BBB-	Perpetual	6.125
23-Mar-17	Caixa Geral de Depositos SA - CGD	Tier I	500,000,000	5.125%	Equity conversion	Fixed	B-	Perpetual	10.75
15-Feb-17	Skandiabanken ASA	Tier I	11,249,796	5.125%	Writedown	Variable	A-	Perpetual	3-mth NIBOR +360bp
30-Mar-17	Santander UK Group Holdings plc	Tier I	575,871,005	7%	Writedown	Fixed	BB	Perpetual	6.75
22-Mar-17	Landshypotek Bank AB	Tier I	73,763,409	5.125%	Writedown	Variable	BB+	Perpetual	3-mth STIBOR +440bp
05-Apr-17	Erste Group Bank AG	Tier I	500,000,000	5.125%	Writedown	Fixed	BB+	Perpetual	6.5
18-Apr-17	Banco Santander SA	Tier I	750,000,000	5.125%	Equity conversion	Fixed rate conv. to floating rate note	BB+	Perpetual	6.75
26-Apr-17	Credit Bank of Moscow OAO - MKB	Tier I	642,703,025	5.125%	Writedown	Fixed	B-	Perpetual	8.875

Source: *Dealogic and Thomson Reuters Eikon*

Summary of the methodologies adopted in this report

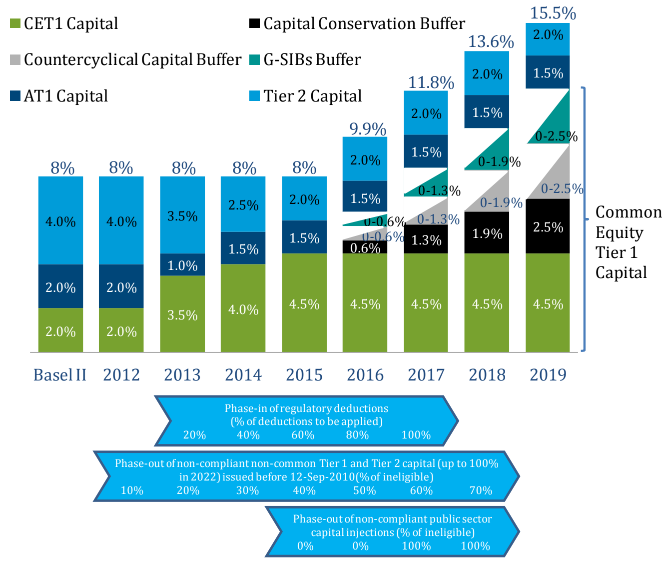
1. Balance Sheets – Overview

In 2013 the European Union adopted the CRDIV legislation, implementing the Basel III accord in the EU. The CRDIV includes a number of transitional measures, which facilitate financial markets and the real economy in adjusting smoothly to the new regulatory landscape. The charts in the first part of the report illustrate the capital and leverage ratios under the phased-in (transitional) and the end-point (fully loaded) approaches, as reported by the EU GSIBs.

During the transition period (2014-2019), certain deductions are applied to the calculation of CET1 capital, Tier 1 capital and Tier 2 capital. For CET1 capital, the regulatory deductions vary by year from 20% in 2014 to 100% from 2018 onwards, with increases of 20% per year. These deductions are related to the treatment of deferred taxes, securitisation, and unrealised losses, among others.

In addition to the abovementioned deductions, the CRDIV also establishes a timetable for the compliance with minimum capital requirements and buffers. The ratio of minimum regulatory capital to risk-weighted assets (RWA) is illustrated in the chart below.

Minimum Capital Requirements & Buffers Implementation Timetable (% of RWAs)



Source: : *AFME*

The GSIB buffer ranges from 1% to 2.5% for GSIBs. The GSIB buffer varies by bank depending on the bucket where the firm is allocated to as per the FSB's/BIS methodology, which takes into account features such as size; interconnectedness; complexity; financial infrastructure; and cross-jurisdictional activity of the institution. The required countercyclical buffer ranges from 0%-2.5% depending on the assessment of each NCA.

1.1. – 1.5, 1.9 Capital Ratios

The Capital Ratios charts illustrate the implementation of the CRDIV requirements by the 14 EU GSIBs as designated by the FSB in 2014. Such banks are: HSBC; Barclays; BNP Paribas; Deutsche Bank; Royal Bank of Scotland; BBVA; Groupe BPCE; Group Crédit Agricole; ING Bank; Nordea; Santander; Société Générale; Standard Chartered; and UniCredit Group.

The number of reporting banks for each chart varies depending on the availability of information. The table below illustrates the number of banks that are included in each of the charts in Section 1. All figures were compiled on a best efforts basis.

	1.1	1.2, 1.3, 1.4, 1.10	1.5, 1.7, 1.8	1.9	1.11	1.12, 1.13	1.14	1.15	1.16*
4Q13	13	13	13	13	13		13	9	
1Q14	13	13	11	12	13	9	13	9	
2Q14	13	13	12	13	13	10	13	10	
3Q14	13	13	11	11	13	8	13	10	
4Q14	13	13	13	13	13	13	13	13	6 (7)
1Q15	13	13	13	12	13	10	13	13	3
2Q15	13	13	13	13	13	12	13	13	3 (9)
3Q15	13	13	13	11	13	10	13	13	3
4Q15	13	13	13	13	13	13	13	13	8
1Q16	13	13	13	11	13	11	13	13	7
2Q16	13	13	13	13	13	13	13	13	7
3Q16	13	13	13	12	13	12	13	13	7
4Q16	13	13	13	13	13	13	13	13	8
1Q17	13	13	13	12	13	11	13	12	8

*The weighted averages for 4Q14 and 2Q15 are sourced from EBA's monitoring exercise reports which is based in the number of banks in parenthesis.

The CET1 Capital ratio is the share of Core Tier 1 (CET1) capital as percentage of Risk Weighted Assets (RWAs); Tier 1 Ratio is the share of Tier 1 capital as percentage of RWAs. Each ratio is shown on a phased-in (transitional) and fully loaded (end-point) approach as per the CRDIV legislation and as reported by the EU GSIBs.

The capital ratios data are sourced from EU GSIBs balance sheets and publicly available information disclosed in periodic financial reports and prudential data reports published by the above mentioned banks (i.e. interim earnings reports, annual reports, results presentations, Pillar III disclosure reports or financial data disclosed as part of interim earnings results). When not available in the EU GSIBs' financial results and publicly available information, 4Q14 CET1 and RWAs were sourced from the EBA's 2013 stress tests for the transitional approach.

For charts 1.3 and 1.4, for purposes of aggregation in Euros, the balance sheets items reported in USD and GBP were converted to Euros using the end-of-quarter exchange rate as certified by the ECB. The specific exchange rates are the following:

	EUR/USD	EUR/GBP
4Q13	1.3791	0.8337
1Q14	1.3788	0.8282
2Q14	1.3658	0.8015
3Q14	1.2583	0.7773
4Q14	1.2141	0.7789
1Q15	1.0759	0.7273
2Q15	1.1189	0.7114
3Q15	1.1203	0.7385
4Q15	1.0887	0.73395
1Q16	1.1385	0.79155
2Q16	1.1102	0.8265
3Q16	1.1161	0.86103
4Q16	1.0541	0.85618
1Q17	1.0691	0.85553

Source: *ECB*

1.6. Change in CET1 by components

Chart 1.6 illustrates the contribution of RWAs, profits and other factors to the quarterly change of CET1 ratio on an end point approach. The figures are aggregated by banks on a weighted average basis. The individual contributions are sourced from banks' presentations of the quarterly financial results and quarterly financial statements, when available in the granularity presented. When the figure is not available at the same level of granularity, a linear decomposition is performed: the quarterly percentage change of the CET1 ratio is approximated as the quarterly percentage change in CET1 capital, minus the quarterly percentage change in RWAs.

Accordingly, the contribution of RWAs to the change is calculated as the percentage change of RWAs multiplied by the CET1 ratio in the past quarter. The contribution of profits is calculated as the quarterly profits, divided by the amount of RWAs in the past quarter. The remaining "FX and other" factor is calculated as residual.

1.7. – 1.8. Difference between CET1 ratios and 2019 ratios on an end-point basis

Chart 1.7 illustrates the difference between the individual EU GSIBs CET1 ratios on an end-point basis, and the regulatory ratio due to apply from 2019 assuming that banks are to comply with the GSIB buffer they are currently assigned (between 1% and 2.5%). The additional countercyclical buffer is represented with a horizontal line at 2.5%, to illustrate the maximum buffer that EU GSIBs would have to comply with, should all NCAs implement the maximum buffer at 2.5%. The countercyclical buffer is yet to be implemented by the European NCAs.

Chart 1.8 illustrates the difference between EU GSIBs weighted-average CET1 ratio on an end-point basis, and a stressed maximum regulatory ratio that banks would have to comply with assuming that NCAs implement the maximum countercyclical buffer at 2.5%. That is, a requirement of 4.5% (Minimum CET1 ratio) + 2.5% (Capital conservation buffer) + 1%-2.5% (according to the bucket where the GSIB is currently located) + 0%-2.5% (countercyclical buffer). To estimate the weighted-average CET1 ratio, individual RWAs were used.

One of the 14 EU GSIBs reports its financial results on a semi-annual basis. Chart 1.8 uses the latest CET1 ratio reported for this bank.

1.10. Cumulative change of T1, RWA and T1 ratio

This chart illustrates the cumulative percentage change of each of the components of the Tier 1 ratio on a phased-in basis. As with previous charts, T1 and RWAs are sourced from EU GSIBs' financial reports and publicly available material (see reference to charts 1.1-1.4).

The data is aggregated for banks where information is available. In contrast to chart 1.8, the ratio and its subsequent cumulative percentage change, is calculated as total T1 capital as proportion of total RWAs (and not simple average of ratios).

1.11. Structure of regulatory capital

Total phased-in regulatory capital of EUGSIBs by capital tiering: CET1, AT1 and T2.

1.12. – 1.13. Risk-Weighted Assets (RWAs)

The breakdown of RWAs by risk is sourced from financial reports published by the EU GSIBs as referenced in 1.1-1.4

Chart 1.12 illustrates the breakdown by risk component for each EU GSIB as of 1Q16 or the latest publicly available breakdown.

The credit risk category represents other risks different from market and operational risk as disclosed by the EU GSIBs.

The figures are in Euros which are converted from the currencies used by banks to report their financial results, using the ECB's official FX rate for the corresponding end of period.

1.14. RWA densities

The densities are calculated as the ratio of RWAs to total assets by bank. The amounts of RWAs are phased-in values as reported by banks and are consistent with the figures reported in chart 1.4.

Total assets are sourced from Thomson Reuters EIKON and Banks' financial statements when not available in Reuters.

1.15. Leverage Ratios (fully loaded)

The leverage ratio represents the share of Tier 1 capital as a percentage of eligible assets under the fully loaded approach.

The leverage ratios are sourced from financial reports published by the EU GSIBs referenced in 1.1-1.5 (i.e. interim earnings reports, annual reports, results presentations, Pillar III disclosure reports, or other financial data disclosed as part of earnings results).

All figures were compiled on a best efforts basis.

1.16. Leverage ratio by components

This chart illustrates the cumulative percentage change of each of the components of the Leverage ratio. As with previous charts, T1 and the exposure measure are sourced from EU GSIBs' financial reports and publicly available material (see reference to charts 1.1-1.4).

1.17. Liquidity Coverage Ratio (LCR)

The LCR represents the share of High Quality Liquid Assets (HQLA) relative to total net cash outflows over a 30-day time period.

LCRs are sourced from financial reports published by the EU GSIBs (i.e. interim earnings reports, annual reports, results presentations, Pillar III disclosure reports, and other financial data disclosed by banks).

Some banks disclosed in their reports that their LCR ratios were above a certain level without disclosing the actual ratio (e.g. "above 100%" or "above 110%"). This information was not added in the graph.

All figures were compiled on a best efforts basis.

2. Debt securities and Contingent Convertibles

2.1. Average EU GSIBs credit rating

This chart presents the simple average of the EU GSIBs long-term foreign credit ratings. The rating of each bank is estimated as the simple average of the individual long-term foreign credit ratings assigned by Moody's, Fitch and S&P. To calculate the average by bank, a value between 0 and 17 is assigned to each rating, where 0 represents DDD (or C in Moody's scale and D in S&P scale) and 17 is equivalent to AAA (or Aaa in Moody's scale). When a Credit Rating Agency (CRA) has not rated the long-term foreign performance of an EU GSIB, the average is calculated with the available credit ratings.

The information is sourced from Thomson Reuters EIKON.

2.2. Debt outstanding by seniority

The data is sourced from Thomson Reuters EIKON. The data corresponds to debt issued by the 14 EU GSIBs, which does not take account of holdings by subsidiaries/branches within the same group.

The "Mortgages" category includes mortgage covered bonds.

2.3. EU 28 bank's debt outstanding by maturity

The data is sourced from the ECB and Dealogic DCM. The figures correspond to the outstanding amounts of debt securities other than shares issued by European Union (EU28) banks at the end of reference period broken down by maturity in years.

All securities issued in all currencies are included and converted into EUR terms by the ECB.

2.4. CoCos by capital tiering

CoCo securities included are those issued by banks whose parent company is located in Europe. It does not include securities issued in Europe by banks whose parent company is non-European. Europe is defined as per Dealogic's classification, which includes European Union nations, Eastern European countries (e.g. Russia, Azerbaijan, and Kazakhstan), EFTA countries, old Soviet Union countries, and Turkey.

All securities issued in all currencies are included and converted into EUR terms by Dealogic.

The capital tiering is sourced from Dealogic DCM for each of the securities covered.

2.5- 2.6. CoCos issued by absorbing mechanism

CoCo securities included are those issued by banks whose parent company is located in Europe as defined by Dealogic, which encompasses European Union member states, Eastern European countries (e.g. Russia, Azerbaijan, and Kazakhstan), EFTA countries, old Soviet Union countries, and Turkey.

The absorbing mechanism is sourced from Thomson Reuters EIKON for each of the securities covered.

2.7 Coupons of fixed-rate CoCos

Weighted average coupons of fixed-rate CoCo originations weighted by size of issuance in EUR. Weighted average at date of issuance.

2.8 CoCos issued by credit rating

CoCo securities included are those issued by banks whose parent company is located in Europe as defined by Dealogic.

The credit rating is based on the classification by Dealogic of “Effective rating at launch”. This rating is calculated as an average of available ratings from S&P, Moody's and Fitch at the time of issuance. If an issue is rated by just one CRA, such rating is displayed.

The category “High Yield” aggregates issuance volumes of instruments rated at date of launch at BB+ or below. Investment Grade instruments relate to issues rated at BBB- or above at date of launch.

2.9. CoCos issued by maturity

CoCo securities included are those issued by banks whose parent company is located in Europe as defined by Dealogic. All securities issued in all currencies are included and converted into EUR terms by Dealogic.

Maturity is classified on the basis of the number of years from settlement date to legal maturity date. Perpetual bonds are classified under their own category.

2.10. CoCos issued by trigger

The chart aggregates the value of CoCo instruments issued by European banks (in billions of Euros), classified by the underlying trigger and the capital tiering in which the instruments are contingent on (T1 or T2 capital performance).

The data are sourced from Dealogic.

2.11. - 2.13 CoCo prices and option-adjusted spreads (OAS)

The indices in 2.10 and 2.12 are compiled by Barclays according to the capital tiering, location (Global vs. European) and risk of the security (High Yield vs. Investment Grade). The indices in 2.10-2.11 are unhedged and in nominal USD terms.

Annex

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Finance for Europe

London Office
39th Floor
25 Canada Square
London E14 5LQ
United Kingdom

Switchboard:
+44 (0)20 3828 2700

Brussels Office
Rue de la Loi, 82
1040 Brussels
Belgium

Switchboard:
+32 (0) 2 788 3971

Frankfurt Office
Skyper Villa
Taunusanlage 1
60329 Frankfurt am Main
Germany

Switchboard:
+49 (0) 69 5050 60 590

AFME
Julio Suarez - Manager, Research
Michael Lever - Managing Director, Prudential
Sahir Akbar - Director, Prudential
Sophie Jade - Associate, Prudential

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