

## The cost of banking

### Recent trends in capital requirements

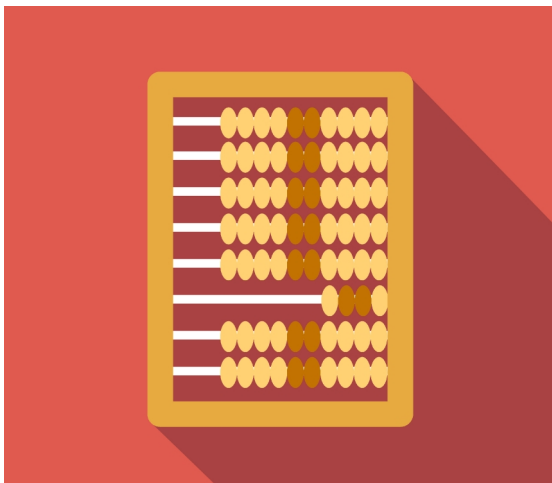
#### SUMMARY

Capital and liquidity requirements are provisions to make banking activities safer through measures to cover a firm's unexpected losses as well as to fund its ongoing activities. The supervision of financial institutions is benchmarked against international standards (Basel III), set by the Basel Committee on Banking Supervision (BCBS). These non-binding provisions are transposed into EU norms through the Capital Requirements Directive and Regulation (CRD-IV/CRR – the 'CRD-IV package').

Current data suggest a limited overall negative impact of increased capital requirements on bank lending. Considering the long-term benefits, an appropriate increase in capital requirements appears to be positive.

Equally, at international level, the Financial Stability Board (FSB) has developed resolution standards for globally systemically important banks (G-SIBs), requiring even higher buffers. Known as Total Loss Absorption Capacity (TLAC), this will enter into force after 2019. In parallel, the EU Banking Union's single resolution mechanism (SRM) is currently finalising its own loss-absorption rules: minimum requirement for own funds and eligible liabilities (MREL), which are required by the Bank Recovery and Resolution Directive (BRRD). The European Commission is currently making efforts to align these different provisions and to reduce the complexity for the banking sector.

At the same time, with remaining high political risk within the euro area and unparalleled ultra-low interest rates, challenges remain. These include sovereign risk, the provision of state aid to banks and the upcoming revision of the CRD-IV package, including proposals to standardise models for risk-weighted assets.



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### Glossary

**Bail-in:** Under BRRD, resolution authorities were given the power to allocate losses to shareholders and creditors (the 'bail in' tool, Article 43).

**Basel III:** A comprehensive [set of reform measures](#), developed by the [Basel Committee on Banking Supervision \(BCBS\)](#), to strengthen the regulation, supervision and risk management of the banking sector.

**BRRD:** The Banking Resolution and Recovery Directive ([2014/59/EU](#)) aims to prevent and manage bank failures.

**Capital Buffer:** Mandatory capital that financial institutions are required to hold in addition to other minimum capital requirements. The **Countercyclical capital buffer (CyCB)** (0-2.5%) aims to ensure that banking sector capital requirements take account of the macro-financial environment in which banks operate. The **Capital conservation buffer** (2.5% as of 2019) ensures buffers are built up outside periods of stress, to be drawn down as losses are incurred.

**CET 1:** [Common Equity Tier 1 capital/ratio](#) is a measure of capital that is predominantly common equity as defined by the Capital Requirements Regulation (Article 26ff.). The CET1-ratio expresses the quality of a bank's balance sheet as it divides common equity and retained earnings by risk-weighted assets (RWA, see below). (**Tier 1** comprises CET1 + Additional Tier 1).

**G-SIBs:** Global Systemically Important Banks ([G-SIBs](#)) are a group of large banks. This group of G-SIBs is updated annually by the [Financial Stability Board \(FSB\)](#) and identified using several criteria, notably size, interconnectedness and substitutability (G-SIBs - *institutions*).

**LCR:** The [liquidity coverage ratio](#) requires banks to have sufficient **high-quality liquid assets (HQLA)** to withstand a 30-day stressed funding scenario that is specified by supervisors.

**LR:** The [leverage ratio](#) is a measure of a bank's ability to meet its long-term financial obligations: Tier 1 capital divided by its average total consolidated assets. Disclosure started in 2015, application begins as of January 2018; see Articles 429, 456(1)(j) CRR and endnote 7.

**MREL:** Minimum requirement for own funds and eligible liabilities ([MREL](#)) is an EU standard which aims to reduce the impact of banking failures on public funds. It applies to all European banks.

**NSFR:** The [net stable funding ratio](#) is a long-term structural ratio designed to address liquidity mismatches. It requires banks to maintain a stable funding profile in relation to their on- and off-balance sheet activities and will be a minimum standard as of January 2018. Next to the LCR, it is the second major liquidity monitoring instrument.

**RWA:** In order to calculate the amount of loss-absorbing capital a bank would need in times of distress, [risk-weighted assets](#) are computed by adjusting each asset class for risk.

**TLAC:** The [total loss-absorbing capacity](#) is an international standard which aims to reduce the impact of banking failures on public funds. It applies to all **G-SIBs** worldwide as of January 2019.

### Context

Capital requirements are part of the prudential provisions to make banking activities safer. They define the amount of assets to be held by the Bank to cover the risk of losses, to a certain confidence level. For governments and regulators, the challenge lies in ensuring adequate levels of [bank capital](#) and [liquidity](#) and decreasing bank [leverage](#), without rendering banking activities too costly.

After years of strengthening banking supervision in the aftermath of the global financial crisis, and especially in view of the current low or even negative interest rate environment, financial actors are increasingly suggesting that the cumulative effect of

regulation needs to be eased. In a similar vein, the European Commission recently voiced [proportionality concerns](#) over the current regulatory architecture. Such calls for more [‘breathing space’](#) are understandable from an industry perspective, yet require some [prudence](#) too. One of the most costly lessons from the financial crisis was the numerous rescue missions for ailing banks in the EU. Between 2008 and 2014, the [Commission approved €802.1 billion](#) (equivalent to 5.7% of EU 2014 GDP) of direct state aid **recapitalisation measures** to financial institutions, in the EU-28. State aid actually used by national governments amounts to €453.3 billion (equivalent to 3.2% of EU 2014 GDP).<sup>1</sup>

Especially after a financial crisis, ‘regulators, who are themselves usually subject to political short-termism, typically respond by focusing on preventative regulation, or at least regulation aimed at preventing the next financial meltdown. But that focus is insufficient because it is impossible to always predict the cause of the next financial crisis’,<sup>2</sup> and [regulators’ experience](#) with crises is scarce.

Non-binding international standards to increase the stability of the banking sector, as set by the Basel Committee on Banking Supervision ([BCBS](#)) are transposed into binding EU norms through the [CRD-IV package](#). Equally, at international level, the [Financial Stability Board \(FSB\)](#) develops standards for globally systemically important banks (G-SIBs), requiring even higher buffers. This Total Loss Absorption Capacity (TLAC) will enter into force after 2019. At the same time, the EU Banking Union’s [single resolution framework \(SRM\)](#) is currently finalising its own rules: minimum requirement for own funds and eligible liabilities (MREL). As required by the [Bank Recovery and Resolution Directive \(BRRD\)](#), MREL set out the capital requirements financial institutions need to absorb losses and, where necessary, recapitalise a firm after resolution.

### Regulatory requirements – capital and liquidity

Financial regulation tends to be imperfect but it corrects or at least mitigates market failures, such as regulation arbitrage,<sup>3</sup> information asymmetries, and agency failure. One of the key purposes is to internalise the social costs of potential bank failures through capital-adequacy requirements.<sup>4</sup> The difficulty from a regulator’s perspective is to strike a balance between imposing safety mechanism such as capital ratios while simultaneously not overly reducing lending and thereby economic activity. Subdued loan provision in the EU is a particular concern of the European Commission’s ambition to create a [Capital Markets Union \(CMU\)](#). Thus, in late 2015, the Commission launched a public consultation on the regulatory impact on [bank lending](#) to the economy, as well a call for evidence on the regulatory framework for [financial services](#). Although available data vary a lot, one [report](#) finds that European banks have raised more than €400 billion of equity since 2007, in response to increased requirements.

To make the regulator’s balancing task even more difficult: short-term costs might be outweighed by long-term benefits; and what might be detrimental for individual firms, may be beneficial for the whole banking sector and hence indirectly increase overall

#### Banks and ultra-low interest rates

As they narrow the margin between borrowing and lending, ultra-low interest rates affect the [business model](#) of banks and squeeze profits. The [OECD’s Business and Finance Outlook 2016](#) finds that the European Central Bank’s [asset purchase programme](#) (quantitative easing) ‘has forced up the amount of central bank reserves in bank portfolios (now carrying negative rates) and bond rates in most jurisdictions are also very low or negative’ (p. 46). In addition, [Slovik and Cornède \(2011\)](#) argue that, in the long run, monetary policy that is too accommodative might lead to excessive risk-taking by banks. [Reportedly](#), in May, EU banks’ share prices were 20% lower than in January 2016.

financial stability. The reason lies in the way banks adjust their balance sheets in response to changing regulatory requirements (see Appendix, upper part). Demanding more liquidity for instance, will reduce interbank loans, spur the purchase of government bonds, which in turn, can reduce risk-weighted assets, i.e. boost the capital ratio, helping to meet any increase in capital requirements. The behaviour of individual banks then affects the aggregate capital and liquidity ratios (see Appendix, lower part).

### Capital requirements

In March 2016, the Basel Committee on Banking Supervision [summarised](#) the findings of major econometric studies, in order to assess the costs and benefits of increased capital requirements. The empirical evidence indicate that an increase in capital requirements by one percentage point forces banks to **cut their lending activity** in the long run by **1.4–3.5%** or **reduce credit growth by 1.2–4.6%** (p. 7). However, the impact on economic activity (lending/GDP) turns out to be relatively small, up to 0.3% of GDP p.a. (p. 11). Focussing on banks in the United Kingdom, [Osborne et al \(2016\)](#) find a cyclical relationship between capital ratios and lending conditions – in good times more bank capital is associated with more expensive credit; in bad times it is the opposite. [Cohen and Scatigna \(2016\)](#) suggest that despite increased capital ratios since 2008, on average (sample size: 101 institutions) banks continued to expand their lending in real terms, the notable **exception being European banks** where lending contracted. The analysis suggests that lower dividend pay-outs and (for advanced economy banks) wider lending spreads contributed to banks' ability to use retained earnings to build capital.

The BCBS report concludes that 'the **overall impact of an appropriate increase in capital requirements seems to be positive**, at least from pre-crisis levels, as long-run benefits are large and short-term costs are smaller. Second, the optimal range for capital requirements is not dissimilar to the current calibration of the Basel III requirements once all regulatory buffers have been included and banks' own voluntary surplus above these requirements has been taken into account' (p. 2).

### Liquidity requirements

The regulatory impacts of liquidity requirements are more difficult to assess, partly due to the fact that liquidity provisions included in the Basel III framework are currently not fully in place (e.g. the LCR is partially implemented, and the NSFR has yet to be implemented). The BCBS report finds many shortcomings in the few existing studies. In sum, these 'suggest that neither lending to the real economy nor output will be significantly affected by the imposition of the LCR' (p. 32).

## International standard setting

### Basel I, II, & III

In 1988, the BCBS<sup>5</sup> released the Basel Capital Accord (later Basel I) which set minimum capital adequacy ratios for international banks, introduced a two-tier definition of capital, with Tier 1 comprising equity and retained earnings and Tier 2 undisclosed reserves, subordinate debt, etc., and introduced risk-weighted assets (RWA) as a metric. Agreed in 2004, [Basel II](#) introduced a three-pillar approach: Pillar 1 defines minimum capital requirements and is mandatory for all banks; Pillar 2 is a bank-specific add-on after supervisory review and Pillar 3 concerns disclosure requirements.

Agreed in 2010, [Basel III](#) is the third of the Basel Accords, involving regulators from 26 countries, and encompasses several aims: to (i) strengthen bank capital (better quality and risk buffers); (ii) to decrease bank leverage (enforce minimum ratios of regulatory

capital to total on- and off-balance sheet exposures); (iii) increase bank liquidity positions (short and long term); and (iv) to improve disclosure. Starting in 2013, the new rules are being phased in gradually over the period to 2019.

The Basel III framework differentiates the three pillar architecture (see Table 1): (i) **Pillar 1** covers capital, risk coverage and leverage provisions; (ii) **Pillar 2** comprises all aspects of risk management and supervision; (iii) **Pillar 3** sets guidelines for market discipline.

**Table 1 – Basel III, stylised overview**

		Capital			
	Capital	Pillar 1 <i>Risk coverage</i>	Containing <i>leverage</i>	Pillar 2 <i>Risk management and supervision</i>	Pillar 3 <i>Market discipline</i>
All Banks	<ul style="list-style-type: none"> <li>Quality and level of capital</li> <li>Capital loss-absorption at the point of non-viability</li> <li>Capital conservation buffer</li> <li>Counter-cyclical buffer</li> </ul>	<ul style="list-style-type: none"> <li>Securitisations</li> <li>Trading book</li> <li>Counterparty credit risk</li> <li>Bank exposures to central counterparties (CCPs)</li> </ul>	<ul style="list-style-type: none"> <li>Leverage ratio</li> </ul>	<ul style="list-style-type: none"> <li>Supplemental pillar 2 requirements</li> </ul>	<ul style="list-style-type: none"> <li>Revised pillar 3 disclosures requirements</li> </ul>
G-SIIs	<p><b>In addition</b>, G-SIIs must have higher loss-absorbency capacity to reflect the greater risks that they pose to the financial system. These additional requirements are to be met with a progressive Common Equity Tier 1 (CET1) capital requirement ranging from 1% to 2.5%, depending on a bank's systemic importance.</p>				

Source: [Basel Committee on Banking Supervision reforms - Basel III](#), summary table, adjusted.

The total regulatory capital in Pillar 1 consists of two elements: (i) **Tier 1 Capital** (going-concern capital) which contains the 'Common Equity Tier 1 (CET1)' and the 'Additional Tier 1', and (ii) **Tier 2 Capital** (gone-concern capital)<sup>6</sup>. The following restrictions apply: Tier 1 Capital must be at least 6.0% of **risk-weighted assets (RWA)** at all times (out of which CET1 must be at least 4.5% of RWA). The total capital (Tier 1 + Tier 2 Capital) must be at least **8.0%** of RWA at all times. As of 2016, a capital conservation buffer will be added to the minimum total capital amount of 8%. This [additional requirement](#) is 'designed to ensure that banks build up capital buffers outside periods of stress which can be drawn down as losses are incurred' (p. 54). Starting at 0.625%, the buffer will gradually increase to [reach 2.5% in 2019](#), resulting in a new minimum total capital plus conversation buffer of **10.5%**. As of 30 June 2015, all large internationally active banks meet Basel III minimum and CET1 capital requirements, according to [BCBS data](#) and [progress report](#).

## TLAC

While supervision aims to prevent bank crises and act as an early-warning mechanism (going concern), banking resolution provides orderly failure and minimises impacts on financial stability (gone concern). The [Financial Stability Board \(FSB\)](#) and the BCBS published a new standard on [Total Loss Absorbing Capacity \(TLAC\)](#) on 9 November 2015. The standard is designed to ensure that if a global systemically important bank (G-SIB) fails it has sufficient loss-absorbing and recapitalisation capacity available to implement an orderly resolution that minimises impacts on financial stability. It applies to all G-SIBs, hence to [13 banks within the EU](#) (out of 30). Since TLAC is not binding, it has to be transposed into national or European legislation.

The TLAC standard sets a **minimum level** of loss-absorbing capacity to be held by all G-SIBs, a 'pillar 1' requirement (while the BRRD provisions allow resolution authorities to set individual requirements on a case-by-case basis, a 'pillar 2' requirement, see below). As of 1 January 2019, G-SIBs will have to comply with a minimum TLAC requirement of

16% of RWA **and** 6% of the Basel III leverage ratio denominator (TLAC Leverage Ratio Exposure (LRE) Minimum). As of 2022, the minimum thresholds will be set at 18% and 6.75% respectively.

#### *Impact of implementing TLAC*

Accompanying the TLAC proposal of 9 November 2015, the FSB also published findings from the [TLAC Impact Assessment Studies](#), indicating that the macroeconomic benefits (+15/20 basis points (bps – hundredths of one per cent) of annual GDP) will exceed the costs (less than -10/-15 bps). In particular, the median lending rates would increase by 8 bps. The FSB/BCBS's quantitative impact study (QIS) indicates for end-2014 that the G-SIBs had an average TLAC ratio of 13.1% of RWA and 7.2% of LRE. In order to comply with the 2019 requirement of 16% of RWA and 6% of LRE, this translates into a TLAC shortfall of between €307 billion and €790 billion, depending on which instruments are considered.

## The EU framework

### CRD-IV/CRR

The CRR ([Regulation \(EU\) 2013/575](#)), lays down uniform rules for credit institutions and investment firms concerning general prudential requirements regarding own funds relating to – among others – elements of [credit risk](#), [market risk](#), [operational risk](#) and [settlement risk](#). CRD-IV ([Directive 2013/36/EU](#)) regulates access to undertaking the activity of a credit institution and the prudential supervision of credit institutions and investment firms, and also defines G-SIBs in the EU context (Article 131). In short, while CRD-IV governs access to deposit-taking activities, the CRR establishes the prudential requirements that institutions need to respect and thus translates the Basel provisions into EU law. Both became effective as of 1 January 2014. Together, CRR and CRD IV replace the Capital Requirements Directives ([2006/48/EC](#) and [2006/49/EC](#)). The package is [supplemented](#) by two Commission Delegated Acts, four Commission Implementing Acts, regulatory technical standards (RTS), and implementing technical standards (ITS).<sup>7</sup>

Together with the directives on ensuring better protection for depositors (Deposit Guarantee Schemes (DGSD) – [2014/49/EU](#)) and on the prevention and management of bank failures, (Bank Recovery and Resolution (BRRD) – [2014/59/EU](#)), they form the '[single rulebook](#)' – a set of legislation applying to all EU countries, and over [8 000 banks](#).

In its November 2015 communication, 'Towards the completion of the Banking Union' ([COM\(2015\) 587](#)), the Commission indicated it plans new 'targeted prudential measures addressing identified weaknesses'. These measures will aim to limit bank leverage, ensure stable bank funding and improve the comparability of risk-weighted assets.<sup>8</sup> On 26 May 2016, the Commission's DG FISMA launched two 'targeted consultations' on (i) [market risk capital requirements and the original exposure method](#) and on (ii) the [implementation of the Net Stable Funding Ratio](#). A Commission proposal is expected in late 2016, while a revision of the macro-prudential policy framework is due in 2017.

### BRRD

In order to improve the **resolvability** of financial institutions in the EU, the ([BRRD](#)) includes provisions on resolvability assessments and resolution plans.<sup>9</sup> In order to reinforce the protection of taxpayers, the directive contains a bail-in instrument. This, allows for a write-down of debts owed by a bank to creditors or for their conversion into equity.<sup>10</sup> While the BRRD applies to all EU Member States, the [SRM](#) unifies the resolution of [non-viable financial institutions](#) within the Banking Union.<sup>11</sup>

To limit [state aid](#) for ailing banks, the BRRD provides for a [bail-in mechanism](#) (Article 43 BRRD). Since 1 January 2016, it is mandatory to bail in shareholders and creditors for a **minimum amount of 8% of total liabilities**.<sup>12</sup> The credibility of bail-in provisions is crucial to manage market participants' expectations. Analysing CDS data for Cyprus, a 2016 European Systemic Risk Board (ESRB) [working paper](#) finds that, despite some chaotic negotiations, 'bailing in senior creditors and even depositors sent a strong and credible signal to investors that the euro area was entering a new regime, moving from bailout to bail-in' (p. 24). However, 'resolving failed banks without the use of public money depends on a very strong delineation of bank liabilities to make clear what can be bailed in'.<sup>13</sup> The BRRD specifies which kind of regulatory capital and high-quality liabilities are considered as 'bail-inable' instruments in a dedicated capital requirement.

#### *Pricing resolution – MREL*

The BRRD's new capital standard 'Minimum requirement for own funds and eligible liabilities' (MREL, Article 45) aims to ensure that institutions maintain an adequate loss-absorbing capacity: the amount of capital needed to absorb losses (**loss absorption amount**) and, where necessary, to recapitalise a firm after resolution (**resolution amount**). To [Mesnard](#) it 'constitutes an anchor point for the new resolution framework, as it determines the credibility of the bail-in regime'. The [MREL framework](#) is legally binding for all banks domiciled in the EU, including G-SIBs. MREL levels for individual EU banks could vary from 8% of RWAs to potentially up to 20% of RWAs (e.g. for a G-SIB).

While both the TLAC standard and the MREL share the same **objective**, their concepts are quite different, especially regarding scope, Pillar1 versus Pillar 2, and sizing (see Table 2): In terms of **scope**, MREL covers all banks in the EU (as covered by the BRRD) and not only systemically important institutions.

**Table 2 – Differences between TLAC and MREL**

	TLAC	MREL
<b>Objective</b>	To ensure i) an appropriate level of loss-absorbing and recapitalisation capacity for the relevant group to be resolvable, ii) critical functions can be continued without taxpayer (public) funding and avoiding adverse effects on the financial system.	
<b>Scope of covered firms</b>	Global systemically important banks ( <b>G-SIBs</b> )	<b>All</b> credit institutions and investment firms
<b>Eligible instruments</b>	Equity, junior debt, senior subordinated debt and part of the senior unsubordinated debt which is <i>pari-passu</i> <sup>14</sup> with excluded liabilities. The latest may account for an amount equivalent to 2.5% RWA.	Equity, junior debt, senior debt, and other unsecured liabilities with residual maturity over one year. Senior unsubordinated debt may be excluded if it accounts for less than 90% of the total liabilities in the same rank.
<b>Pillar 1 vs. Pillar 2 approach</b>	All banks should have the same <b>Pillar 1</b> minimum TLAC requirement plus a Pillar 2 firm-specific requirement.	Case-by-case approach ( <b>Pillar 2</b> ) based on each bank's characteristics: resolvability assessment, complexity, risk profile, etc.
<b>Sizing / Calculation</b>	Pillar 1 standard minimum: 16% of RWA and 6% of leverage assets (2022: 18% and 6.75%) plus Pillar 2 case-by-case requirements. TLAC minimum requirements do not include capital buffers.	Sum of the <b>Loss Absorption Amount</b> (current capital requirements) and <b>Recapitalisation Amount</b> (capital requirement post-resolution), subject to various adjustments by the resolution authority, including potential use of DGS; Denominated as % of total liabilities and own funds.
<b>Deductions</b>	Deduction of TLAC eligible instruments issued by other G-SIBs. ratio	No deductions of cross-holdings.
<b>Come into force</b>	1 January 2019	2016 with 48-month phase-in period (four years)

Sources: de Lis, Santiago Fernandez (2016): [New requirements for loss absorbing capacity: TLAC and MREL](#), BBVA Research, 8 March 2016, p. 19; Mesnard, Benoît (2016): [Loss absorbing capacity in the Banking Union: TLAC implementation and MREL review](#), European Parliament, DG IPOL/EGOV, Brussels, July, p. 5, author's contribution.

Instead of setting a mandatory fixed minimum **Pillar 1** requirement for all institutions as TLAC does, the MREL will be determined on a case-by-case approach, i.e. not a minimum standard but one set individually for each bank (Pillar 2 only). As to **sizing**, the TLAC standard provides that instruments used to comply with capital buffer requirements shall not count towards TLAC requirements.

One element of discussion is the role of risk-weighting in determining MREL: Commissioned by the European Parliament, four research papers published in July 2016 focus on the pros and cons of calculating 'total assets' using leverage ratio exposure versus 'risk-weighted assets'. [Ayadi/Ferri](#) support a full alignment of MREL with TLAC and recommend 'to keep the two metrics RWA and LRE and apply the maximum in each case'. [Hellwig](#) finds that neither RWA nor total assets provide proper guidance for determining MREL. In particular, risk-weighting seems less suited for determining MREL since 'capital regulation focuses on the probability of bad results, while MREL is concerned with the extent of losses conditional on results being bad'. [Berger et al](#) find the use of RWAs more convincing, though they admit this method comes at a cost for smaller banks. In a similar vein, [de Groen](#) simulates (on a sample of 90 banks) that RWA to total assets turns out to be higher for smaller and retail-oriented banks.

#### *Harmonising international and EU standards*

The Commission has started designing different options for implementing TLAC and harmonising MREL. On 26 May 2016, the Commission proposed to specify its criteria on how to set MREL, thus incorporating the [draft regulatory technical standards \(RTS\)](#) of the European Banking Authority (EBA) of 3 July 2015 into a [Delegated Regulation \(2976 final\)](#). However, EBA and the Commission conveyed [dissenting views](#) regarding the burden-sharing requirement for shareholders and creditors of institutions of significant importance. Further analysis on the implementation of the MREL is expected to be submitted by the EBA by 31 October 2016. As indicated in its November 2015 communication on completing the Banking Union, the Commission may, if appropriate, by end-2016 submit a legislative proposal on the harmonised application of the MREL so that TLAC can be implemented by the agreed deadline of 2019. The first attempts of the Commission's [Expert group on Banking, Payments and Insurance](#) to merge TLAC and MREL requirements met with [resistance](#).

### **European Parliament**

In December 2015, the European Parliament (EP) adopted a report on the regulatory impact 'Stocktaking and challenges of the EU Financial Services Regulation' ([2015/2106\(INI\)](#)). The report raises aspects regarding CRR calibration with the [Markets in Financial Instruments Directive \(MiFID\)](#) and the [European Market Infrastructure Regulation \(EMIR\)](#) (Pts 16, 17).

In its first own-initiative report on the state of the Banking Union on 10 March 2016 ([2015/2221\(INI\)](#)), the EP notes on [capital requirements \(CR\)](#), that CR 'beyond a certain threshold may in the short term create unintended consequences, limiting banks' lending capacity' (Pt 21). For financing of SMEs, the European supervisory authorities should 'conduct a comprehensive assessment of CR embedded in current and future legislation' as well as take into account 'the balance between short-term and long-term impact of CR' (Pt 22). Since the EU's prudential requirements framework (CRD-IV/CRR) already existed, the report 'encourages' the Commission to align it with the Banking Union framework. It calls for flexibility on the [Maximum Distributable Amount \(MDA\)](#),<sup>15</sup> to avoid being 'too rigid' and 'negatively affect[ing] the [Add\[itional\] Tier 1](#) bond market



and the level playing field' (Pt 26). The report pushes for the use of regulations rather than directives (Pt 29). With regard to resolution, the EP 'welcomes the efficient setting-up of the SRB and the establishment of national resolution authorities (NRAs)' (Pt 43). It calls for 'timely progress to be made in drawing up resolution plans and setting a minimum requirement for own funds and eligible liabilities (MREL)', and to prioritise systemically important institutions (Pt 50, 52).

Regarding MREL, on 29 June 2016 the Greens/EFA put forward a [motion for a resolution](#) to object to the proposed Delegated Regulation ([2016/2743/DEA](#)) by the Commission. Especially 'the assessment, for systemic institutions, of whether the burden-sharing requirements as established by Article 44(5) of Directive 2014/59/EU could be met ... [and] should be explicitly maintained in the delegated regulation ...' (Pt. 3a)). In this regard the motion sides with the view of the EBA (see above) but it was [rejected](#) in plenary.

## Remaining challenges

### *ONDs – national options and discretions*

So far, the EU's banking regulatory framework – CRD-IV/CRR – contains some 150 [national options and discretions \(ONDs\)](#), i.e. the choice for Member States to decide how to comply (*option*) with a given provision or to decide not to apply it (*discretion*). This remains a challenge from the point of view of supervisory convergence, especially for the Single Supervisory Mechanism, as stated in an [ECB assessment](#) in November 2014. On [15 February 2016](#), the Commission's Banking Expert group discussed options and discretions in the CRD-IV/CRR framework, especially which of them are relevant for further risk-reduction, as required in the context of Banking Union. On 24 March 2016, the ECB published a [Regulation \(EU\) No. 2016/445](#) on binding and horizontal ONDs and a [guide](#) on how to address non-binding case-by-case ONDs.

### *Risk measurement*

In a similar vein, discussing risk-reduction measures in the Banking Union also entails the prudential treatment of banks' exposures to [sovereign risk](#). Usually, government bonds are considered to be risk-free. However, whether this should remain the case for countries with profound budgetary challenges has recently become a topic of some [controversy](#). However, introducing tougher **risk weights** (e.g. adjusted to national debt levels) would immediately impact on the respective banking sector too. Banks holding [high amounts of domestic government debt](#) would hence find their capital ratio heavily affected. To tackle this state-bank interdependence, the [Dutch Council Presidency](#) presented, at the informal ECOFIN meeting on 22 April 2016, several reform options, including non-zero risk weights and exposure limits as Pillar 1 adjustments. The [Financial Times](#) reports that the BCBS is expected to publish on the topic in late 2016.

### *Recapitalisation and state aid*

Regulatory developments in resolution and the new bail-in regime also affect the other side of the state-bank nexus: Governments in some Member States are faced with ailing banks and the need to set up support mechanisms. However, due to [tightened restrictions on state aid](#) for banks, [The Economist](#) finds that, for instance, Italy could not set up a genuine 'bad bank' but had to create a bank rescue fund ('Atlante') and to collect €4.25 billion from 67 institutional investors, a presumably riskier solution. To the extent that the new bail-in regime impacts on the assessment of state aid, an [EP paper](#) of June 2016 finds several issues needing to be considered: whether deposit insurance schemes constitute state aid; precautionary recapitalisation; the [no creditor worse off \(NCWO\) principle](#); as well as exclusions from bail-in. An [ESRB working paper](#) finds that

‘the fact that senior creditors of Greek banks were spared from losses in 2015 and the political uproar upon the recent bail-ins of investors in Italy and Portugal raises concerns that policy makers will continue to try to circumvent bail-in rules’ (p. 25).

#### *Upcoming Basel IV?*

[Reportedly](#), recent discussions among regulators have stirred up fears among [industry representatives](#) that new supervisory rules, a ‘Basel IV’ agreement, are in the making, with two topics receiving most coverage. The first is a possible overhaul of the capital treatment of banks’ trading books and **market risk**, which might have a [large impact on banks](#) with big securities operations, making trading activities more expensive. A [revised market risk framework](#) was proposed by the BCBS in January 2016. The Commission’s DG FISMA held a [targeted consultation](#) on this topic in May/June 2016 (see above), as part of its CRD-IV/CRR review. The second topic raised is that, up to now, the calculation of **Risk-weighted assets (RWA)** and hence **credit risk** is conducted by the banks themselves. They assess the riskiness of various loans and other assets, and European banks vary widely in their internal models for mortgage and corporate loan risk. In March 2016, the BCBS published a [consultative document](#) to constrain banks’ flexibility in calculating RWAs through internal models,<sup>16</sup> in order to reduce the high RWA-variation across banks. The international organisation also suggested excluding internal modelling from **operational risk**, a framework for such contingencies as fraud and cyber-attacks. Though welcoming the approach, the [Institute for International Finance \(IIF\)](#) criticised the [BCBS approach](#) as ‘blunt’ and called for a ‘more granular and risk-sensitive version’. In fact, to standardise models to compute RWAs can [be costly](#), changing capital ratios by **up to 2 percentage points**. However, [Sandbu](#) notes the Financial Times that ‘to the extent banks perceive capital requirements as a burden, it creates an incentive for them to engineer risk assessments that minimise that burden’. The BCBS is expected to submit a proposal by the end of 2016.

#### **Main references**

Bank for International Settlements (2010): [Basel III: A global regulatory framework for more resilient banks and banking systems](#), BCBS, Basel, 2010, update June 2011.

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Huertas, Thomas F. (2016): [European Bank Resolution - making it work!](#), CEPS, Brussels, January.

Mesnard, Benoît (2016): [Loss absorbing capacity in the Banking Union: TLAC implementation and MREL review](#), European Parliament, DG IPOL/EGOV, Brussels, 7 July.

#### **Endnotes**

<sup>1</sup> Data on recapitalisations show the overall amounts of capital, including liquidation aid, provided in a reporting year. However, aid repayments are not taken into account. The European Commission [State Aid Scoreboard 2015](#) reports (for EU-28) amounts of state aid used: Recapitalisation €453.3 billion, Impaired asset measures €188.5 billion, Guarantees on liabilities €1 188.1 billion, and other liquidity measures €105.0 billion. For data from the United States’ **Troubled Asset Relief Program** (TARP) see the [study](#) of the Congressional Budget Office, March 2015, p. 2. Total ‘subsidy cost’ to the federal government is estimated at US\$28 billion.

<sup>2</sup> Schwarcz, Steven L. (2017): [Banking and Financial Regulation](#), in: Parisi, Francesco (ed.): Oxford Handbook of Law and Economics, OUP, *forthcoming*, p. 4.

<sup>3</sup> A major risk is the shift of banking activities to the less or non-regulated areas of shadow banking. [Deutsche Bank Research](#) reports for the euro area a major increase in shadow banks during the last 15 years, representing 40% of the financial sector with assets estimated at €26 trillion. See e.g. [Duca, John V. \(2016\)](#) on the development in the United States. As to taxation, a 2015 study of 26 banks in the EU finds a significant number of banks over-reporting their profits in low-tax jurisdictions to reduce their total tax burden. Murphy, Richard (2015): [European Banks’ Country-by-Country Reporting. A review of CRD IV data](#), Study for the Greens/EFA, July.

- <sup>4</sup> Brunnermeier, Markus K., et al (2009): [The Fundamental Principles of Financial Regulation](#), Geneva Reports on the World Economy 11, p. xi.
- <sup>5</sup> The [Basel Committee on Banking Supervision \(BCBS\)](#) the international standard-setting body in the banking sector, its establishment dating back to 1974. It sets prudential rules for banks and promotes cooperation amongst national banking supervisors. The BCBS is an international organisation and the secretariat is provided by the Bank for International Settlements (BIS). See [Quaglia, Lucia \(2015, p. 8ff.\)](#).
- <sup>6</sup> **Going concern:** Permanent capital of the bank that is subordinated to all other categories of capital, creditors and depositors and first available to absorb the losses incurred by the bank in the ordinary course of business, i.e. while it is solvent and trading, as well as in insolvency and/or resolution. **Gone concern:** other capital instruments which are not permanent, i.e. they are repayable at maturity, and have an original term of at least 5 years. They are subordinated to other creditors and depositors and are designed to be written down or converted into equity in the event of the bank entering insolvency or resolution. Source: Finance Watch.
- <sup>7</sup> The CRD-IV/CRR package is supplemented (date 10 March 2016) by 28 adopted [Regulatory Technical Standards \(RTS\)](#) (developed by the European Banking Authority – EBA); 21 adopted [Implementing Technical Standards \(ITS\)](#) and two delegated regulations: (i) [\(2015/61\)](#) on the liquidity coverage ratio of credit institutions ('LCR Regulation'), aiming for a sufficient proportion of banking assets to be made available in the short term, and (ii) [\(2014/62\)](#) covering the leverage ratio, to ensure that EU credit institutions and investment firms use the same methods to calculate, report and disclose their leverage ratios.
- <sup>8</sup> See also Duillet-Margerit, Aliénor (2016): [Completing the Banking Union. Risk sharing initiatives and parallel risk reduction measures](#), European Parliament, DG IPOL/EGOV, Brussels, 8 June.
- <sup>9</sup> Out of 143 SRB banks (142 in June 2016), the Single Resolution Board is drafting resolution plans for 68 'high priority banking groups' and transitional resolution plans for 32 'medium priority banking groups' in order to prepare the setting of MREL on a case-by-case basis. See presentation by Grande, Mauro (2016): [3rd SRB–Banking Industry Dialogue Meeting Resolution Planning in 2016](#), Brussels, 23 May, p. 7.
- <sup>10</sup> For a comprehensive overview see Joosen, Bart (2015): Regulatory capital requirements and bail in mechanisms, in: Haentjens, Matthias/Wessels, Bob (2015): Research handbook on crisis management in the banking sector, Cheltenham, Edward Elgar, pp. 175-235.
- <sup>11</sup> The SRM consists of a central resolution authority (the [Single Resolution Board](#)) and a [Single Resolution Fund \(SRF\)](#). To be used in cases of bank failure, the SRF, financed by bank contributions, will be built up over eight years (2016-2023). As of 2024 it will reach at least 1% of covered deposits.
- <sup>12</sup> As to the bail-in instrument, Finance Watch warns that what may have been seen as a 'quick fix' 'may be found wanting in the moment of need'. [Policy Brief, 1 March 2016](#).
- <sup>13</sup> Bailey, Andrew, [Post crisis reforms - the lessons of balance sheets](#), Deputy Governor of Prudential Regulation at the Bank of England, at the International Financial Services Forum, Dublin, 27 January 2016.
- <sup>14</sup> Meaning 'equal footing' that describes situations where two or more assets, securities, creditors or obligations are equally managed without any display of preference.
- <sup>15</sup> An institution cannot distribute profits (dividends, discretionary bonuses, etc.) to an extent that would decrease its Common Equity Tier 1 (CET1) capital to a level where the combined buffer requirement is no longer met ([CRD-IV, Article 141\(1\)](#)). See also Mesnard, Benoît/Magnus, Marcus (2016): [What to do with profits when banks are undercapitalized: Maximum Distributable Amount, CoCo bonds and volatile markets](#), European Parliament, DG IPOL/EGOV, Brussels, 18 March.
- <sup>16</sup> Such an [IRB \(internal-ratings-based approach\)](#), developed as part of the [Basel II framework](#) in 2004, allows banks to use 'their own internal measures for key drivers of credit risk as primary inputs to the capital calculation, subject to meeting certain conditions and to explicit supervisory approval'.

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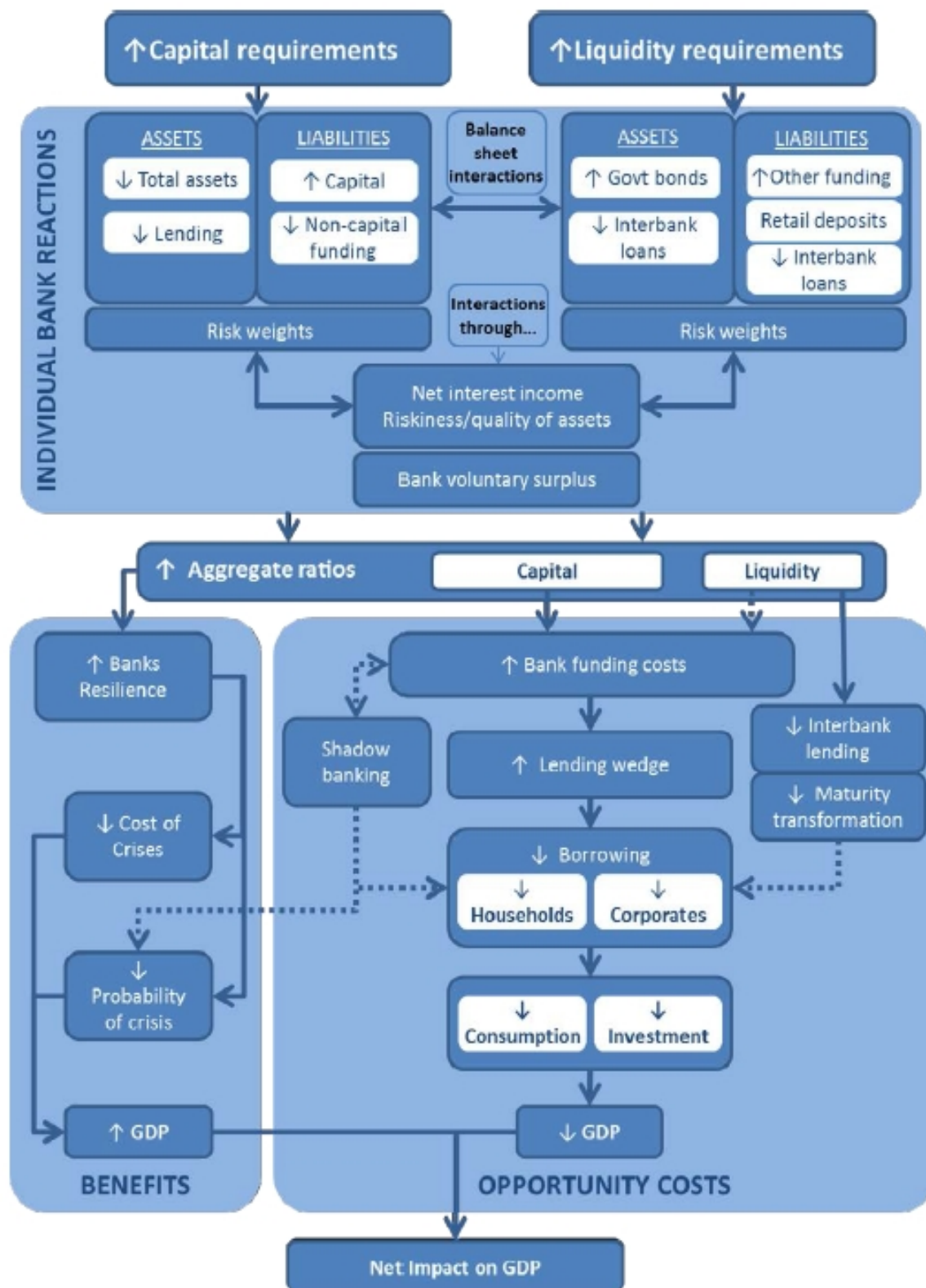
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**Appendix – Transmission mechanism of regulatory requirements to economic activity**



Source: Bank for International Settlements (2016): [Literature review on integration of regulatory capital and liquidity instruments](#), Basel Committee on Banking Supervision (BCBS), Working Paper No 30, Basel, March, p. 5.