

3Q 2019

Prudential Data Report

EU GSIBs prudential
capital and liquidity



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This report collates timely information on EU GSIBs' prudential capital*, leverage, loss-absorption capacity and liquidity ratios with updated information as at 30 September 2019.

It also illustrates the recent performance of the debt and contingent convertibles (CoCo) markets for banks in Europe.

Most prudential data publications and statistical sources compile information that is not comparable or is published with a substantial delay. This report addresses the existing data gap by publishing comparable and consistent prudential statistics of EU GSIBs on a timely basis.

All data is sourced from public information, with the exception of CoCo markets performance and banks' debt structure by seniority. All figures exclude any estimates for the impact of the final Basel III proposals.

As this Data Report illustrates, European systemically important banks (or EU-GSIBs) have improved their capital, leverage, loss-absorption and liquidity positions over the last years, in compliance with CRDIV.

The CRDIV rules comprise minimum requirements on bank solvency and liquidity, which seek to enhance the soundness of banks' balance sheets.

*According to the 2019 FSB GSIB list

EU GSIBs capital and liquidity ratios

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 3Q 2019 |
|--------------------------------|--------------------|--------|--------|--------|--------|--------|---------|
| CET1 ratio (end-point) | 10.0% | 10.9% | 11.6% | 12.2% | 13.3% | 13.1% | 13.3% |
| T1 ratio (end-point) | 11.3% | 11.7% | 12.7% | 13.5% | 14.7% | 14.8% | 15.0% |
| Leverage ratio (end-point) | 3.6% | 4.2% | 4.5% | 4.7% | 4.9% | 4.8% | 4.7% |
| Liquidity Coverage Ratio (LCR) | - | 127.5% | 134.8% | 132.9% | 141.0% | 142.4% | 138.4% |
| TLAC ratio | % RWAs | - | - | - | - | - | 25.6% |
| | % exposure measure | - | - | - | - | - | 8.2% |

Source: EUGSIBs earnings reports, EBA and Dealogic

EU systemically important banks* (EU GSIBs) continued to comply in the third quarter of 2019 with the Basel III accord and the CRDV minimum requirements on bank solvency and liquidity.

Among the main findings of this report:

- **EU GSIBs end-point CET1 ratio increased to 13.3% in 3Q19, from 13.1% in 4Q18.**
- **End-point Tier 1 ratios increased to 15.0% in 3Q19, from 14.8% in 4Q18.**
- **End-point Leverage ratios (LR) declined to 4.7% in 3Q19 from 4.8% in 4Q18.**
- **Liquidity Coverage Ratio (LCR) declined to 138.4% on a weighted average basis in 3Q19, from 142.4% in 4Q18.**
- **TLAC ratio stood at 25.6% relative to RWAs and 8.2% as a percentage of leverage exposure.**

During the latest quarter, earnings retention contributed 18bps to the CET1 ratio variation. This increase was marginally offset 2bps by an increase in RWAs by 6 of the 11 banks as consequence of business growth (most predominantly credit risks) and bank-specific factors like changes to regulatory models.

Other factors including FX variation and other bank-specific factors (e.g. large share buybacks and temporary impact of structural transformation) partially offset the quarterly increase on CET1 ratio by 6bps. See page 13.

TLAC ratios (a new addition to the report) stood comfortably above the minimum required by the FSB global standards (16% of RWAs and 6% of leverage exposure measure). As of 3Q2019, EU GSIBs have accumulated a total of c€1.2tn of TLAC including own funds and eligible liabilities. See page 20.

*According to the 2019 FSB GSIB list

Capital raising above 2018FY level

The amount of new capital raised during 2019YtD by EU banks totalled €26.2 bn, €3.8bn above the amount raised in 2018FY.

The amount of fresh capital raised was almost exclusively in the form of contingent convertible (CoCo) bonds.

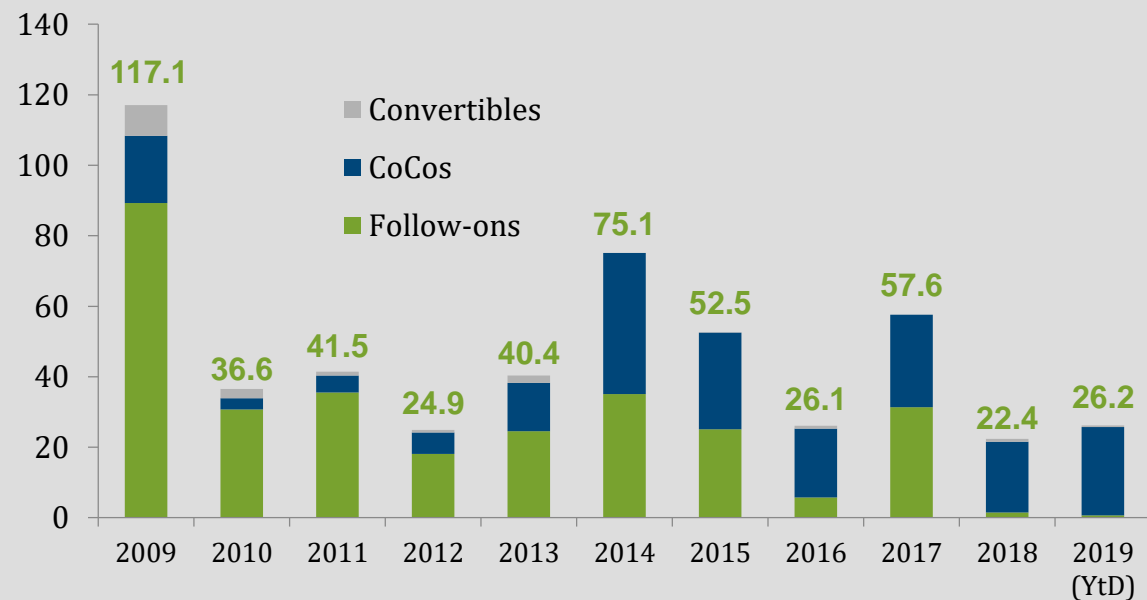
43 European banks have issued 55 CoCo instruments in 2019 YtD including 9 European GSIBs (vs 37 in 2018FY including 9 European GSIBs).

Coupon rates of newly originated CoCos have decreased on a weighted average basis to 5% in 4Q19 (from 7.1% in 4Q18) on the back of lower

risk-free long-term yields and higher credit ratings of the recently issued instruments. As noted on page 40, 42% of the issued amount in 2019 was rated at investment grade compared with 35% in 2018 and 28% in 2017 reducing borrowing costs and facilitating the issuance of this form of loss-absorption debt.

EU GSIBs have also continued to issue bail-inable senior non-preferred bonds, accumulating a total stock of €153bn as of November 2019, representing between 2.7% and 6% of EU GSIBs RWAs, as banks continue to prepare for the implementation of TLAC/MREL requirements.

Fresh capital raised by EU banks (€bn)



Source: Dealogic

BOX: Capital Markets Union: Key Performance Indicators

Pages 22-33 summarise the main findings of a recent AFME report on Capital Markets Union (CMU) Key Performance Indicators (KPIs), produced in collaboration with ten other trade associations and international organisations.

The report assesses the EU's progress against 8 KPIs across the 8 political priorities of the CMU, including a country-by-country comparison of individual EU Member State progress against the CMU's objectives.

CMU progress so far

Compared to last year's report, the findings show mixed results, with some indicators showing a positive trajectory while others have deteriorated or remained neutral.

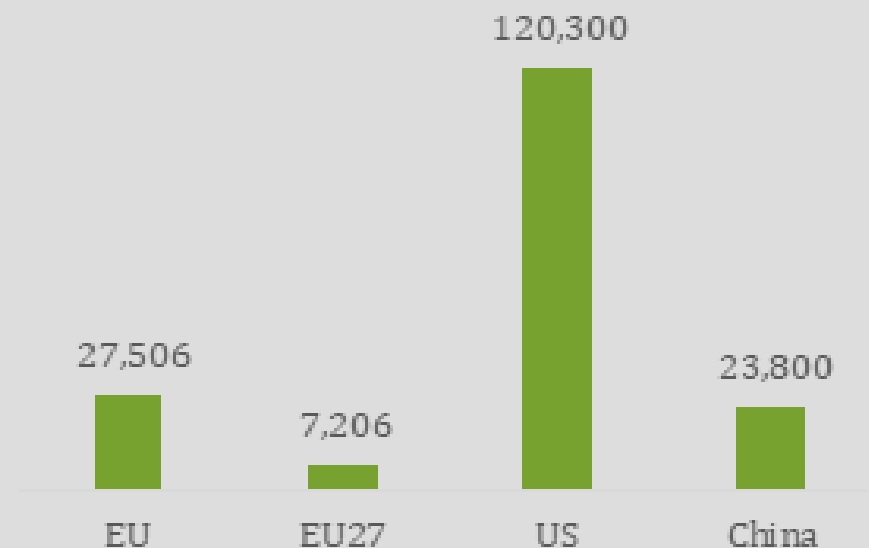
Among the key findings:

Europe is a global leader in sustainable finance, representing 43% of global issuance of sustainable bonds in 2018 (vs. 16% in the United States and 18% in China), with the Euro as the most popular denomination of choice.

Europe's reliance on bank lending has increased in recent years. EU companies continue to over rely on bank lending, with 88% of their new funding in 2018 coming from banks and only 12% from capital markets – (14% on average in 2013-2017).

The EU lags behind other jurisdictions on FinTech funding – EU27 FinTech companies have only benefited from €6.3bn in investments since 2009, compared with €105bn in the US and €20.8bn in China. See chart.

Investment activity in FinTech: cumulative amount 2009-19 (USD mm)



Source: CBinsights

New GSIB list

The Financial Stability Board (FSB) updated on Nov-19 the list of globally systemically important banks (GSIBs).

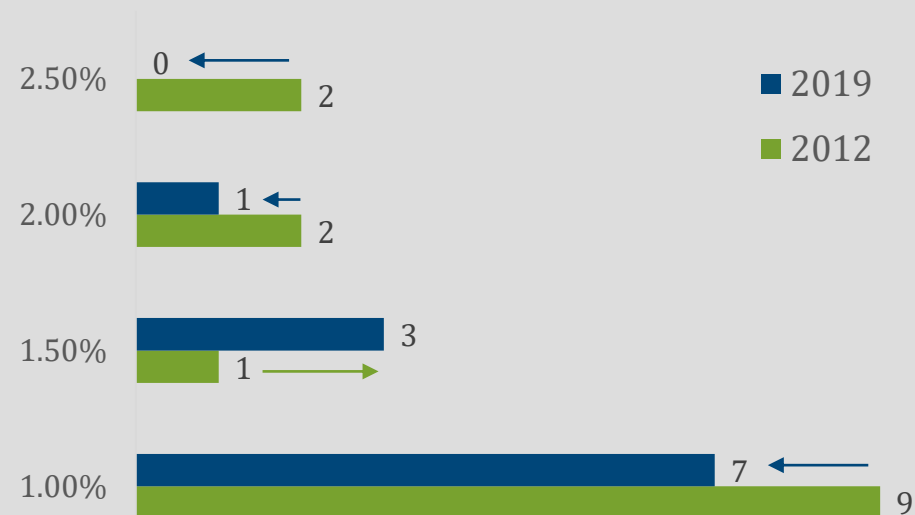
The most relevant changes of the 2019 list are the reclassification of one EU bank which moved from bucket 3 (2% CET1 capital surcharge) to bucket 2 (1.5% surcharge), and the addition to the GSIB list of one Canadian bank.

Compared with the 2018 GSIB list, the number of GSIB banks increased from 29 to 30.

Since 2012, the number of EUGSIBs has declined from 14 to 11 in 2019. These changes have also signified, on a weighted average basis, lower GSIB capital surcharges for global EU banks.

This is in response to the continued effort of banks to restructure their balance sheets to comply with the capital requirements including through asset disposals and RWA restructuring (see Graph).

Number of EU GSIBs by capital bucket



Source: FSB

Major upcoming regulatory, legislative and policy initiatives

Some of the globally agreed regulatory initiatives, including the “Basel III framework”, are currently being considered for implementation at the EU level.

At the global level, the Basel committee will continue addressing only a targeted set of policy initiatives that require finalisation. This includes work related to the Credit Valuation Adjustment (CVA) framework, expected credit loss accounting changes, the leverage ratio treatment of client cleared derivatives and measures to curtail window-dressing behaviour, efforts to enhance operational resilience, and potential policy measures related to crypto-assets.

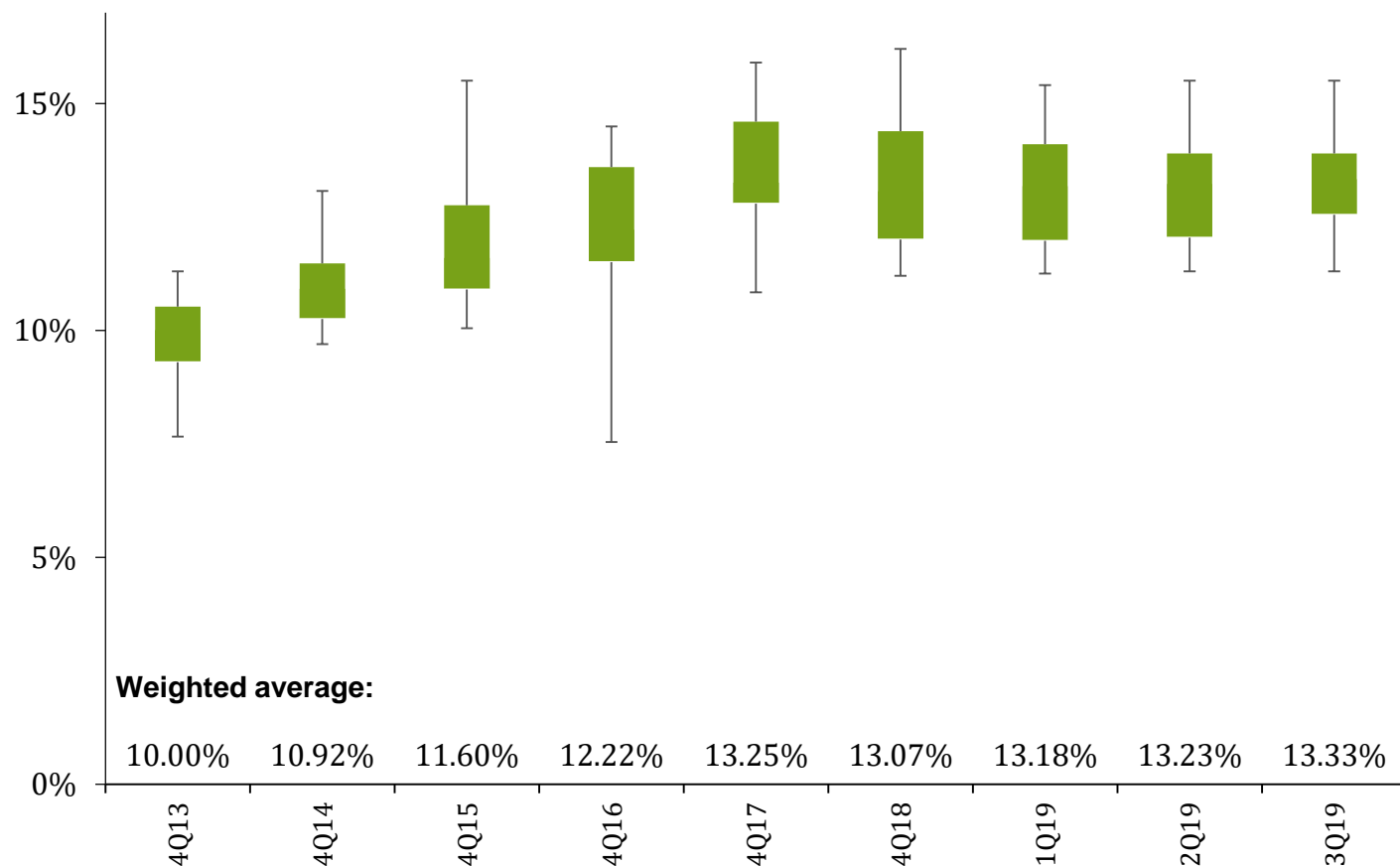
The Basel committee is also expected to continue to monitor the implementation of the Basel standards and exchange views on their proportionality.

These initiatives will potentially impact the basis of calculations for the metrics covered in this report for future iterations.

AFME is actively contributing to each of these initiatives.

Capital and liquidity ratios

CET1 end-point ratio



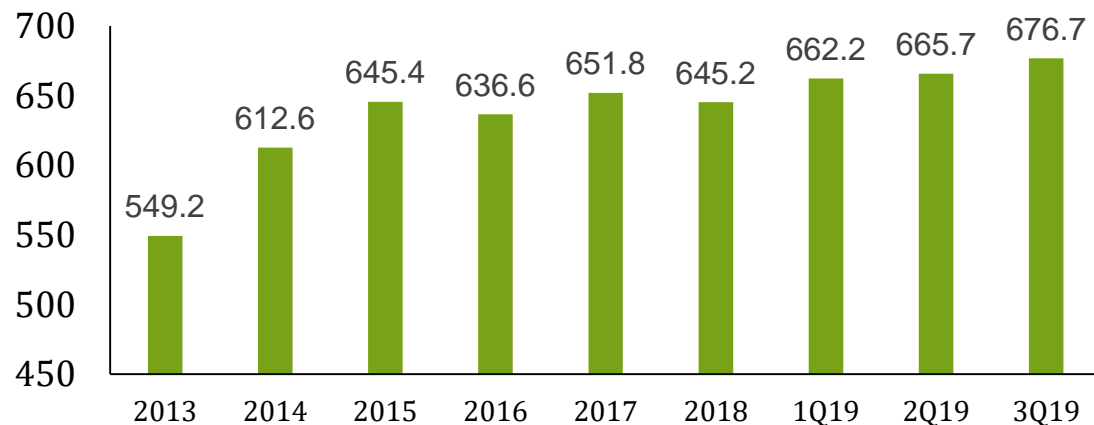
Source: EU GSIIBs earnings reports

Sustained increase in CET1 ratio during 2019

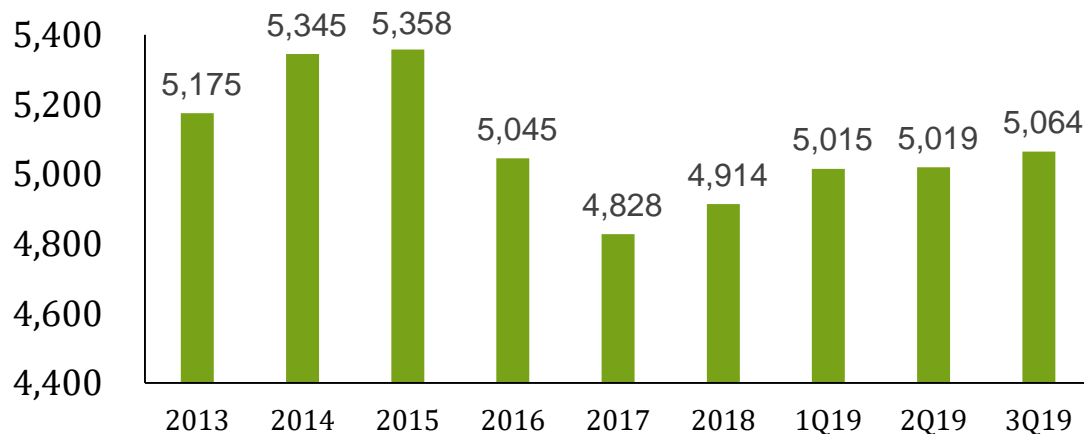
9 of the 11 EUGSIIBs have increased or maintained during 2019YtD the CET1 ratios reported at the end of 2018.

Since December 2013, the average end-point CET1 ratio has accumulated an increase of 333ps, from 10% to 13.33% in September 2019.

CET1 capital (€bn)



RWA (€bn)



Source: EU GSIBs earnings reports. From 2019 onwards, CET1 phased-in transitional measures finalised in 2019.

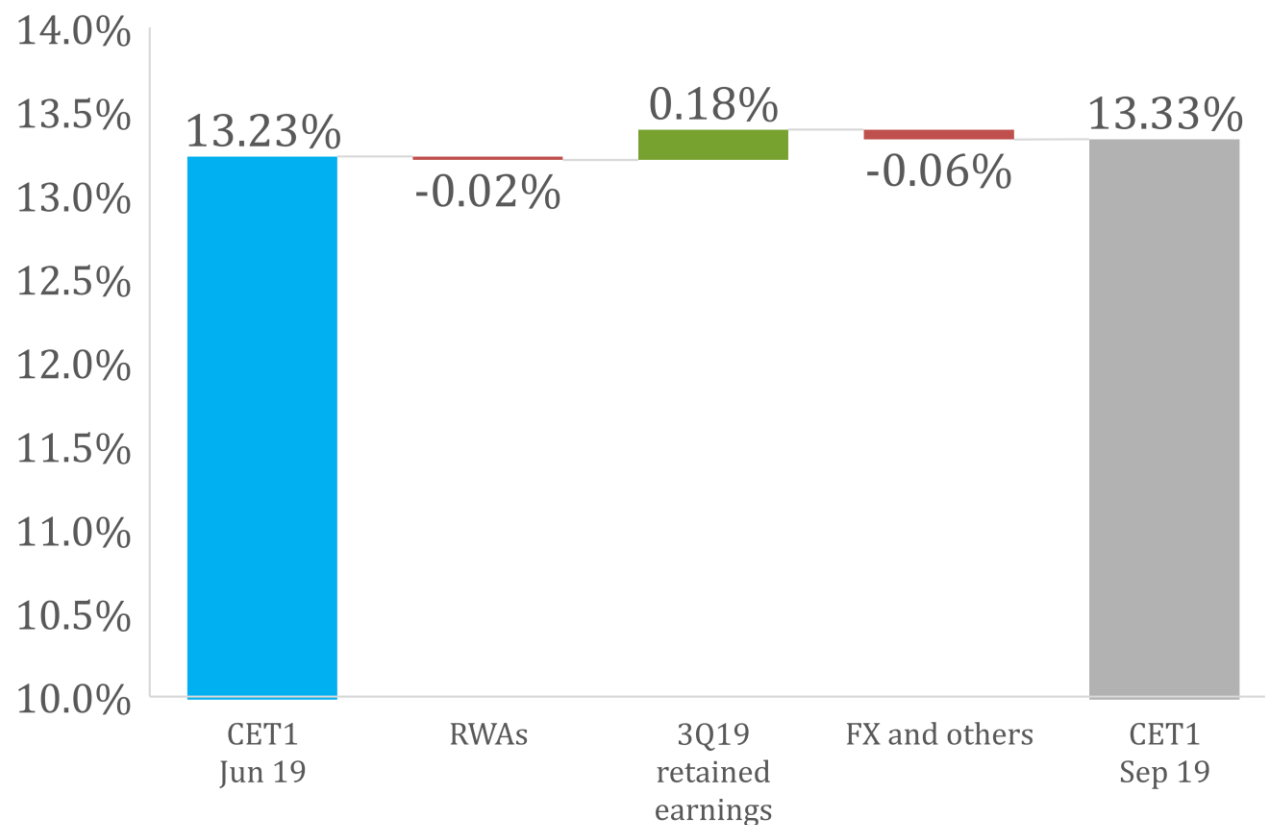
€150bn increase in RWAs during the year

EU GSIBs have increased RWAs by 3.1% in 2019YtD, predominantly in credit risk RWAs.

EU GSIBs have also increased their CET1 capital by €31.5bn, reaching a total of €676.7bn as at September 2019.

8 of the 11 banks have increased CET1 RWAs during the year while 9 of the 11 banks have increased CET1 capital.

Change in CET1 ratio by components in 3Q 2019 (%)



Source: EU GSIBs earnings reports

10bps increase in CET1 ratio in 3Q 2019

Earnings retention positively contributed 18bps to the quarterly variation in end-point CET1 ratio.

RWA increase during the period partially offset (by 2bps) the increase in CET1 ratio.

Other factors like FX translation and other bank-specific partially offset by 6bps the CET1 ratio increase.

See more detail of these bank-specific factors on page 13.

Change in CET1 capital and RWAs by banks

% change QoQ

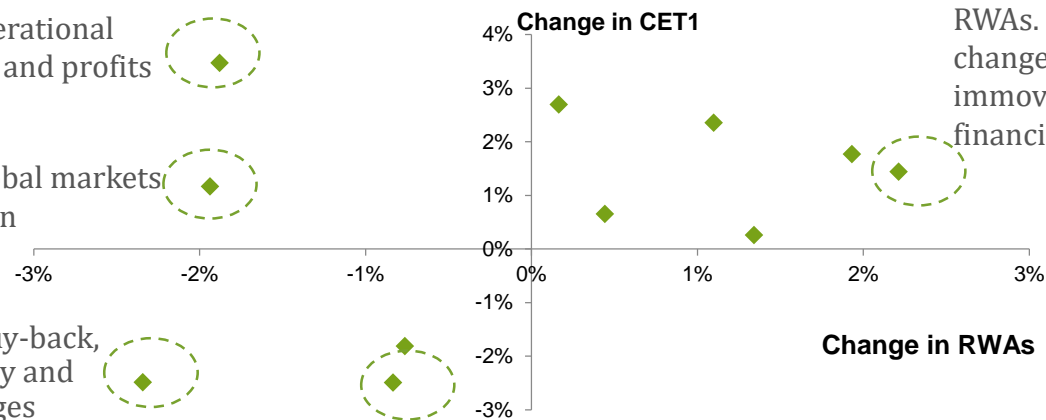
Removal of operational risk RWA floor and profits retention

Continued global markets RWA reduction

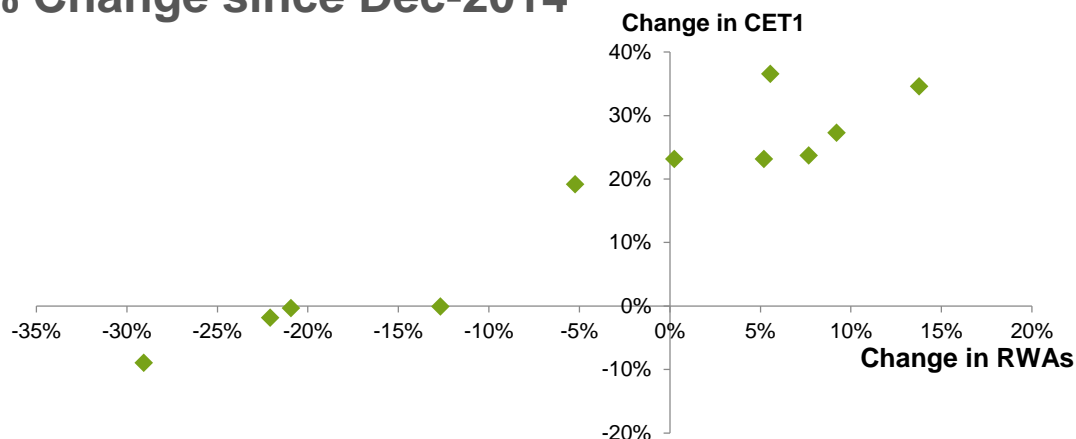
FX, share buy-back, methodology and policy changes

Negative impact on earnings of strategic transformation

Increase in retail banking RWAs. Methodological changes (speculative immovable property financing)



% Change since Dec-2014



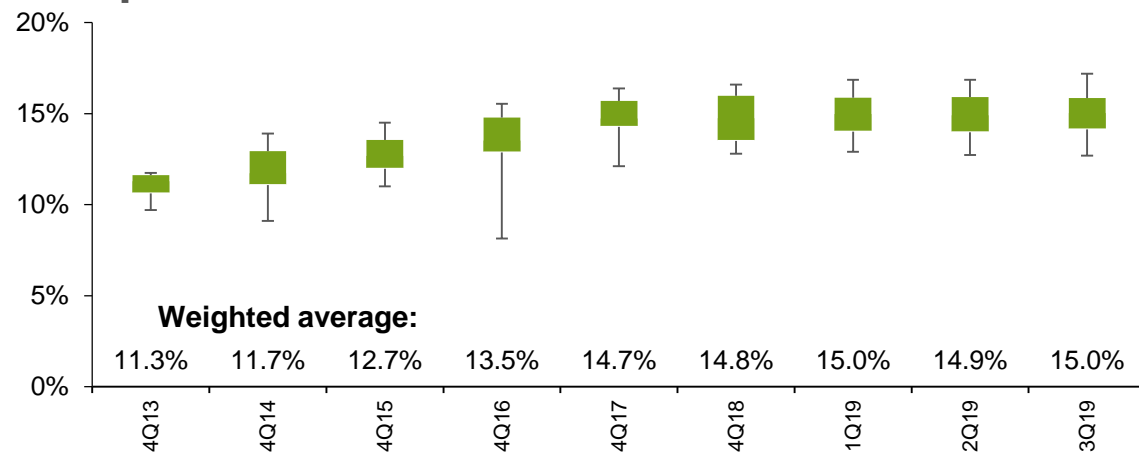
Source: EU GSIBs earnings reports. Each dot represents a bank

Large heterogeneity in CET1 and RWA quarterly variation

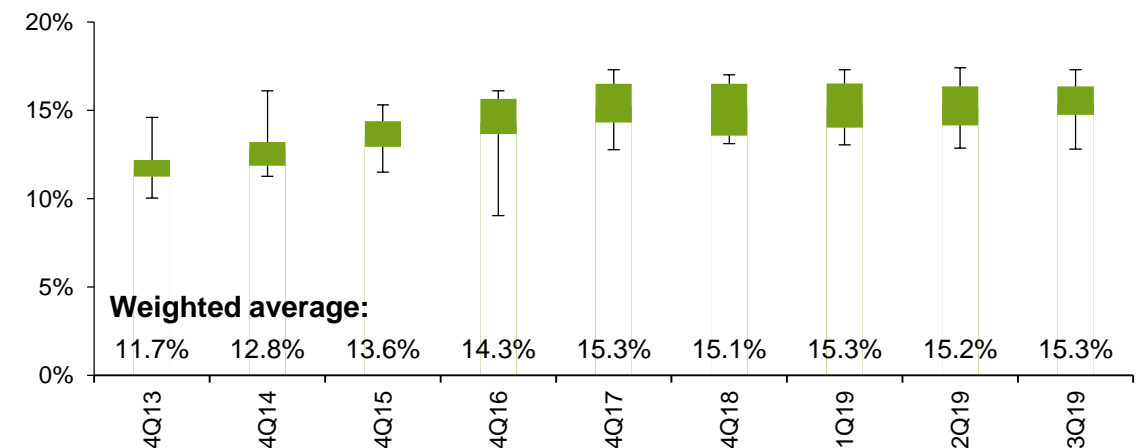
6 of the 11 EU GSIBs increased their RWAs and increased CET1 capital from 2Q19. 2 banks increased CET1 capital but decreased RWAs; and 3 banks decreased RWAs and decreased CET1 capital.

Some of the bank-specific factors behind the variations (top chart) include a continued reduction in global markets activities with increasing credit RWAs; changes in methodology calculations of RWAs, share buybacks and temporary impact of structural transformation.

End-point



Phased-in



Source: EU GSIBs earnings reports

Robust T1 capital ratio

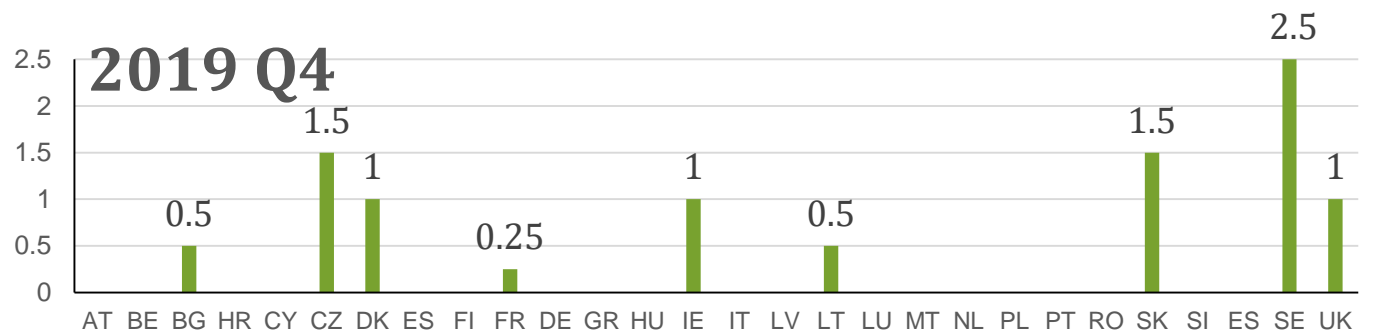
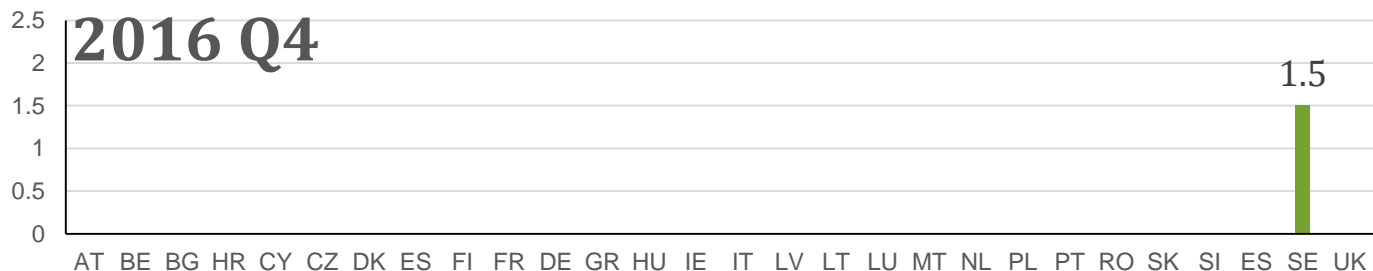
End-point T1 ratios increased from 14.8% in 4Q18 to 15% in 3Q19.

As observed on pages 44-45, 7 of the 11 EU GSIBs have issued AT1 instruments during the year equivalent to €12.1bn in proceeds, which facilitated the continued build up of robust capital buffers.

afme / Countercyclical capital buffer

Finance for Europe

CCyB rates by jurisdiction (%)



Source: ESRB. Exemptions are provided for certain small and medium-sized investment firms from holding a CCyB in the following countries: Croatia, Cyprus, Luxembourg, Malta, Poland, Slovakia, Sweden and the United Kingdom

The countercyclical capital buffer (CCyB) is designed to help counter pro-cyclicality in the financial system.

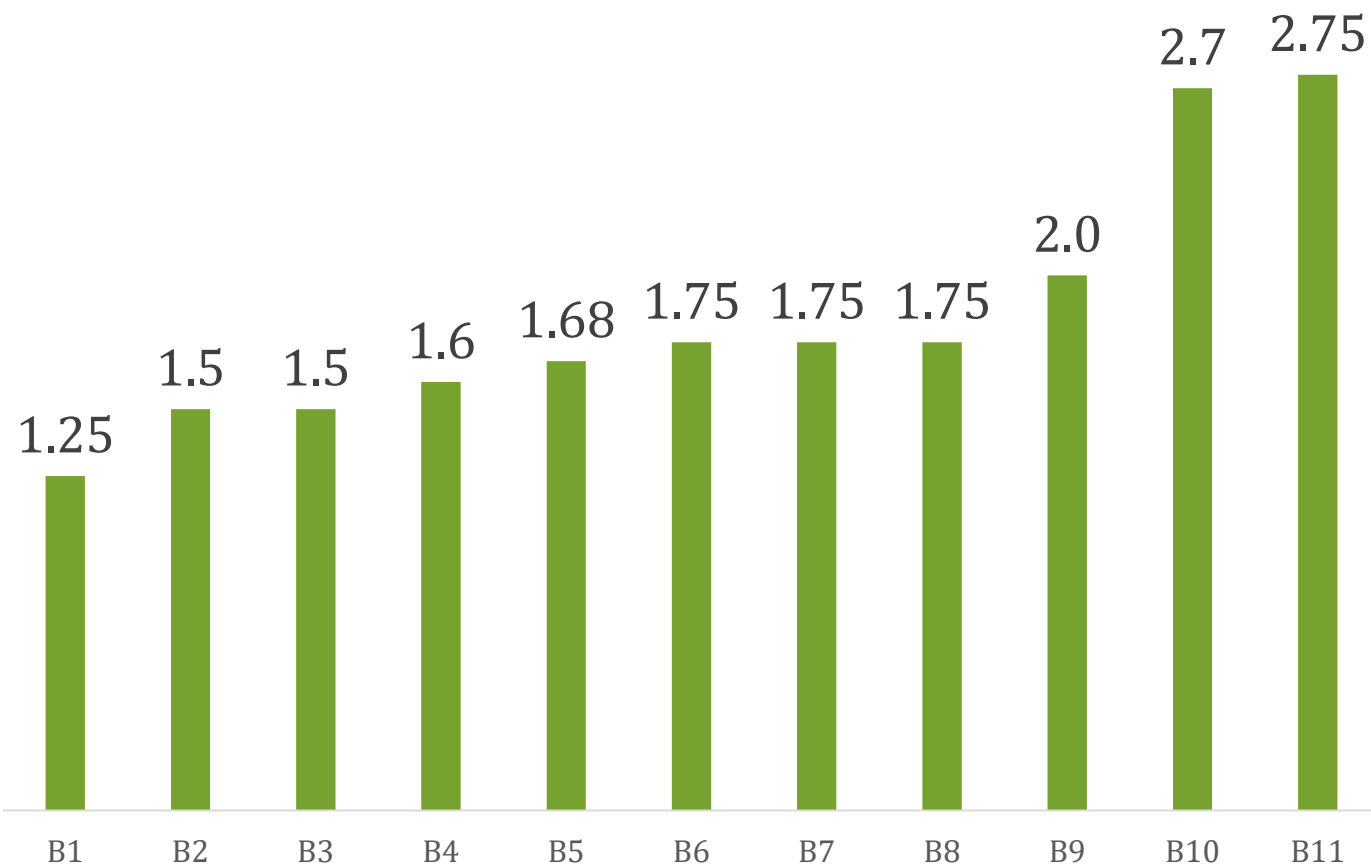
The CCyB seeks to encourage banks to accumulate capital when cyclical systemic risk is judged to be increasing and help smooth excessive credit growth during the upswing of the financial cycle.

The CCyB is set by national prudential supervisors and can reach a maximum of 2.5% of RWAs that must be met with CET1 capital.

As shown on the left charts, more countries are using this macroprudential instrument in a combination of implemented and yet to be implemented macroprudential measures.

Bank-specific Pillar 2 requirements

P2R (%)



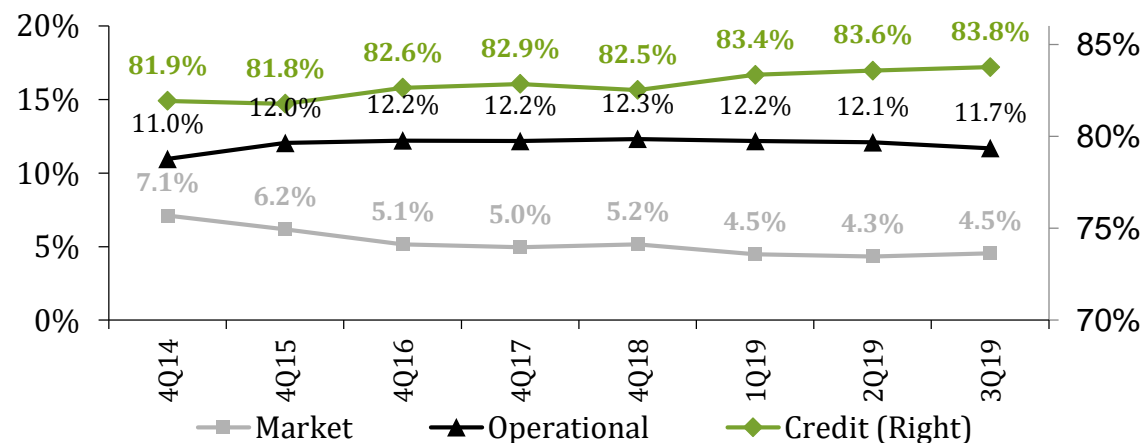
Source: EU GSIBs Earnings reports and regulatory filings

National supervisors can set additional capital requirements to supervised banks in order to address higher-than-normal risk.

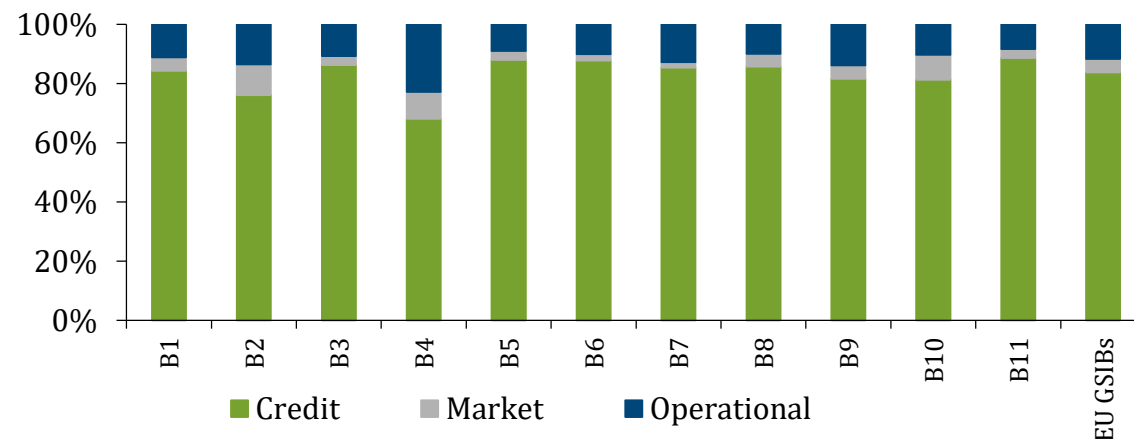
In the euro area, following the Supervisory Review and Evaluation Process (SREP) by the financial supervisor, a bank-specific capital buffer is set which considers risks not covered by the Pillar 1 minimum requirements.

For EU GSIBs, the P2R ranges from 1.25% of RWAs to 2.75%, which must be met with CET1 capital.

RWAs by risks



RWAs by risks and EU GSIB



Source: EU GSIBs earnings reports

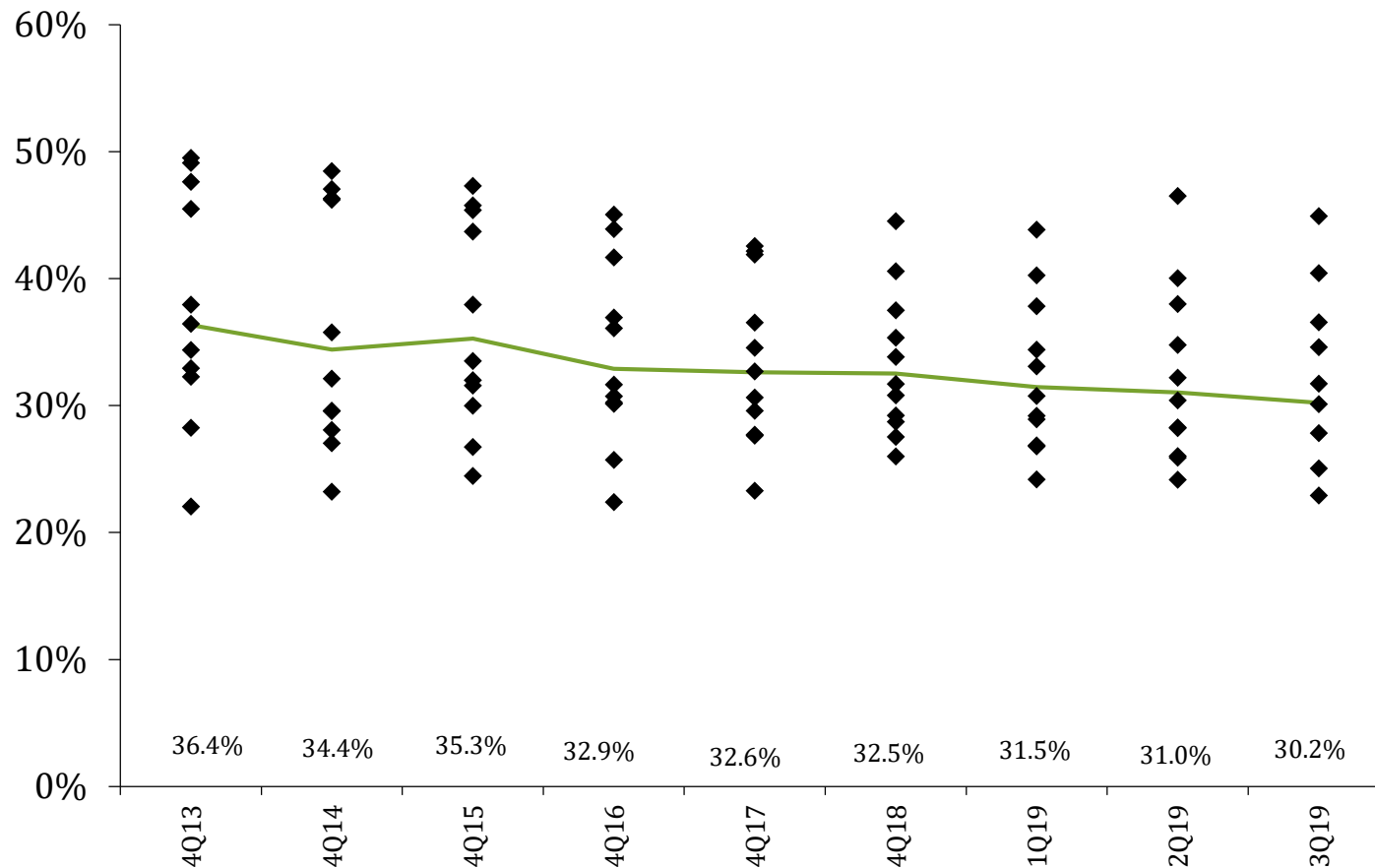
Continued increase in credit risk RWAs

As of September 2019, 83.8% of RWAs corresponded to credit risks; 11.7% to operational risks; and 4.5% to credit risks.

Credit risks (including credit counterparty risks) totalled €4.17tn in 3Q 2019 accumulating an increase from €4.05tn at the end of 2018 but below €4.4tn at the end of 2014.

By banks, operational risks represented between 8% and 23% of EU GSIBs RWAs. Market risks represented between 1.8% and 10.4%, while credit risks (including counterparty risks) represented the largest proportion of RWAs for all banks at between 68% and 89%

RWA densities: RWA/total assets



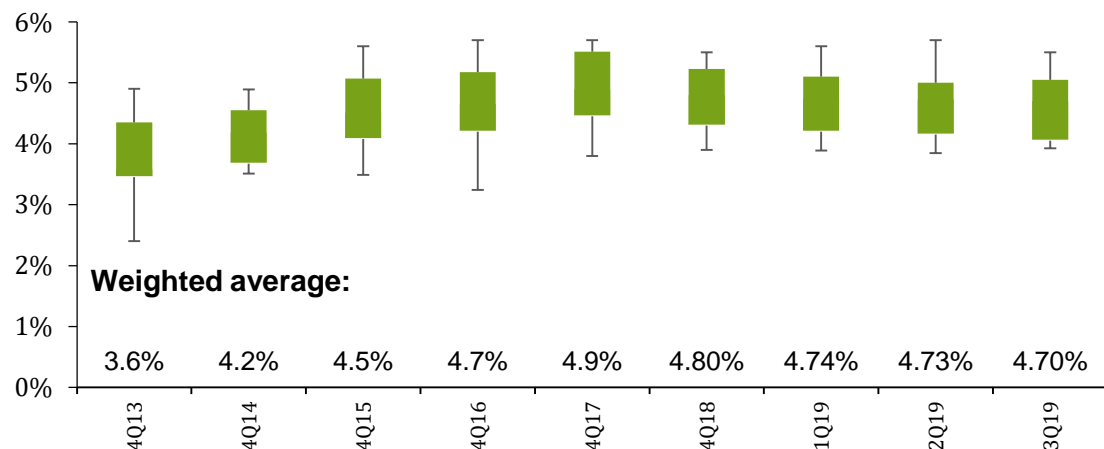
Source: EU GSIBs earnings reports

30% average RWA density

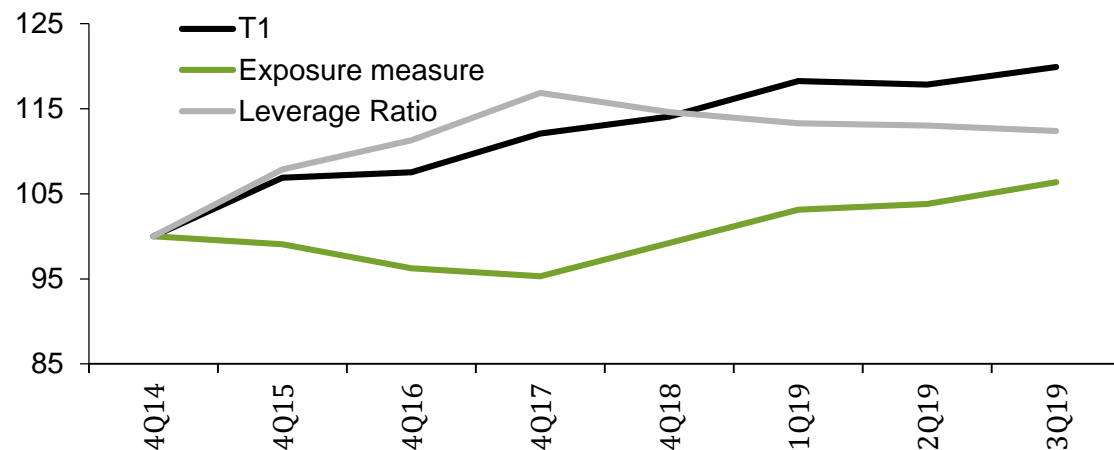
10 of the 11 EU GSIBs have decreased their RWA densities during the year.

RWAs have increased 3.1% during the year while total assets increased 11%, suggesting business prioritization for these banks to allocate more resources in activities with lower risk weights.

Leverage ratio: end-point



Cumulative change of T1 capital, exposure measure and LR



Source: EU GSIBs earnings reports

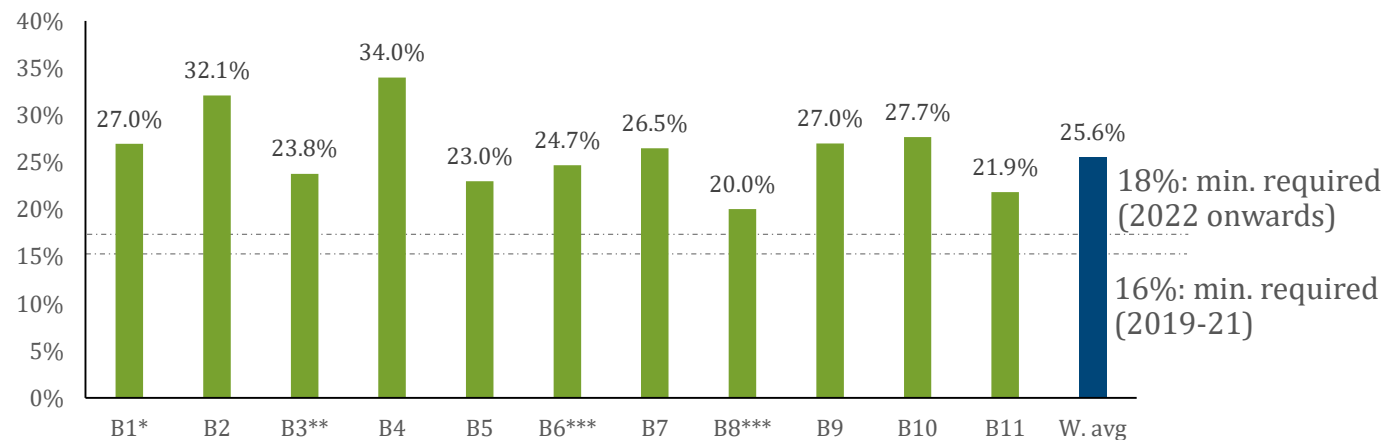
Leverage Ratio decline during the year

The weighted average leverage ratio stood at 4.7% in 3Q19, 10bp below the ratio observed in 4Q18 (4.8%).

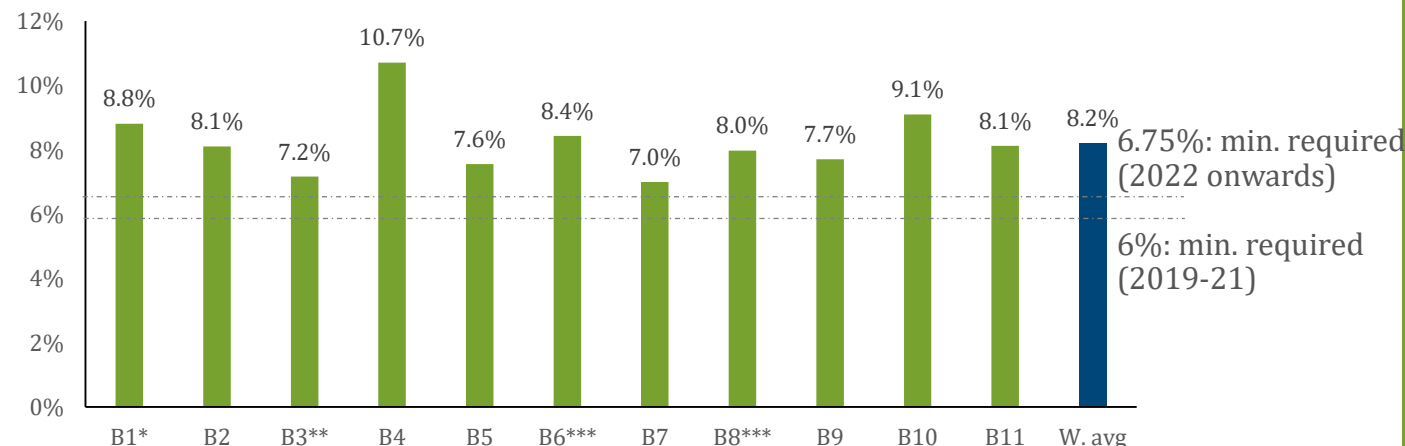
The increase is driven by a larger increase in exposure measure (+7% YtD) compared to the annual increase in T1 capital (5.1% YtD), consistent with the increase in low-risk RWAs and balance sheets size over the year.

The weighted average ratio of 4.7% is comparable with a global minimum standard of 3% according to the Basel III accord.

TLAC ratio (as % of RWAs)



TLAC ratio (as % of exposure measure)



Source: EU GSIBs earnings reports. *weighted average of resolution entities. ** including 2.5% senior preferred allowance
*** not based on public disclosure. Based on AFME calculations as a sum of own funds + senior non-preferred+ senior preferred allowance of 2.5% of RWAs

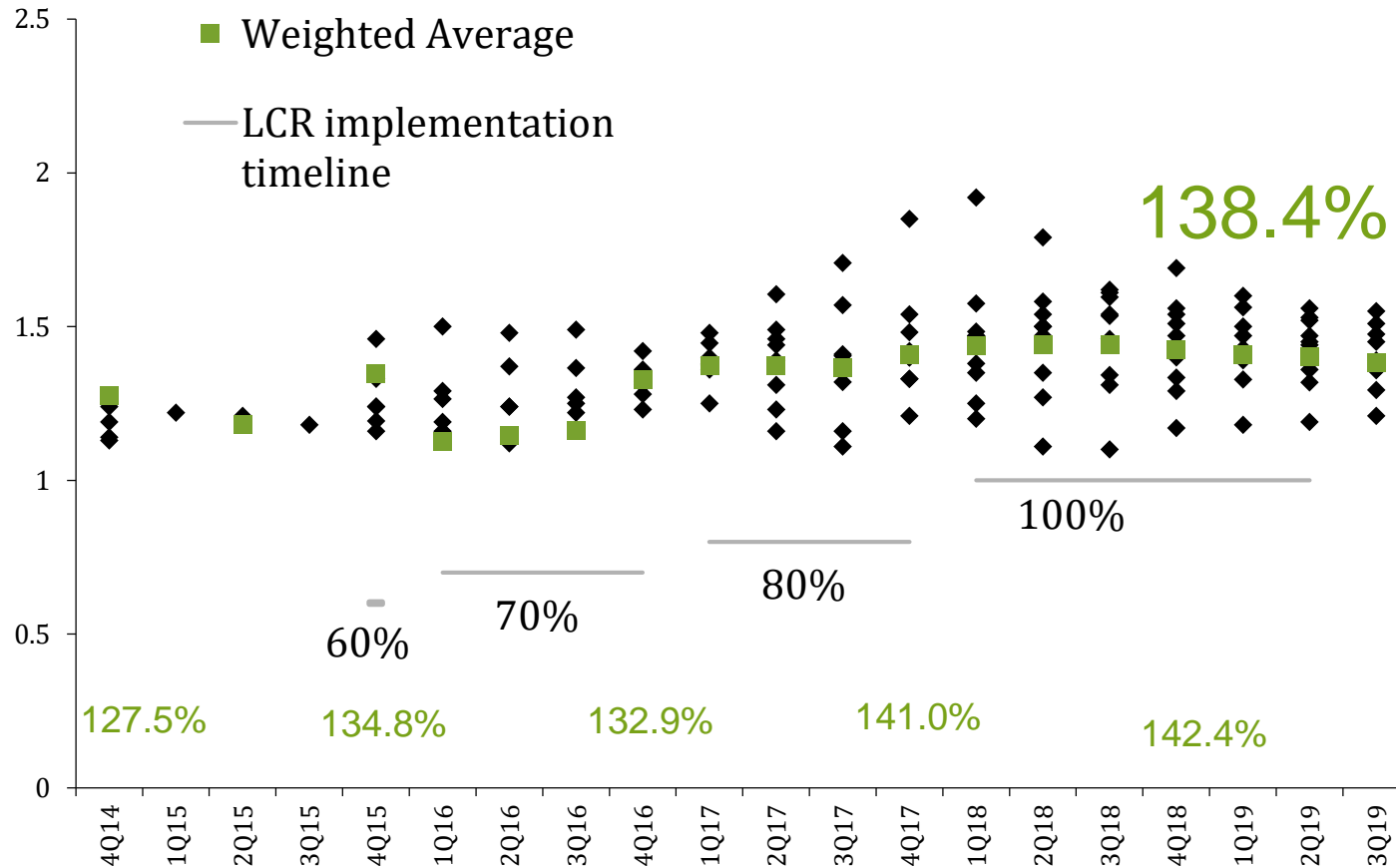
The objective of Total Loss-Absorbing Capacity (TLAC) is to ensure that GSIBs have sufficient loss-absorbing and recapitalization capacity for authorities to implement an orderly resolution that minimizes impacts on financial stability, maintains the continuity of critical functions, and avoids exposing public funds to loss.

GSIBs are required to hold minimum TLAC of 16% of RWAs, or 6% of the leverage exposure measure during 2019-21. This minimum requirement is set to increase to 18% of RWAs, or 6.75% of leverage exposure from 2022 onwards.

According to AFME estimates based on public disclosures, EUGSIBs have a total of c€1.2tn of TLAC eligible liabilities, with all EU GSIBs meeting their 2019 and 2022 TLAC minimum ratios.

Liquidity Coverage Ratio (LCR)

Liquidity coverage ratio (%)



Source: EU GSIBs earnings reports

LCR 38% above minimum required ratio (100%)

The weighted average LCR finalised the quarter at 138.4%, below the average ratio at the end of 2018 (142.4%).

CRDIV requires banks to have a sufficient level of High Quality Liquid Assets (HQLA) to withstand a stressed funding scenario of 30 days. HQLA relative to total net cash outflows over a 30-day time period must be greater than or equal to 100%.

Capital Markets Union (CMU): Key performance Indicators

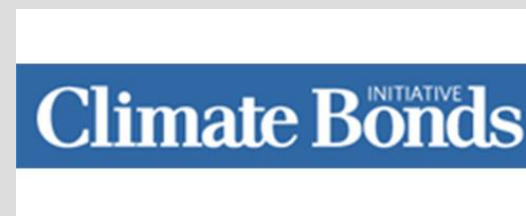
afme / CMU Key Performance Indicators

Finance for Europe

This second edition of AFME's annual report tracks the progress of the Capital Markets Union (CMU) project through eight Key Performance Indicators (KPIs).

It is a joint publication with ten trade associations and international organisations representing global and European capital markets stakeholders.

The report includes a country-by-country comparison of individual EU Member State progress against the CMU's objectives.



afme / 2018: mixed results

Finance for Europe

The report assesses the EU's progress against 8 key performance indicators across the 8 political priorities of CMU.

Compared to last year's report, the findings show mixed results with some indicators showing a positive trajectory while others have deteriorated or remained neutral.

This box presents the main findings of 3 of the 8 KPIs. Further details are available in the report which is available on the AFME website.



Market Finance



**Household
Market Investment**



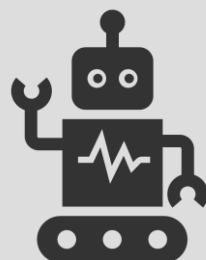
**Sustainable
Finance**



**Cross-border
Finance**



**Pre-IPO
Risk Capital**



FinTech



Loan Transfer

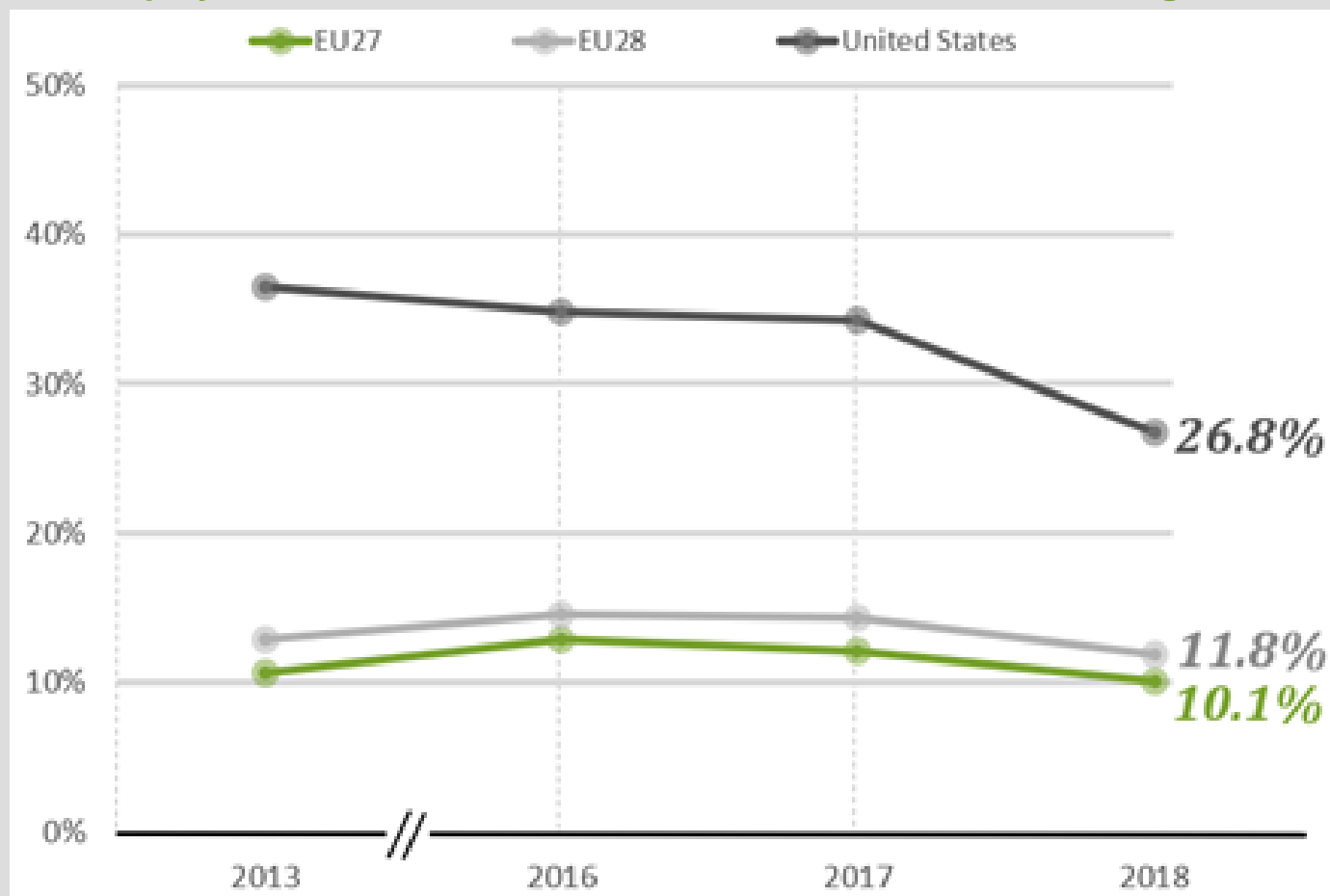


Market Depth

Market Finance indicator: EU companies continue to over rely on bank lending

Market Finance Indicator: 2013-18

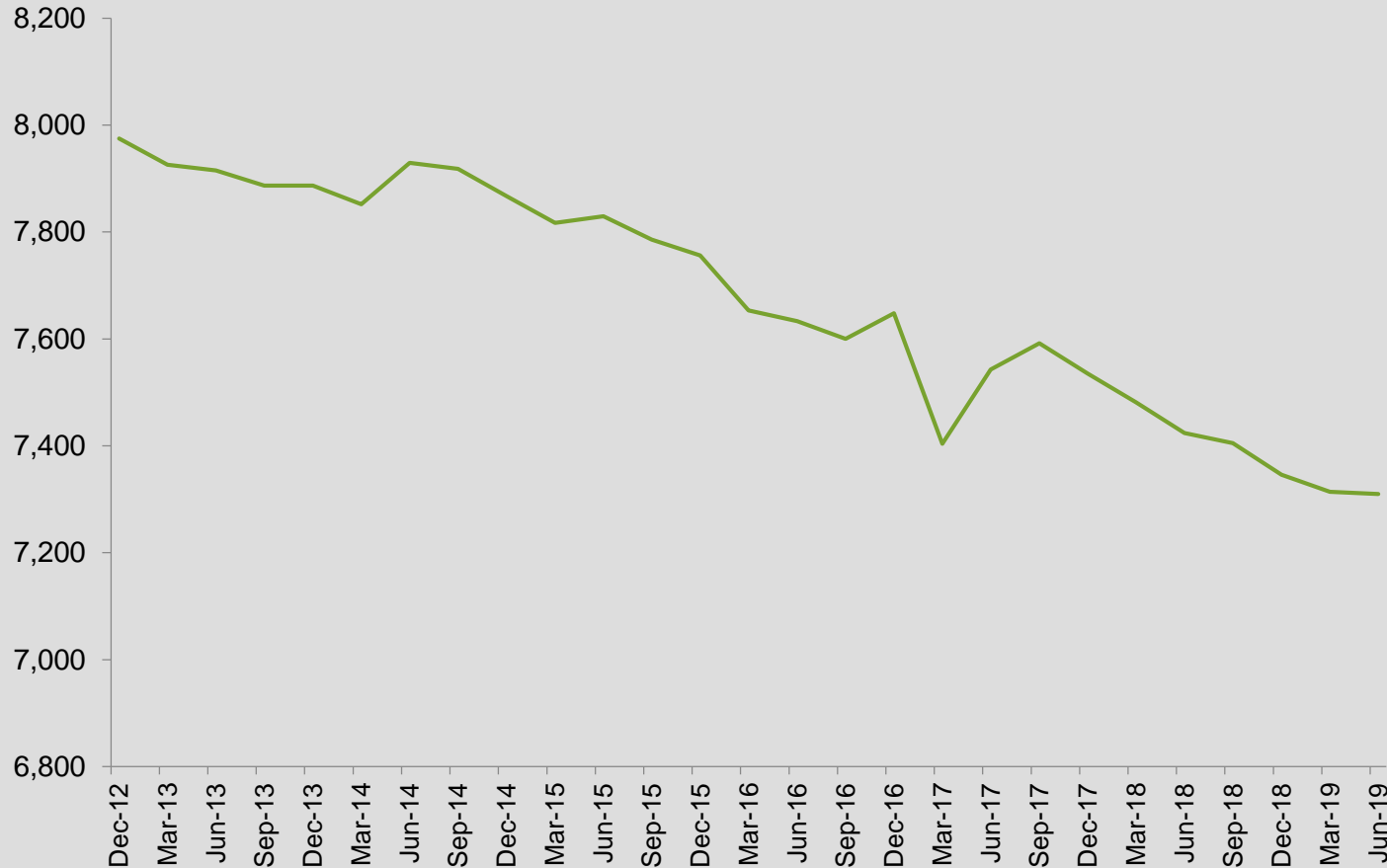
NFC equity and bond issuance as a % of total NFC annual financing



- Whilst there has been gradual recovery in the amount of financing for NFCs provided by capital markets in the previous decade, both in the EU and the US, 2018 marked a break from this trend, with the Market Finance indicator falling in both jurisdictions.
- The decline was driven by an annual fall in both bond (-16%) and equity issuance (-5%).
- The report also shows how private markets (private equity and private debt) have consolidated their presence in capital markets activities with a rapid increase in investment on European companies.

De-equitisation in Europe?

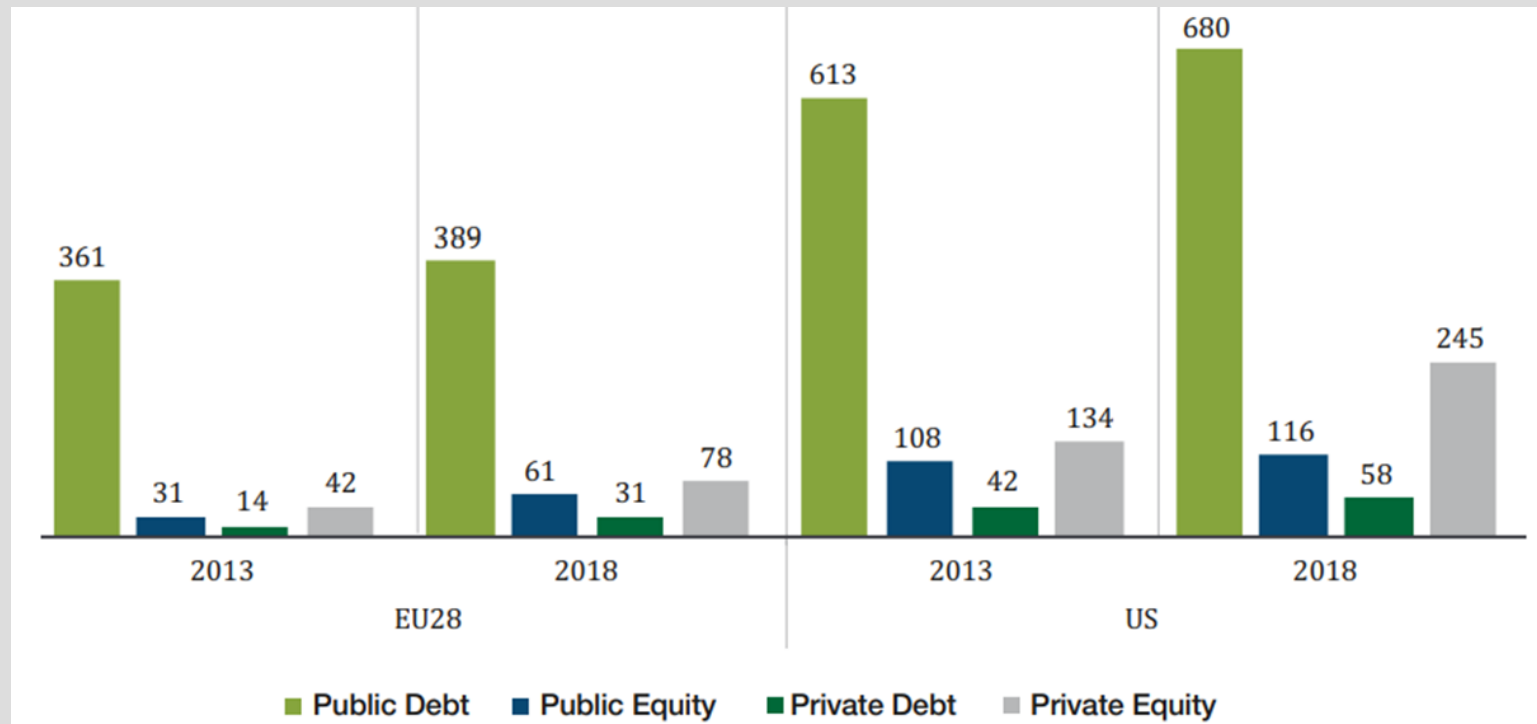
Number of listed companies on European exchanges



Source: WFE, FESE and local exchanges

- The number of listed companies in the EU has declined from 8,000 in 2012 to c7,400 in 2018 while private equity-backed companies rose from c5,900 in 2012 to c7,900 in 2018
- Continued company delistings, low cost of debt compared to cost of equity (2% cost of debt compared to 8% cost of equity), a buoyant private equity and venture capital market, and M&A transactions (c200 deals between publicly listed companies in 2018 in Europe according to Dealogic) are factors behind this trend.

New gross issuance of NFC debt and equity through public markets, private equity investments and private debt fundraising 2013-2018 (EURbn)



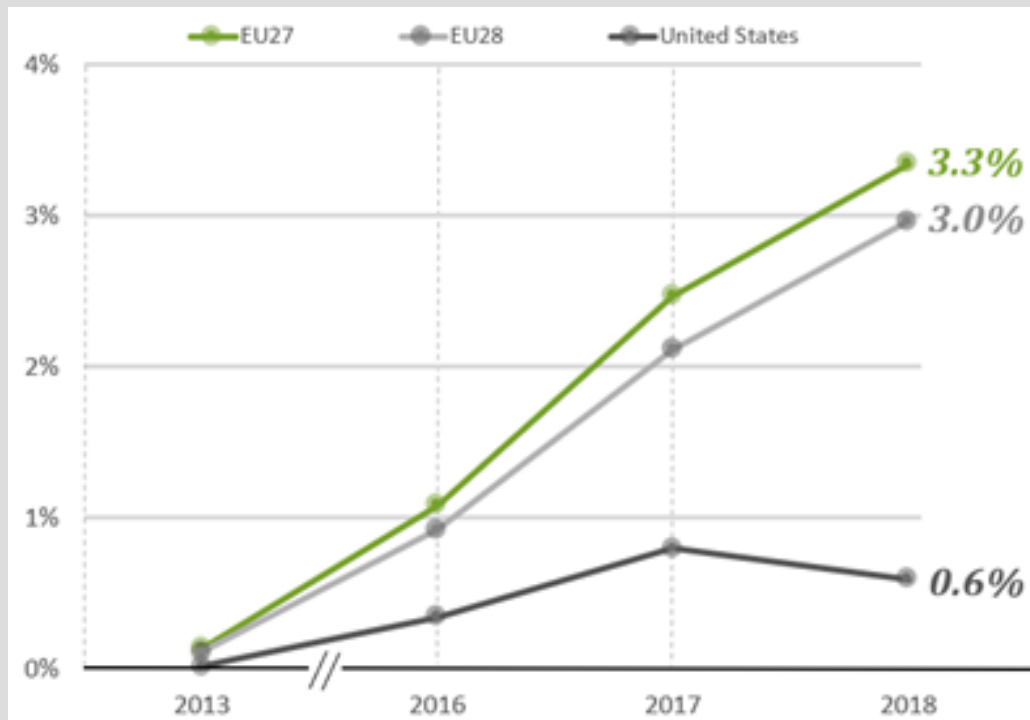
- Private equity investment increased by €36bn in the EU28 and €111bn in the US between 2013 and 2018.
- Global trend of declining public equity and rising private markets.

Sustainable Finance indicator: Europe is a global leader in sustainable finance

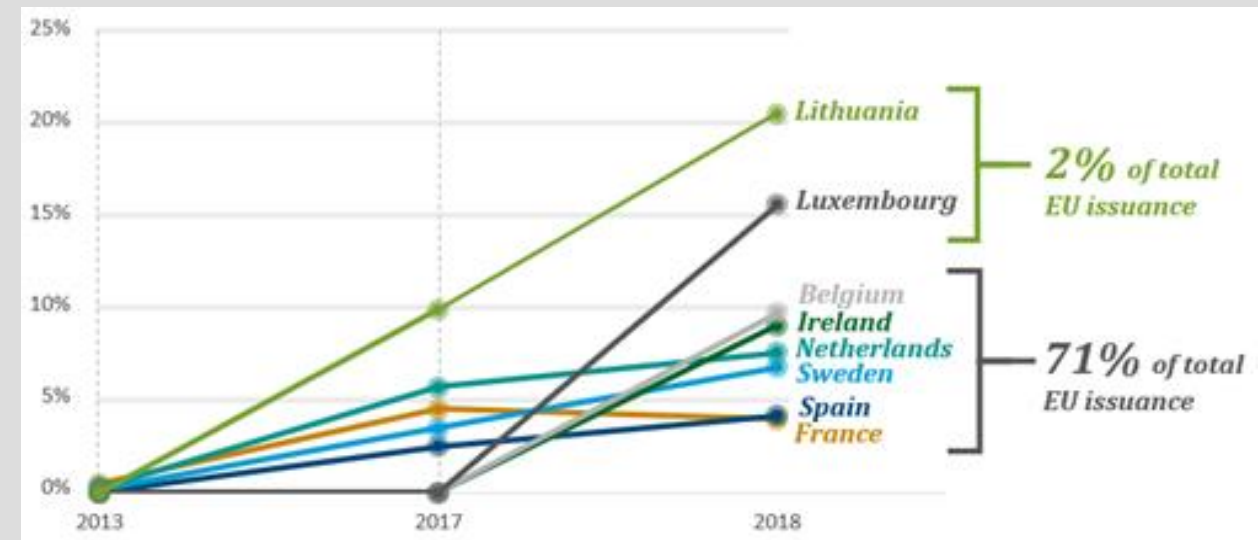
The Sustainable finance indicator measures the labelling of sustainable bond markets: Bond issuance labelled as sustainable as % of total bond issuance (as per CBI and Dealogic). Definition of “sustainable” is likely to change following ongoing initiatives.

EU consolidates global leadership in sustainable finance.

Evolution of Sustainable Finance Indicator:
Sustainable bond issuance as a % of total bond issuance

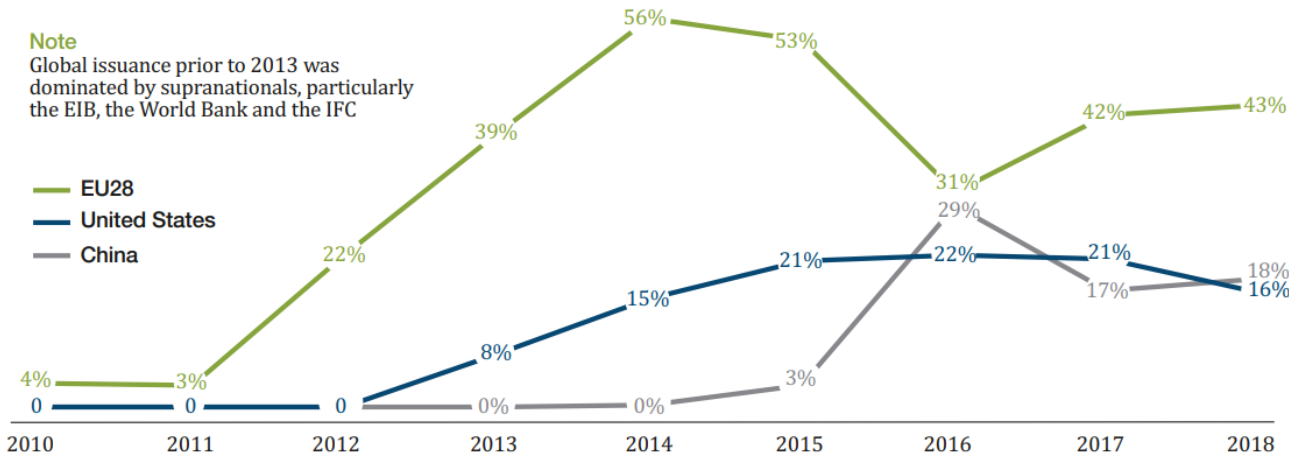


Sustainable Finance Indicator: selected EU countries
Sustainable bond issuance as a % of total bond issuance

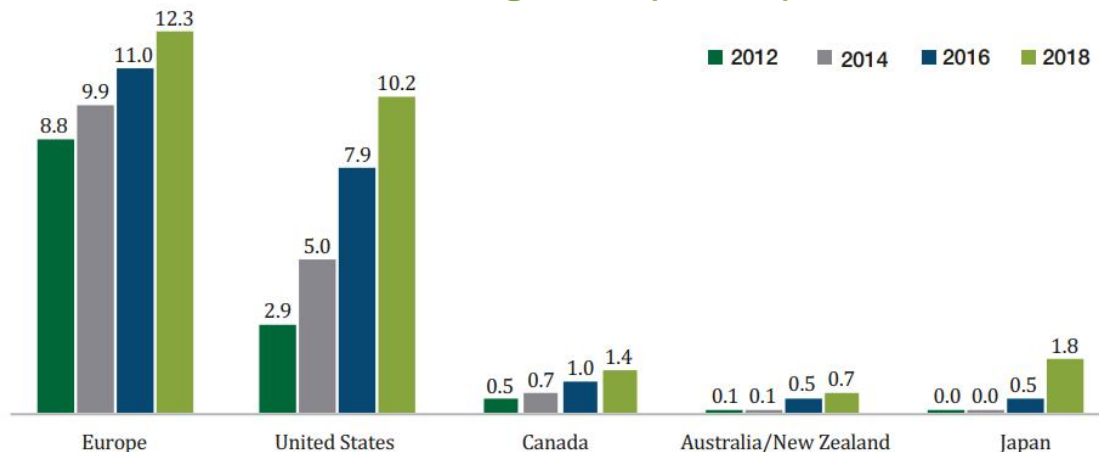


The EU is a global leader in sustainable finance

Sustainable bond issuance as a % of global issuance (EU28, US, China)



Global sustainable assets under management (EUR tn)

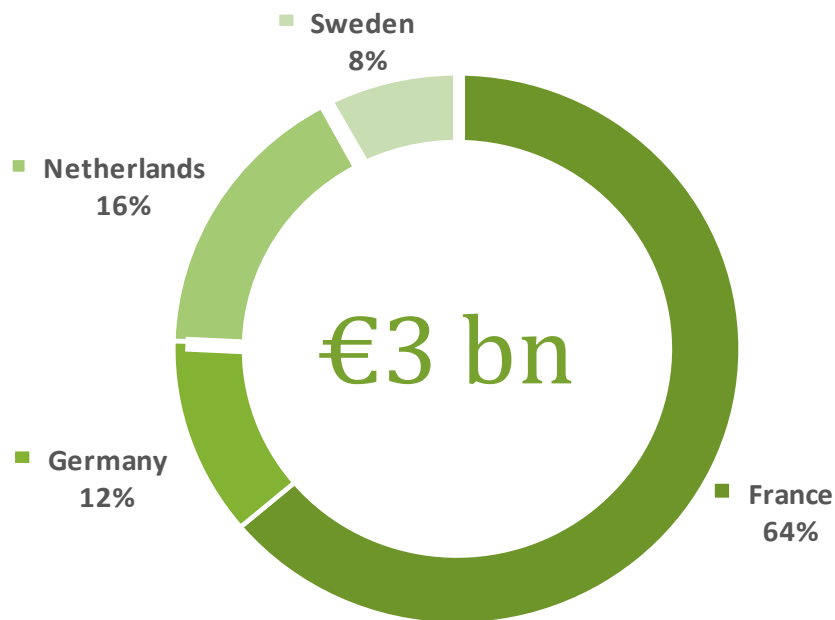


Source: Global Sustainable Investment Alliance

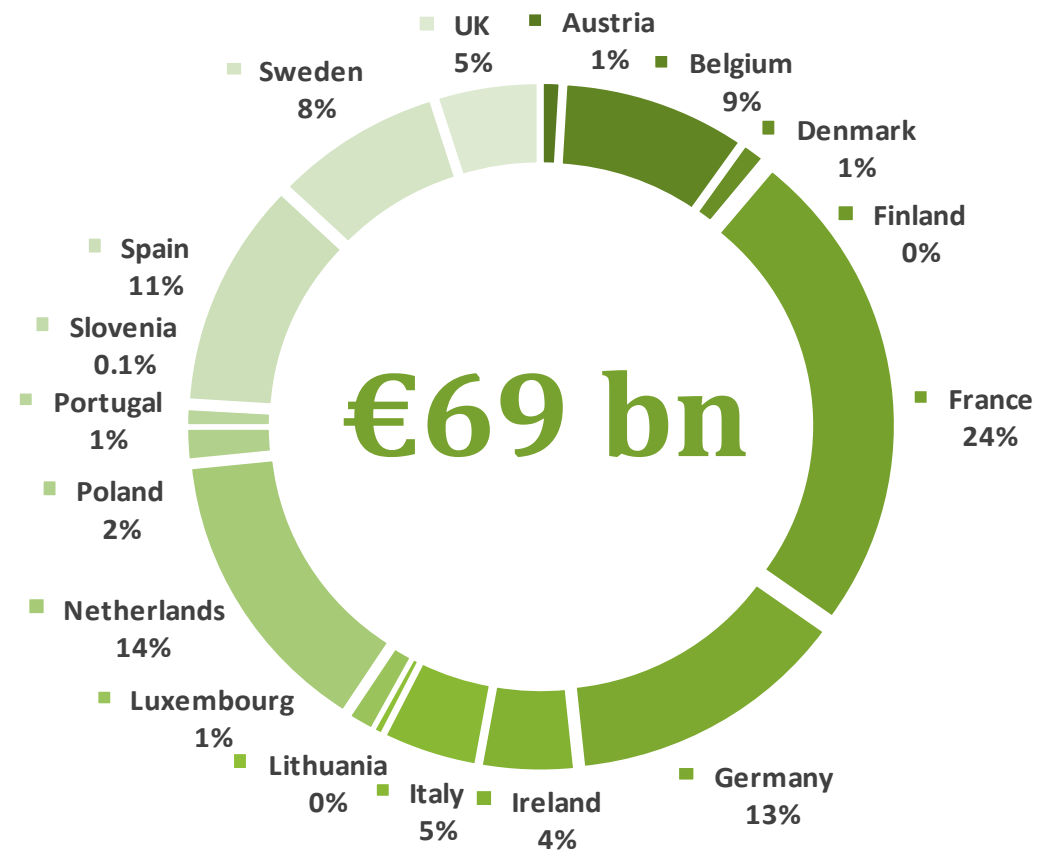
- The EU28 remains ahead of the US and China by a significant margin in sustainable bond issuance.
- the Euro was the most popular denomination of choice in 2018, accounting for 40% of annual green bond issuance volume.
- Europe remains the leader in overall sustainable assets under management.
- Taxonomy and global definition of “sustainable” is crucial to continue to assess progress in this rapidly growing market segment.

Growing issuance of sustainable bonds by more countries

Diversification of country of issuance in sustainable bond issuance



2013



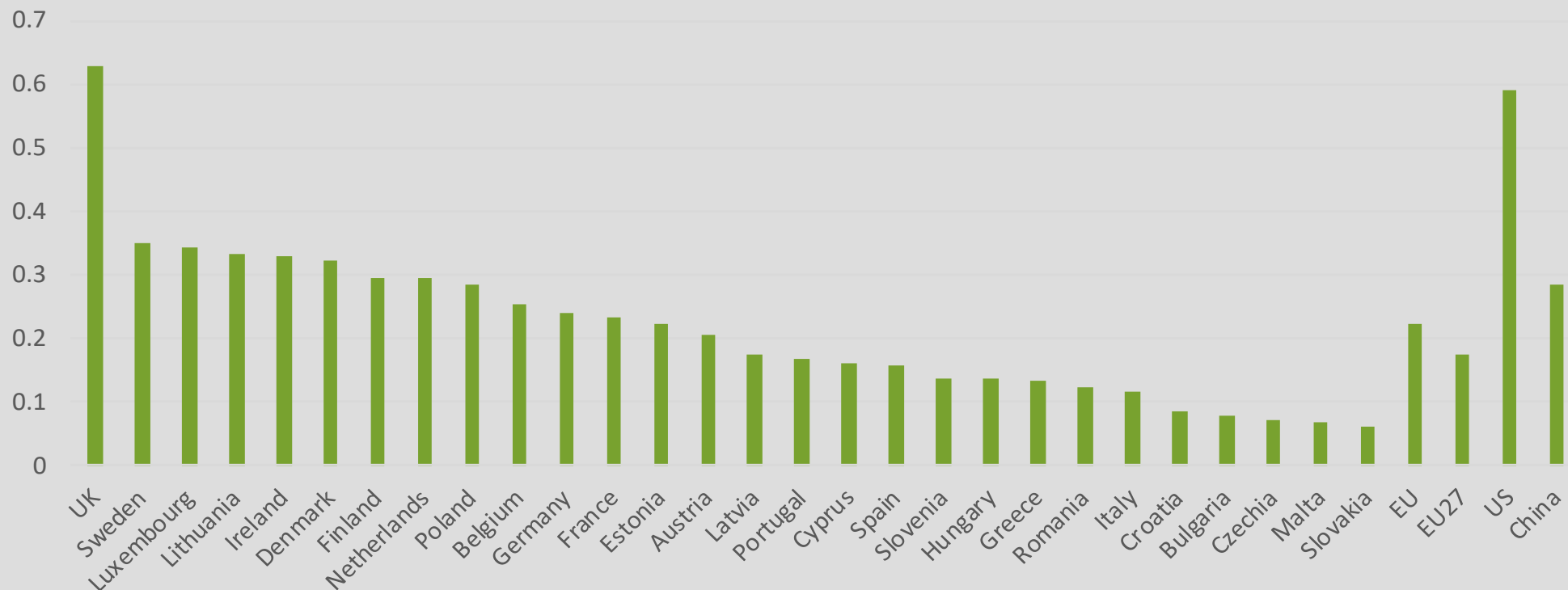
2018

FinTech indicator: EU lags behind the US and China

We have constructed a FinTech composite indicator which seeks to rank countries by their capacity to host a vibrant FinTech ecosystem. The indicator is constructed based on four sub-indicators: (i) regulatory landscape; (ii) availability of finance for companies; (iii) degree of innovation; and (iv) talent pool.

In the EU, the UK leads by a large margin in the capacity to facilitate FinTech innovation.

FinTech Indicator: 2018

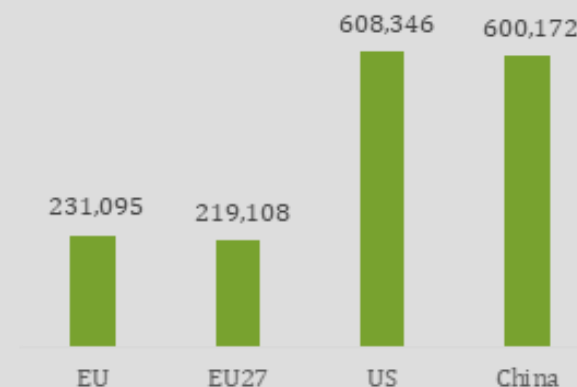


FinTech indicator: EU27 with sound regulatory environment and talent pool but lags behind in Fintech investment

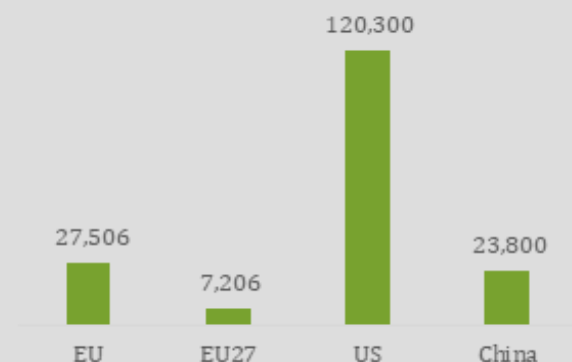
% STEM graduates



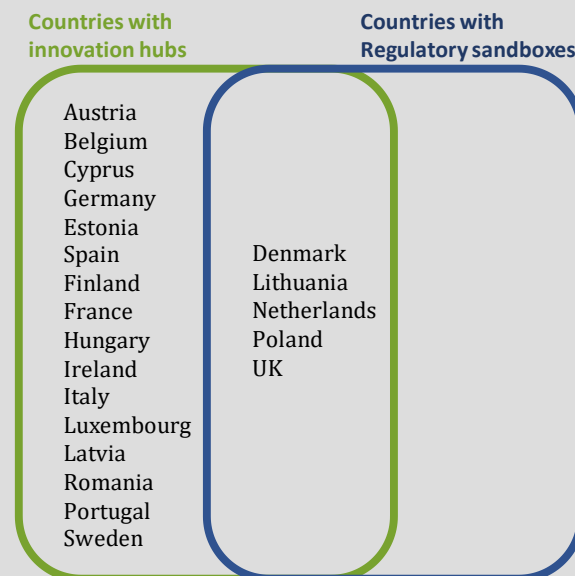
Number of FinTech patents registered: 2009-19



Investment activity in fintech: cumulative amount 2009-19 (\$million)



78% of funding provided to FinTech companies in the EU comes from the UK



The report produces Country rankings to facilitate comparison against peers and recent years across the eight KPIs

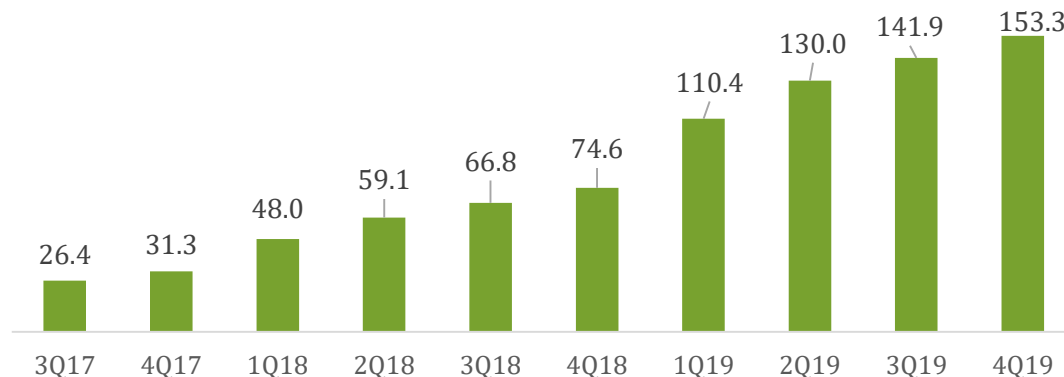
| | Market Finance Indicator | Households Market Investment Indicator | Loan Transfer Indicator | FinTech Indicator | Sustainable Finance Indicator | Risk Capital Indicator | Intra-EU Integration (EU) | Global Integration Indicator | Market Depth Indicator |
|----------------|--------------------------|--|-------------------------|-------------------|-------------------------------|------------------------|---------------------------|------------------------------|------------------------|
| Austria | 21 | 11 | 12 | 14 | 13 | 18 | 8 | 17 | 12 |
| Belgium | 14 | 5 | 10 | 10 | 3 | 26 | 5 | 5 | 7 |
| Bulgaria | 12 | 24 | 22 | 25 | 28 | 13 | 13 | 21 | 20 |
| Croatia | 28 | 16 | 23 | 24 | 28 | 24 | 28 | 23 | 26 |
| Cyprus | 28 | 18 | 4 | 17 | 28 | 11 | 6 | 3 | 19 |
| Czech Republic | 5 | 20 | 16 | 26 | 28 | 17 | 21 | 25 | 11 |
| Denmark | 17 | 3 | 1 | 6 | 10 | 4 | 14 | 7 | 4 |
| Estonia | 11 | 23 | 28 | 13 | 28 | 2 | 3 | 26 | 16 |
| Finland | 4 | 15 | 14 | 7 | 17 | 6 | 11 | 14 | 6 |
| France | 3 | 6 | 17 | 12 | 8 | 10 | 20 | 10 | 5 |
| Germany | 10 | 8 | 15 | 11 | 14 | 16 | 23 | 4 | 8 |
| Greece | 19 | 26 | 11 | 21 | 28 | 3 | 25 | 16 | 28 |
| Hungary | 24 | 17 | 9 | 20 | 28 | 23 | 24 | 22 | 22 |
| Ireland | 6 | 12 | 2 | 5 | 4 | 1 | 7 | 9 | 10 |
| Italy | 15 | 7 | 3 | 23 | 15 | 27 | 19 | 15 | 15 |
| Latvia | 25 | 25 | 20 | 15 | 28 | 12 | 4 | 28 | 25 |
| Lithuania | 7 | 27 | 28 | 4 | 1 | 7 | 9 | 11 | 18 |
| Luxembourg | 20 | 13 | 21 | 3 | 2 | 22 | 1 | 2 | 9 |
| Malta | 8 | 9 | 28 | 27 | 28 | 21 | 16 | 18 | 13 |
| Netherlands | 2 | 1 | 7 | 8 | 5 | 8 | 10 | 6 | 2 |
| Poland | 22 | 22 | 24 | 9 | 9 | na | 27 | 20 | 23 |
| Portugal | 13 | 14 | 6 | 16 | 11 | 14 | 18 | 24 | 17 |
| Romania | 16 | 28 | 19 | 22 | 28 | 9 | 22 | 13 | 27 |
| Slovakia | 23 | 19 | 18 | 28 | 28 | 20 | 12 | 27 | 24 |
| Slovenia | 28 | 21 | 28 | 19 | 12 | 15 | 26 | 19 | 21 |
| Spain | 18 | 10 | 8 | 18 | 7 | 25 | 17 | 12 | 14 |
| Sweden | 9 | 4 | 5 | 2 | 6 | 19 | 15 | 8 | 3 |
| UK | 1 | 2 | 13 | 1 | 16 | 5 | 2 | 1 | 1 |

Funding structure

EU GSIBs Senior non-preferred debt outstanding by banks. 4Q19 (November)

| | Outstanding amount (EUR bn) | | as % of RWAs | # Bonds |
|-------|--------------------------------|------|-----------------|---------|
| B1 | 346.9 | 13.0 | 3.8% | 100 |
| B2 | 669.5 | 37.5 | 5.6% | 108 |
| B3 | 355.9 | 10.8 | 3.0% | 65 |
| B4 | 552.3 | 18.0 | 3.3% | 45 |
| B5 | 317.7 | 8.5 | 2.7% | 7 |
| B6 | 605.5 | 16.1 | 2.7% | 48 |
| B7 | 361.0 | 21.7 | 6.0% | 38 |
| B8 | 407.0 | 17.1 | 4.2% | 42 |
| B9 | 387.1 | 10.6 | 2.9% | 14 |
| Total | 153.3 | - | - | 467 |

EU GSIBs Senior non-preferred debt outstanding (EUR bn)



Source: Reuters Eikon. Q3 data retrieved on September 2019. Includes bonds issued by GSIB subsidiaries. Numbers may not add up to the total due to rounding.

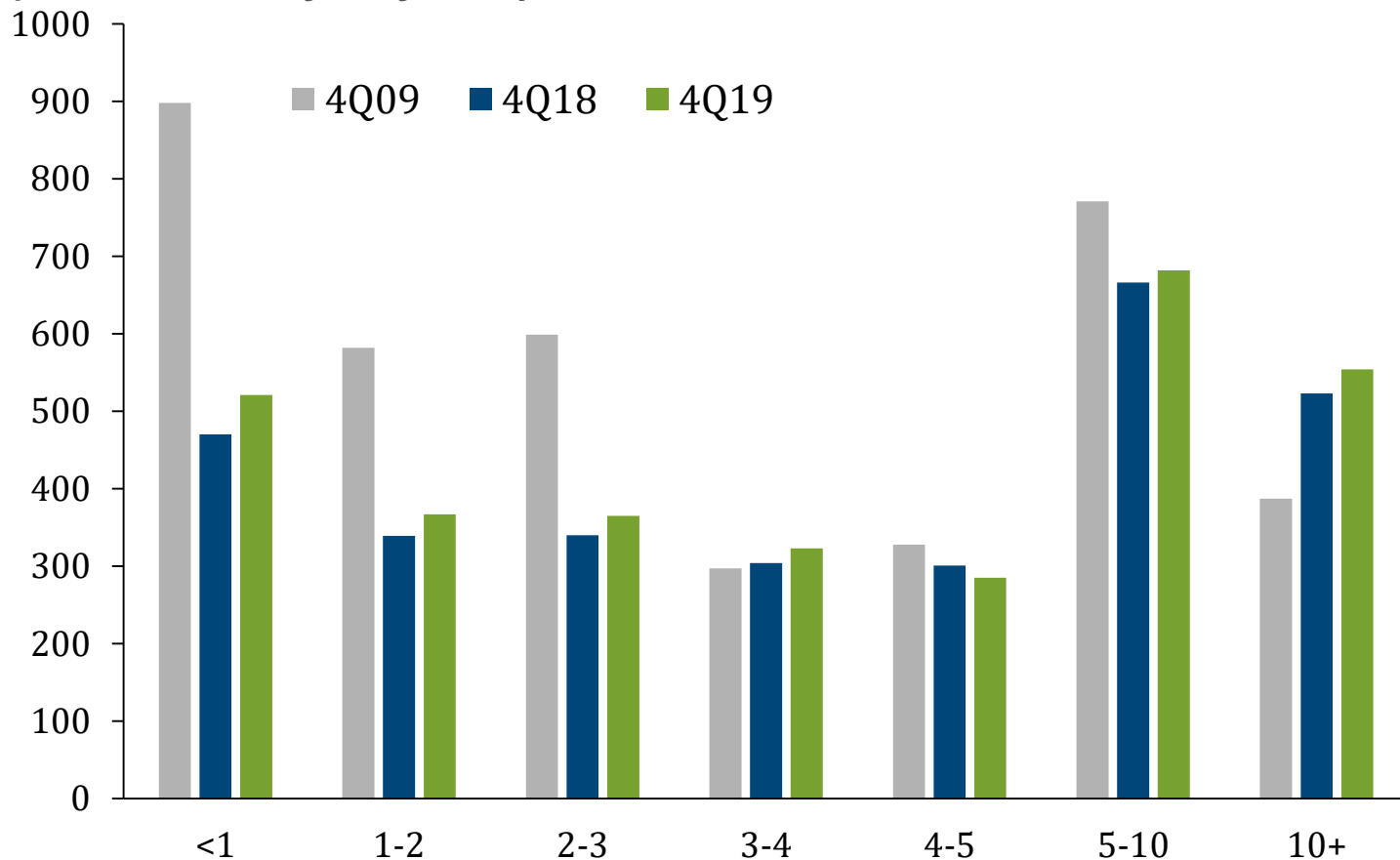
EU GSIBs increased the proportion of bail-inable senior non-preferred bonds

EU GSIBs have increased the amount of TLAC-compliant senior non-preferred debt over the last two years from €26.4 bn in 3Q 2017 to €153bn as of November 2019, representing between 6% and 2.7% of RWAs for the banks that have issued this form of debt.

Senior non-preferred bonds take losses after subordinated notes and before preferred senior debt

Maturity wall of EU banks' debt

Maturity profile of EU28 banks' outstanding debt securities (€ bn, maturity in years)



Source: ECB

EU banks maturity ladder

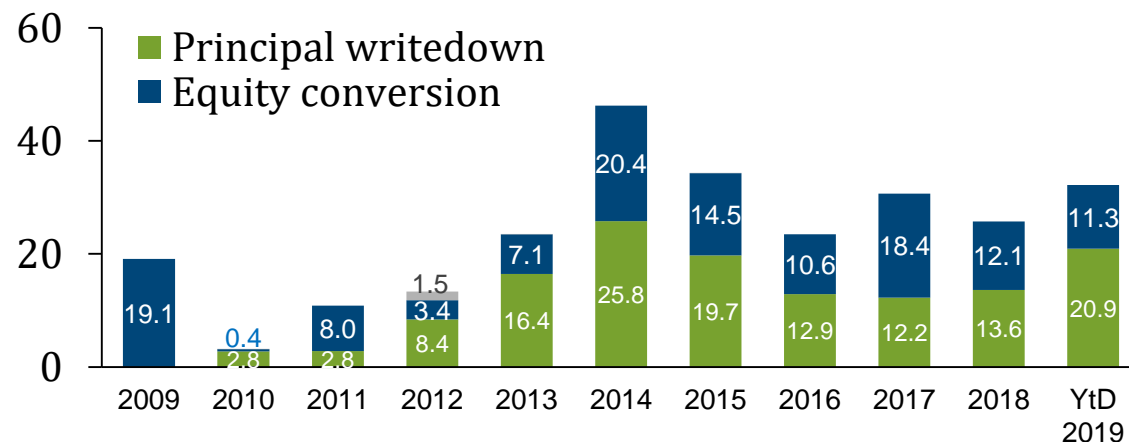
The proportion of short-term debt (<1Y maturity) relative to outstanding debt securities has recently increased, reversing a declining trend commenced in the immediate aftermath of the post-financial crisis period.

Short-term debt (<1Y maturity) has increased from 15% (2018) of total market debt to 18% in 4Q 2019.

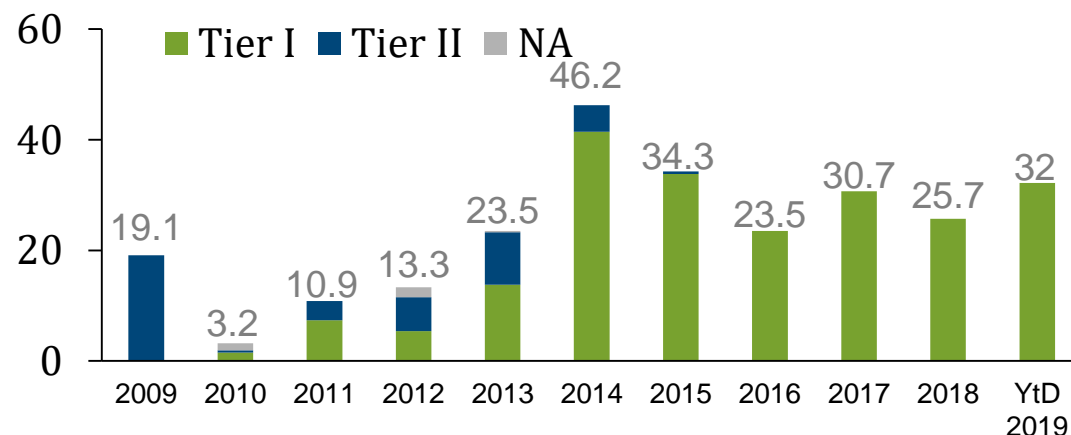
Long-term debt (>10Y), however, has continued to increase from a total of €387bn in 4Q09 to €554bn in 4Q19.

Contingent Convertibles (CoCo)

CoCos by loss absorbing mechanism (€ bn)



CoCos by capital tiering (€ bn)



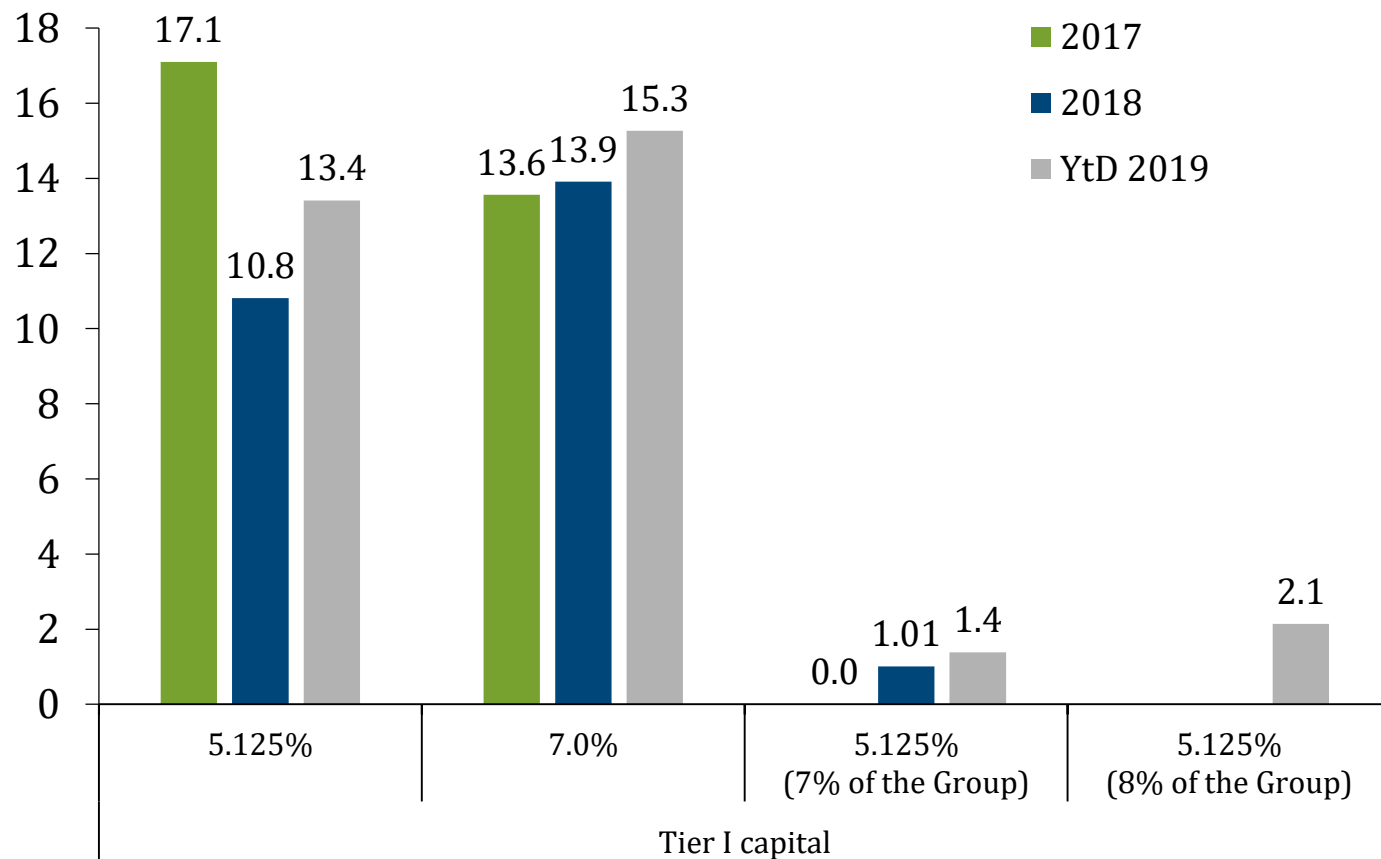
Source: Dealogic and Thomson Reuters

Largest amount of CoCo issuance over the last 4Y

European banks have issued a total of 55 CoCo bonds in the course of 2019, representing a total of €32 bn in proceeds (or 24% above the amount issued in 2018FY).

41 of the 55 instruments issued so far in 2019 were structured with a loss absorbing mechanism on the basis of principal writedown (€20.9bn). The remaining 14 instruments representing €11.3bn of the issued amount were structured on the basis of equity conversion

CoCos by trigger (€ bn)



CoCos contingent on CET1 capital triggers

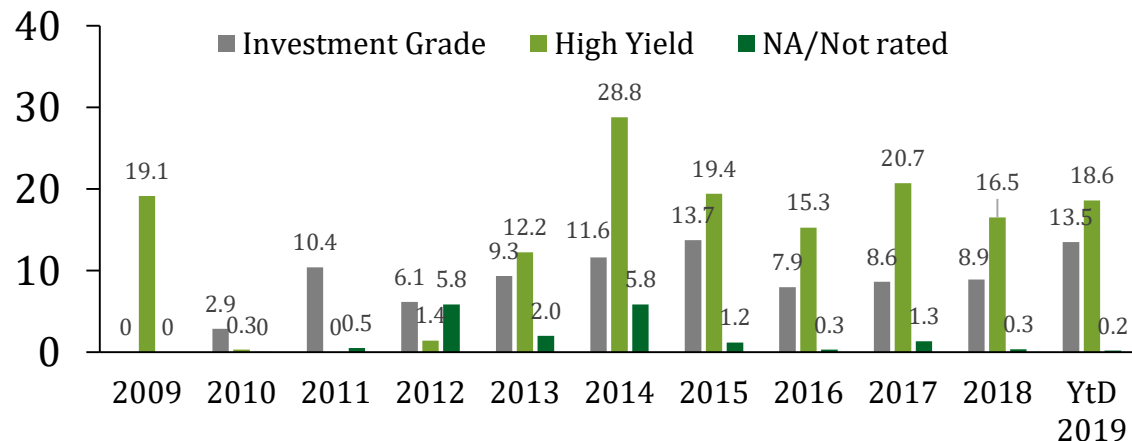
The majority of instruments are structured with triggers of 5.125% and 7.0%.

7 instruments equivalent to €3.5bn where issued contingent on the bank's and the parent company's CET1 capital ratios.

2019 YtD CoCo issuance by credit rating (€ bn)



CoCo issuance by credit risk (€ bn)



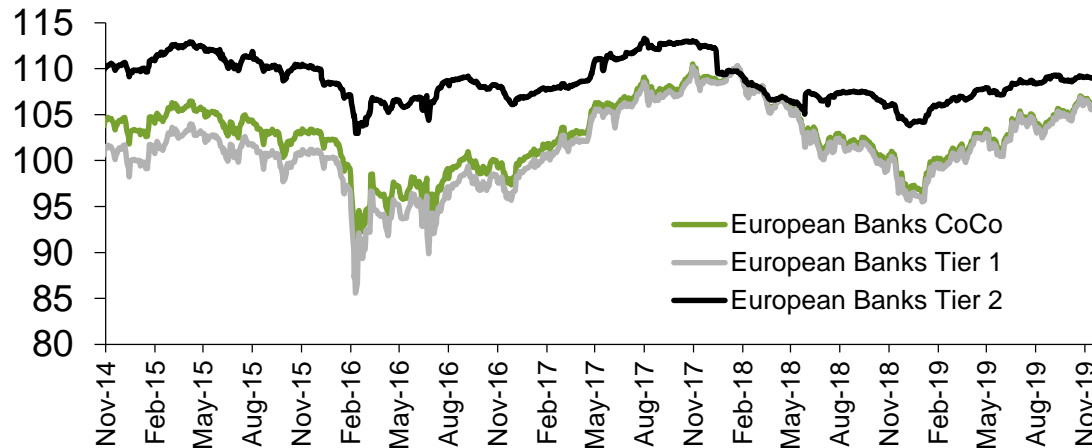
Source: Dealogic. Credit rating at date of issuance

CoCo credit quality

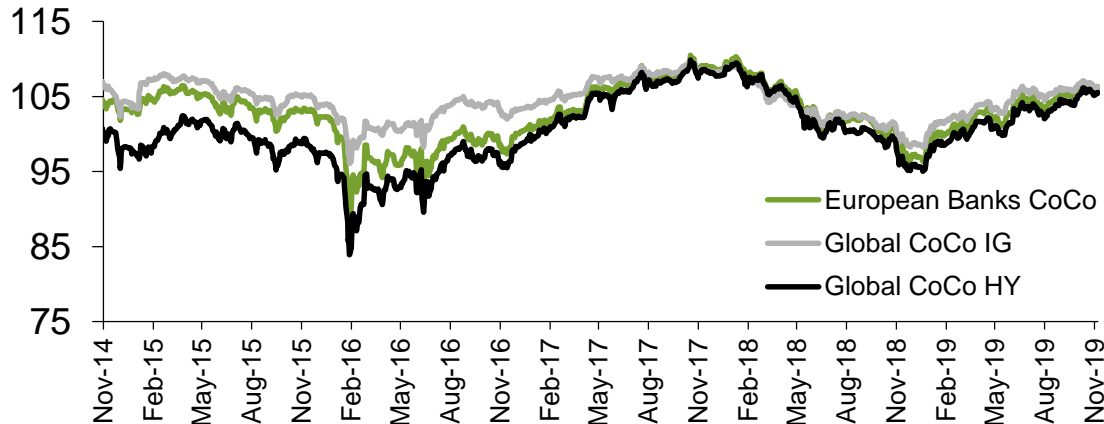
CoCos issued during 2019 were assessed with credit ratings of between A and CCC (or between A2 and Caa2 in the Moody's scale).

42% of the total issuance value in 2019 was rated at investment grade ratings (AAA to BBB-), 57% were rated at BB+ or below, while the remaining 1% were not rated.

CoCo prices by capital tiering



CoCo prices by credit risk



Source: Barclays capital

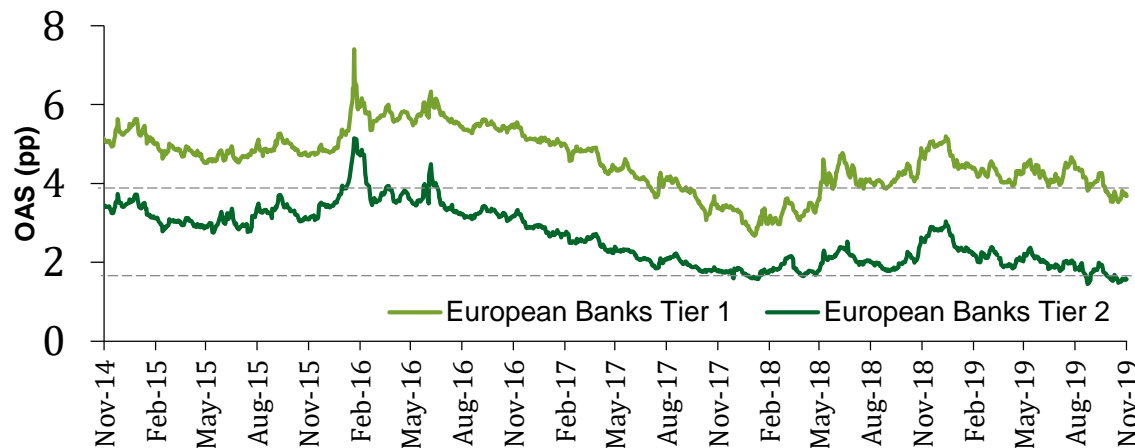
CoCo instruments accumulate gains in 2019

CoCo prices have accumulated gains of c9.7%, reversing the strong losses seen in 2018.

Price gains have been driven by a significant decline in global bond yields as central banks in the US and Europe have resumed their accommodative monetary stance.

Most recently the decline in risk premia against benchmark rates has also contributed to the increase in CoCo prices. See page 42.

CoCo option-adjusted spreads (OAS) by capital tiering (%)



CoCo option-adjusted spreads (OAS) by credit risk (%)



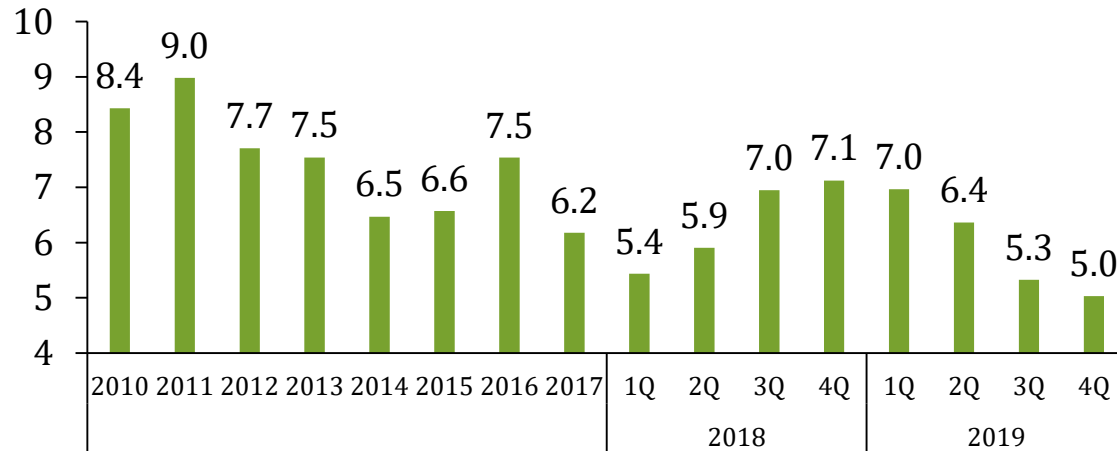
Source: Barclays capital

Decline in CoCo risk premia

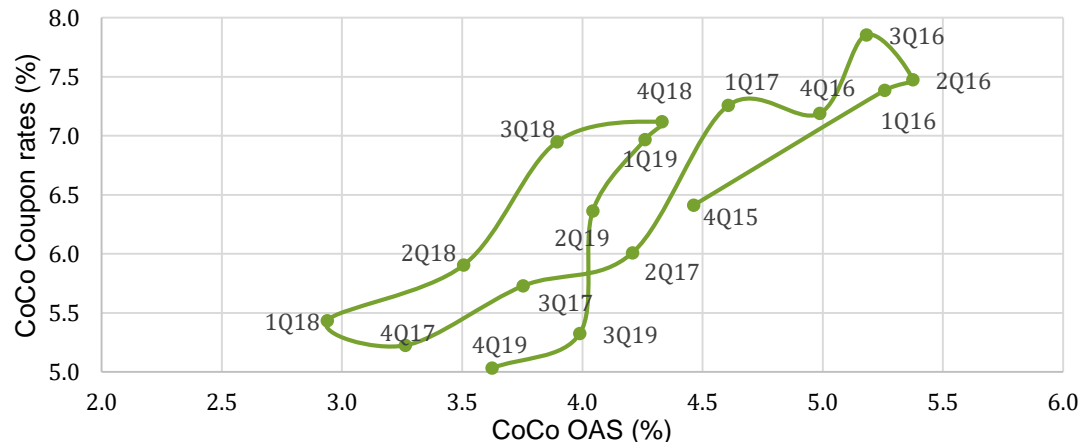
AT1 option-adjusted spreads (OAS) have declined c130bps in the course of the year.

The largest decline in risk premia was observed in High Yield CoCo instruments with a drop of 145bps. This compares with a decline of 95bps in OAS of investment grade instruments.

Weighted average coupons of fixed-rate CoCos (%)



CoCo risk premia (OAS) and coupon rates of new issues



Source: Barclays capital

CoCo borrowing costs at record low

Coupon rates of newly originated CoCos have decreased to 5% in 4Q19, on the back of lower risk-free long-term yields and higher credit ratings of the recently issued instruments.

As noted on page 40, 42% of the issued amount in 2019 was rated at investment grade compared with 35% in 2018 and 28% in 2017.

afme / Recently issued CoCos

Finance for Europe

| Pricing Date | Issuer | Tier Capital | Deal Total Value (Euro) | Trigger | Conversion mechanism | Issue Rate | Effective Rating (Launch) | Maturity | Coupon |
|--------------|------------------------------------|--------------|-------------------------|--------------------------|----------------------|--|---------------------------|-----------|-------------------|
| 24-Jan-19 | Millennium BCP | Tier I | 400,000,000 | 5.125% | writedown | Fixed rate | B- | Perpetual | 9.25 |
| 28-Jan-19 | UBS Group Funding (Switzerland) AG | Tier I | 2,191,732,784 | 7.000% | writedown | Fixed rate conv. to floating rate note | BB+ | Perpetual | 7 |
| 06-Feb-19 | Santander | Tier I | 1,050,696,086 | 5.125% | writedown | Fixed rate | BB+ | Perpetual | 7.5 |
| 14-Feb-19 | Svenska Handelsbanken AB | Tier I | 442,262,616 | 5.125% (8% of the Group) | writedown | Fixed rate conv. to floating rate note | BBB | Perpetual | 6.25 |
| 19-Feb-19 | ING Groep NV | Tier I | 1,104,874,707 | 7.000% | Equity conversion | Fixed rate conv. to floating rate note | BBB- | Perpetual | 6.75 |
| 20-Feb-19 | Credit Agricole | Tier I | 1,104,728,237 | 5.125% (7% of the Group) | writedown | Fixed rate conv. to floating rate note | BBB- | Perpetual | 6.875 |
| 26-Feb-19 | KBC Group NV | Tier I | 500,000,000 | 5.125% | writedown | Fixed rate conv. to floating rate note | BB+ | Perpetual | 4.75 |
| 22-Feb-19 | Fros Sparekasse | Tier I | 9,381,177 | 5.125% | writedown | Fixed rate conv. to floating rate note | | Perpetual | 7 |
| 05-Mar-19 | Erste Group Bank AG | Tier I | 500,000,000 | 5.125% | writedown | Fixed rate | BBB- | Perpetual | 5.125 |
| 06-Mar-19 | CYBG plc | Tier I | 290,545,645 | 7.000% | Equity conversion | Fixed rate | B+ | Perpetual | 9.25 |
| 12-Mar-19 | UniCredit | Tier I | 1,000,000,000 | 5.125% | writedown | Fixed rate | B+ | Perpetual | 7.5 |
| 14-Mar-19 | Nordnet | Tier I | 47,388,649 | 7.000% | writedown | Floating rate note | | Perpetual | 3-mth STIBOR +675 |
| 18-Mar-19 | BNP Paribas | Tier I | 1,324,503,311 | 5.125% | writedown | Fixed rate conv. to floating rate note | BBB- | Perpetual | 6.625 |
| 19-Mar-19 | Nordea Bank Oyj | Tier I | 1,102,438,594 | 5.125% | writedown | Fixed rate conv. to floating rate note | BBB | Perpetual | 6.625 |
| 19-Mar-19 | BBVA | Tier I | 1,000,000,000 | 5.125% | Equity conversion | Fixed rate | BB | Perpetual | 6 |
| 20-Mar-19 | Barclays plc | Tier I | 1,762,192,167 | 7.000% | Equity conversion | Fixed rate | BB | Perpetual | 8 |
| 22-Mar-19 | Collector Bank AB | Tier I | 47,953,121 | 5.125% | writedown | Floating rate note | Not rated | Perpetual | 3-mth STIBOR +800 |
| 25-Mar-19 | Van Lanschot Kempen NV | Tier I | 100,000,000 | 5.125% | writedown | Fixed rate conv. to floating rate note | BB | Perpetual | 6.75 |
| 26-Mar-19 | Coventry Building Society | Tier I | 484,134,391 | 7.000% | Equity conversion | Fixed rate | BBB- | Perpetual | 6.875 |
| 29-Mar-19 | Jyske Bank A/S | Tier I | 95,721,718 | 7.000% | writedown | Floating rate note | BB+ | Perpetual | 3-mth STIBOR +500 |
| 03-Apr-19 | Lansforsakringar Bank AB | Tier I | 95,843,277 | 5.125% (7% of the Group) | writedown | Floating rate note | BBB- | Perpetual | 3-mth STIBOR +420 |
| 04-Apr-19 | Volksbank Wien AG | Tier I | 220,000,000 | 5.125% | writedown | Fixed rate | BB | Perpetual | 7.75 |
| 09-Apr-19 | Fana Sparebank | Tier I | 10,375,220 | 5.125% | writedown | Floating rate note | | Perpetual | 3-mth NIBOR +350 |
| 09-Apr-19 | Societe Generale | Tier I | 492,125,984 | 5.125% | writedown | Fixed rate | BB+ | Perpetual | 6.125 |
| 11-Apr-19 | Banco BPM SpA | Tier I | 300,000,000 | 5.125% | writedown | Fixed rate | CCC+ | Perpetual | 8.75 |
| 17-Apr-19 | Luzerner Kantonalbank AG | Tier I | 222,489,209 | 5.125% | writedown | Fixed rate | BBB | Perpetual | 1.8 |
| 23-May-19 | LeasePlan Corp NV | Tier I | 500,000,000 | 5.125% | writedown | Fixed rate conv. to floating rate note | BB- | Perpetual | 7.375 |
| 29-May-19 | Credit Suisse Group AG | Tier I | 486,918,133 | 7.000% | Equity conversion | Fixed rate | BB | Perpetual | 5.625 |

afme / Recently issued CoCos (cont.)

Finance for Europe

| Pricing Date | Issuer | Tier Capital | Deal Total Value (Euro) | Trigger | Conversion mechanism | Issue Rate | Effective Rating (Launch) | Maturity | Coupon |
|--------------|--|--------------|-------------------------|--------------------------|----------------------|--|---------------------------|-----------|-------------------|
| 06-Jun-19 | Julius Baer Group AG | Tier I | 266,856,431 | 5.125% | writedown | Fixed rate | BBB | Perpetual | 2.375 |
| 06-Jun-19 | Barclays plc | Tier I | 1,128,923,007 | 7.000% | Equity conversion | Fixed rate | BB- | Perpetual | 7.125 |
| 12-Jun-19 | Lloyds Banking Group | Tier I | 441,676,604 | 7.000% | Equity conversion | Fixed rate | BB+ | Perpetual | 6.75 |
| 01-Jul-19 | Advanzia Bank SA | Tier I | 23,196,235 | 7.000% | writedown | Floating rate note | | Perpetual | 3-mth NIBOR +700 |
| 03-Jul-19 | BNP Paribas SA | Tier I | 185,609,107 | 5.125% | writedown | Fixed rate conv. to floating rate note | BBB- | Perpetual | 4.5 |
| 04-Jul-19 | Cembra Money Bank AG | Tier I | 134,843,581 | 5.125% | writedown | Fixed rate | A- | Perpetual | 2.5 |
| 11-Jul-19 | FinecoBank SpA | Tier I | 300,000,000 | 5.125% | writedown | Fixed rate | BB- | Perpetual | 5.875 |
| 14-Aug-19 | Credit Suisse Group AG | Tier I | 1,563,686,727 | 7.000% | writedown | Fixed rate | BB | Perpetual | 6.375 |
| 20-Aug-19 | UBS Group AG | Tier I | 427,507,023 | 7.000% | writedown | Fixed rate | BB+ | Perpetual | 4.375 |
| 23-Aug-19 | Swedbank | Tier I | 451,080,337 | 5.125% (8% of the Group) | writedown | Fixed rate | BBB | Perpetual | 5.625 |
| 28-Aug-19 | Credit Suisse Group AG | Tier I | 482,536,765 | 7.000% | writedown | Fixed rate | BB | Perpetual | 3 |
| 28-Aug-19 | UBS Group AG | Tier I | 486,523,304 | 7.000% | writedown | Fixed rate | BBB- | Perpetual | 4.85 |
| 28-Aug-19 | BBVA | Tier I | 900,941,484 | 5.125% | writedown | Fixed rate conv. to floating rate note | BB | Perpetual | 6.5 |
| 29-Aug-19 | SBAB Bank AB | Tier I | 37,297,428 | 5.125% (7% of the Group) | writedown | Fixed rate conv. to floating rate note | A | Perpetual | 3.67 |
| 29-Aug-19 | SBAB Bank AB | Tier I | 149,189,713 | 5.125% (7% of the Group) | writedown | Floating rate note | A | Perpetual | 3-mth STIBOR +365 |
| 02-Sep-19 | Cooperatieve Rabobank UA | Tier I | 1,250,000,000 | 5.125% (8% of the Group) | writedown | Fixed rate | BBB- | Perpetual | 3.25 |
| 03-Sep-19 | ING Groep NV | Tier I | 1,357,113,571 | 7.000% | Equity conversion | Fixed rate | BBB- | Perpetual | 5.75 |
| 05-Sep-19 | Societe Generale | Tier I | 431,579,272 | 5.125% | writedown | Fixed rate | BB+ | Perpetual | 4.875 |
| 17-Sep-19 | Nationwide Building Society | Tier I | 676,589,986 | 7.000% | Equity conversion | Fixed rate | BB+ | Perpetual | 5.875 |
| 23-Sep-19 | Barclays Plc | Tier I | 1,131,990,038 | 7.000% | Equity conversion | Fixed rate | BBB+ | Perpetual | 6.375 |
| 02-Oct-19 | AIB Group plc | Tier I | 500,000,000 | 7.000% | writedown | Fixed rate | BB- | Perpetual | 5.25 |
| 16-Oct-19 | Sparebank 1 SR-Bank ASA | Tier I | 59,624,366 | 5.125% | writedown | Floating rate note | A | Perpetual | 3-mth NIBOR +325 |
| 29-Oct-19 | Skandinaviska Enskilda Banken AB - SEB | Tier I | 812,274,368 | 5.125% | Equity conversion | Fixed rate | BBB- | Perpetual | 5.125 |
| 05-Nov-19 | DNB Markets | Tier I | 762,092,617 | 5.125% | writedown | Fixed rate | BBB | Perpetual | 4.875 |
| 06-Nov-19 | Sparebanken Sor Boligkreditt AS | Tier I | 29,519,424 | 5.125% | Equity conversion | Floating rate note | Not rated | Perpetual | 3-mth NIBOR +320 |
| 13-Nov-19 | La Banque Postale SA | Tier I | 750,000,000 | 5.125% | writedown | Fixed rate | BB | Perpetual | 4.875 |
| 13-Nov-19 | Lloyds Banking Group | Tier I | 582,954,413 | 7.000% | Equity conversion | Fixed rate | BB+ | Perpetual | 5.125 |

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