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# LIQUIDITY COVERAGE REQUIREMENT UNDER THE DELEGATED REGULATION OF THE EUROPEAN COMMISSION AND BASEL III RULES – A COMPARATIVE STUDY<sup>1</sup>

## INTRODUCTION

A general liquidity coverage requirement has already been proposed under the Capital Requirements Regulation (CRR)<sup>2</sup> with a view to be further specified by the European Commission (EC). On 10 October 2014 the EC adopted the delegated act on liquidity coverage requirement (*delegated act* or *delegated Regulation*)<sup>3</sup>, which provides detailed quantitative liquidity rules.

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Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, Official Journal of the European Union, L 176/1 (CRR).

Commission Delegated Regulation (EU) No 2015/61 of 10 October 2014 to supplement Regulation (EU) 575/2013 with regard to the liquidity coverage requirement for Credit Institutions, OJL11. 17.1.2015 7232.

The delegated Regulation is based on the rules set out by the Basel Committee (Basel rules or Basel III)<sup>4</sup>, which represent an internationally agreed framework for liquidity regulation. The Basel rules incorporate lessons learned during the recent financial crisis and can be regarded as best practices. Notwithstanding the fact that the liquidity coverage requirement (the LCR) should be consistent with the recommendations of the Basel Committee<sup>5</sup>, the European Commission proposed numerous adjustments<sup>6</sup>.

The reason for the changes to the approach proposed under the Basel accord was twofold. Firstly, certain adjustments were introduced in order to take account of Union specificities resulting from the fact that the scope of application of these two documents differs. In contrast to the Basel rules, the delegated act applies at the individual as well as consolidated level and it encompasses not only internationally active banks but all credit institutions operating in the European Union. Secondly, the European Commission has placed particular emphasis on promoting growth and investment in the economy.

The purpose of this paper is to identify major differences between the approaches toliquidity regulation presented under the delegated act and the Basel accord, in order to assess whether the delegated Regulation adopted by the European Commission would enable a prudential objective of the liquidity coverage requirement to be reached. The article is structured as follows. Firstly, the notion of the liquidity coverage requirement (LCR) is presented along with its scope and transitional provisions. Secondly, the differences with regard to the composition of the liquidity buffer and characteristics of the high quality liquid assets which make up the liquidity buffer are discussed. Thirdly, the liquidity inflows and outflows are compared. Finally, main conclusions are presented.

## 1. LIQUIDITY COVERAGE REQUIREMENT

The liquidity coverage requirement is a prudential standard, which requires credit institutions<sup>7</sup> to hold a sufficient cushion of high quality liquid assets to enable them to withstand a period of stress lasting for at least 30 calendar days without requiring assistance from central banks or governments. The prudential aim of the requirement is therefore to foster a short-term resilience of the credit institutions to liquidity crises.

<sup>&</sup>lt;sup>4</sup> BCBS, Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, Bank for International Settlements, January 2013.

<sup>&</sup>lt;sup>5</sup> See paragraph 101 of the CRR.

<sup>&</sup>lt;sup>6</sup> Under paragraph 101 of the Regulation No 575/2013 (CRR), the liquidity requirement should be consistent with the proposal of the Basel Committee.

Investment firms are not yet included in the scope of the delegated Regulation.

The standard was initially agreed at the international level and published by the Basel Committee in the form of a list of recommendations, incorporating lessons learned from the recent financial crisis<sup>8</sup>. It was transposed to European law through the legislative texts known as the CRDIV/CRR package<sup>9</sup>.

The requirement should be equal to the ratio of a credit institution's liquidity buffer to its net liquidity outflows over a 30 calendar day stress period and it should be calculated as follows<sup>10</sup>:

$$\frac{\text{Liquidity}}{\text{Net Liquidity outflows over a 30 calendar day stress period}} = \text{LCR (\%)} \ge 100\%$$

The LCR should be maintained at a level of at least 100%. In certain cases<sup>11</sup>, when stress periods occur, the ratio may fall below 100%. As specified under the delegated Regulation, the requirement will come into force on October 1, 2015, and it will be fully introduced in 2018<sup>12</sup>.

 $<sup>^{8}</sup>$   $\,$  Compare with Basel III: The Liquidity Coverage Ratio..., op. cit.

Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (CRD IV) and Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms (CRR).

See Article 4 of the delegated Regulation.

Under Article 5 of the delegated Regulation, the conditions that allow for a sale of liquid assets by a credit institution, which might potentially lead to a breach of the requirement, include:

<sup>-</sup> the run-off of a significant proportion of its retail deposits;

a partial or total loss of unsecured wholesale funding capacity, including wholesale deposits and other sources of contingent funding such as received committed or uncommitted liquidity or credit lines;

<sup>-</sup> a partial or total loss of secured short-term funding;

<sup>-</sup> additional liquidity outflows as a result of a credit rating downgrade of up to three notches;

increased market volatility affecting the value or quality of collateral or creating additional collateral needs;

unscheduled draws on liquidity and credit facilities;

<sup>-</sup> potential obligation to buy-back debt or to honour non-contractual obligations.

During a phase-in period, the ratio might be maintained below the required level: 60% of the requirement from 1 October 2015, 70% from1 January 2016, 80% from 1 January 2017, and 100% from 1 January 2018. See Article 38 of the delegated Regulation.

# 2. LIQUIDITY BUFFER

The delegated act specifies a set of general<sup>13</sup> and operational<sup>14</sup> requirements that liquid assets or credit institutions have to comply with in order to qualify as part of the liquidity buffer. These eligibility criteria are generally aligned with those of Basel III, with several exceptions concerning:

- a) diversification requirement,
- b) requirement to test access to the market,
- c) preferential treatment of the deposits and other funding in cooperative networks and institutional protection schemes (IPS),
- d) restrictions with regard to issuers of liquid assets,
- e) liquid asset characteristics.

Among other factors, a credit institution should have a well diversified pool of liquid assets, which could be readily accessible in times of stress. What is more, it should test access to the market through regular sales of a significant sample of

- no legal, contractual, regulatory or other impediments to convert assets into cash within 30 calendar days (unencumbrance of assets),
- easy access to market prices and ease of valuation,
- requirement of being listed on recognised exchanges or being traded in active and sizeable markets as characterised by low bid-ask spreads, high trading volume, large and diverse number of market participants and a presence of a robust market infrastructure,
- limitations as regards the type of issuer.
- $^{14}$  The operational criteria, under Article 8 of the delegated Regulation, require that:
  - a credit institution should have a well diversified pool of liquid assets, which could be readily
    accessible in times of stress.
  - the distribution of liquid assets should be consistent with the liquidity needs by currency (liquidity buffer should contain foreign currency denominated liquid assets up to the extent which can be justified by the amount of the net liquidity outflows denominated in that currency).
  - the pool of liquid assets should be under the control (direct or indirect through policies and procedures) of a specific liquidity management function within the credit institution (e.g. Treasury), so that that the assets can be monetised quickly or used as a source of contingent funds, including during stress periods
  - a significant sample of the liquid assets should be monetised regularly in order to test access to the market (conducting such tests would enable the credit institutions to liquidate a portion of their liquid assets in times of stress with the minimum risk of sending a negative signal to the market participant, which could otherwise distort their reputation and lead to liquidity spirals. Liquidity spirals occur when funding and market liquidity risks interact. If investors sell assets to meet funding requirements, they create price declines, loss of confidence, and further funding pressures. See more: Global Financial Stability Report: Containing Systemic Risks and Restoring Financial Soundness, World Economic and Financial Surveys, International Monetary Fund, April 2008, p. 3 and M. Drehmann, K. Nikolaou, Funding liquidity risk. Definition and measurement, Working Paper Series, No 1024/March 2009, European Central Bank, 2009, p. 22).

<sup>&</sup>lt;sup>13</sup> Under Article 7 of the delegated Regulation the general eligibility criteria include:

liquid assets. As regards the diversification requirement<sup>15</sup>, the scope of exemptions is relatively wider under the delegated act. In contrast to Basel III, the requirement does not apply to certain liquid assets, such as assets representing claims on or guaranteed by multinational banks and international organisations, or restricted-use committed liquidity facilities. The scope of exemptions is also wider with regard to the market access test requirement. The requirement does not apply to extremely high quality liquid assets qualifying as level 1 assets category (except for extremely high quality covered bonds), nor to the restricted-use committed liquidity facility, or to deposits and other funding in cooperative networks and institutional protection schemes (IPS)<sup>16</sup>, as these assets are deemed sufficiently liquid.

The recognition of the deposits and other funding in cooperative networks and institutional protection schemes<sup>17</sup> as of liquid assets (either level 1 or level 2 liquid assets) represents another significant divergence from the Basel rules. The reason for their inclusion in the liquidity buffer, as stated by the EC<sup>18</sup>, was that members of the network cannot take advantage of central bank liquidity facilities. Instead, the central institution or body in the network or IPS acts similarly to the central bank. Such an argument, however, does not hold true for commercial banks, which may also establish an IPS while having access to the central bank's operations. Therefore, the EC's explanation of this derogation cannot be regarded as sufficient.

Compared to the Basel accord, the delegated act proposes a more detailed definition of issuers whose assets should not be included in the liquidity buffer<sup>19</sup>. In general, assets issued by credit institutions should not be recognised as liquid assets, which is in line with Basel rules<sup>20</sup>. However, the delegated act permits private bank assets with an explicit State guarantee to be included in the liquidity buffer. The derogation is time limited and will be phased out as credit institutions may include the securities only if the guarantee was granted or committed prior to 30 June 2014<sup>21</sup>.

The requirement for asset diversification concerns the assets among various categories as well as within the same category. Diversification criteria may include types of issuers, counterparties or geographical location of those issuers and counterparties as laid down in Article 8(1) of the delegated act.

See Article 8(4) of the delegated Regulation.

<sup>17</sup> See Article 16 of the delegated Regulation.

<sup>&</sup>lt;sup>18</sup> See paragraph 12 of the delegated Regulation.

<sup>&</sup>lt;sup>19</sup> See Article 7(4) of the delegated Regulation.

Securities qualifying as level 1 assets should not represent an obligation of a financial institution or any of its affiliated entities. This includes, in particular, government guaranteed securities issued during the financial crisis, which remain liabilities of the financial institution. The exception is when the bank qualifies as a public sector entity. See paragraph 50(c) tier 4 of Basel III.

 $<sup>^{21}</sup>$   $\,$  See paragraph 7 of the delegated Regulation.

Certain characteristics of high quality liquid assets described in the Basel rules<sup>22</sup>, such as a proven flight to quality, low volatility, low duration, low legal risk, low inflation risk, low correlation with risky assets, central bank eligibility and the requirement to monitor the physical location of liquid assets, have not been included in the delegated Regulation. Instead, the EBA took a set of factors into account – where applicable – while examining the liquidity profile of the assets<sup>23</sup>. The EBA was assigned, prior to the trilogue negotiations, to examine the liquidity profile of a broad range of assets<sup>24</sup>, including residential mortgage-backed securities (RMBS), other central bank eligible securities, or non-central bank eligible but tradable assets. It was found that certain asset classes' liquidity can be attributed to a different set of characteristics. Credit rating, time to maturity and issue size were found to be significant determinants of liquidity for sovereign and public sector debt, corporate and covered bonds and all types of asset-backed securities (ABS). This was the reason for setting additional eligibility criteria, alongside the operational criteria, to certain asset classes under the delegated act. The EBA also found that, in general, assets such as sovereign bonds, covered bonds, some other forms of public sector securities, corporate bonds, ABS, gold and equity may be put in an order of decreasing liquidity, whereas equities, gold, ABS not backed by residential mortgages, credit claims, securities issued by financial institutions, central bank securities, bank-issued government guaranteed bonds and bonds issued by promotional banks should not be perceived as liquid assets of high credit quality at all<sup>25</sup>.

The differences identified in terms of the general and operational criteria for inclusion of assets in the stock of high quality liquid assets will probably result in an average increase of the LCR.

# 2.1. Composition of the liquidity buffer

Similar to Basel III<sup>26</sup>, the liquidity buffer specified in the delegated act should comprise of level 1 assets of extremely high liquidity and credit quality, as referred to in the CRR, representing a minimum of 60% of high quality liquid assets

See paragraph 24 and 26 of Basel III.

The criteria, which are listed in Article 509(4) of the CRR, included a minimum trade volume of the assets, minimum outstanding volume of the assets, transparent pricing and post-trade information, credit quality, proven record of price stability, average volume traded and average trade size, maximum bid/ask spread, remaining time to maturity and minimum turnover ratio. Based on these criteria and others used in the academic literature, the EBA considered such liquidity metrics as price impact, bid/ask spread, trading volume and turnover, zero-trading days and volatility. See Reporton appropriate uniform definitions..., op. cit., p. 8.

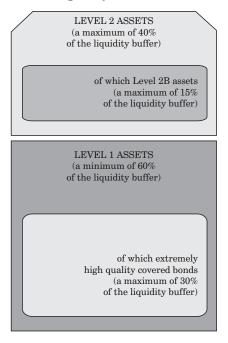
The EBA should also examine liquid assets specified under Article 416 of the CRR, except for cash and bonds issued or guaranteed by government, central banks or multinational organizations.

Report on appropriate uniform definitions of extremely high quality liquid assets (extremely HQLA)..., op. cit., p. 20.

<sup>&</sup>lt;sup>26</sup> See paragraph 46–48 of Basel III.

(see Graph 1). Additionally, a minimum of 30% of the liquidity buffer should be composed of level 1 assets excluding extremely high quality covered bonds. Level 2 assets of high liquidity and credit quality can be subdivided into two categories – level 2A and level 2B assets – which differ in terms of their ability to meet the prudential objective of the liquidity requirement, whereas a maximum of only 15% of the liquidity buffer may be held in level 2B assets.

Graph 1. Composition of the liquidity buffer under the delegated act



Source: own work based on Article 17 of the delegated Regulation.

For the purpose of calculating the liquidity buffer<sup>27</sup>, the valuation of liquid assets should be based on market prices and it should take due account of appropriate reductions, known as haircuts, reflecting a possibility that the prices may decline under stressed conditions which an institution might be exposed to for 30 consecutive days<sup>28</sup>. The value of liquid assets should also be adjusted for the impact of secured funding, secured lending or collateral swap transactions using liquid assets where these transactions mature within 30 calendar days. What is

<sup>27</sup> The formula for calculating of the liquidity buffer is laid down in Annex I to the delegated Regulation. See also Article 17 of the delegated Regulation

<sup>&</sup>lt;sup>28</sup> See Article 9 of the delegated Regulation.

more, even if a liquid asset ceases to meet the applicable eligibility criteria, it is permitted to be kept in the liquidity buffer for an additional 30 day period, which is in line with Basel III<sup>29</sup>.

As regards the composition of the liquidity buffer in general, the most notable difference lies in the more detailed description of the composition of level 1 assets due to the inclusion by the European Commission of extremely high quality covered bonds<sup>30</sup> in its scope along with a respective cap. Widening the range of instruments included in the liquidity buffer will inevitably lead to an average increase of the LCR. However, it may be assumed that the effect will be more noticeable in those countries in which markets for extremely high credit quality covered bonds are well developed.

# 2.2. Level 1 assets

Level 1 assets (L1) consist of the most liquid assets and, as such, they form a substantial part of the liquidity buffer. These assets are perceived as reliably liquid in times of stress, that is why they should be subject to a 100% cap and a 0% haircut, except for extremely high quality covered bonds, which should constitute no more than 30% of the liquidity buffer and their value should be deducted by at least 7% from the market value (see Table 1).

The recognition of covered bonds as extremely liquid assets represents the main divergence from the Basel III rules and is not compatible with the prudential approach. Even the EBA, due to data constraints, recommended inclusion of covered bonds in the L2 instead of L1 assets category in order to align with the Basel rules<sup>31</sup>. However, according to the EC, the nature of covered bonds allows them to be considered sufficiently liquid. The features in favour of such treatment include their secured nature, the requirement for the issuer to replace non-performing assets in the cover pool and to maintain the cover pool at a value exceeding the nominal value of the bonds, which is known as the asset coverage requirement. The Commission argued that these instruments can be considered as relatively low-risk and yield-bearing. They are also an important funding source in mortgage markets, while in some Member States the outstanding issuance of covered bonds is even greater than of the government bonds. Taking into consideration their credit quality (at least step 1 to be included in the L1 assets category), liquidity performance during the recent financial crisis and significant importance as regards

<sup>&</sup>lt;sup>29</sup> See Article 18 of the delegated Regulation and par. 43 of Basel III.

Covered bonds are debt instruments issued by credit institutions and secured by a cover pool of assets which typically consist of mortgage loans or public sector debt to which investors have a preferential claim in the event of default. See paragraph 8 of the delegated Regulation.

Report on appropriate uniform definitions of extremely high quality liquid assets (extremely HQLA)..., op. cit., p. 26.

Table 1. Level 1 assets under the delegated act (the DA)

Item	Haircuta	$\mathbf{Cap}^{\mathrm{b}}$
Coins and banknotes	0%	100%
Qualifying exposures to central banks	0%	100%
Qualifying securities from central or regional governments, local authorities or public sector entities	0%	100%
Qualifying securities from the central government or the central bank of a third country which is not assigned a credit quality step 1 credit assessment by a nominated ECAI <sup>c</sup>	0%	100%
Qualifying assets issued by credit institutions	0%	100%
Qualifying exposures in the form of extremely high quality covered bonds $^{\rm d}$	min. 7%	30%
Qualifying securities from multilateral development banks and international organisations	0%	100%
Qualifying deposits and other funding held in the central institution or body by members of a cooperative network or IPS	0%e	100%
Qualifying collective investment undertakings (CIUs)	$0\%, 5\%, 12\%^{\mathrm{f}}$	EUR 500 million <sup>g</sup>

<sup>&</sup>lt;sup>a</sup> Haircuts are a reduction in the market value of a liquid asset expressed as a percentage of the market value. They provide an additional level of conservatism which protects against potential losses in the value of liquid assets when sold in stressed conditions. See: *Liquidity Coverage Requirement Delegated Act: Frequently Asked Questions*, Memo, European Commission, Brussels, 10 October 2014.

Source: own work based on Article 10, 15 and 16 of the delegated Regulation.

<sup>&</sup>lt;sup>b</sup> A cap is the maximum amount of assets of a given level that a credit institution is allowed to hold expressed as a percentage of the total liquidity buffer. They are designed to reduce concentration risk, that is the risk of the liquidity buffer being composed of an excessive amount of assets of lower liquidity. See: *Liquidity Coverage Requirement Delegated Act: Frequently Asked Questions*, op. cit.

 $<sup>^{\</sup>rm c}$  ECAI or external credit assessment institution means a credit rating agency that is registered or certified in accordance with Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies or a central bank issuing credit ratings which are exempt from the application of Regulation (EC) No 1060/2009.

<sup>&</sup>lt;sup>d</sup> The qualifying L1 covered bonds should, among other factors, be assigned to a credit quality of at least ECAI 1 (or a 10% risk weight), meet the transparency requirement, have an issue size of at least EUR 500 million and an asset coverage requirement of at least 2%. See Article 11.1(c) of the delegated Regulation.

 $<sup>^{\</sup>rm e}$  Where the central institution is obliged to hold or invest the deposits in liquid assets of a specified level or category, the deposits shall be treated as liquid assets of that same level or category. See Article 16(1)(a) of the delegated Regulation.

f The haircut depends on the type of underlying liquid assets: 0% for coins and banknotes and exposures to central banks, 5% for level 1 assets other than extremely high quality covered bonds, 12% for extremely high quality covered bonds. See Article 15(2) of the delegated Regulation.

 $<sup>^{\</sup>rm g}$  The limit of euro 500 million applies to each credit institution on an individual basis. See Article 15(1) of the delegated Regulation.

funding markets in the European Union, the EC assumed that certain covered bonds should be treated as extremely liquid assets of level 1 category, on condition that they are well diversified and subject to a relevant cap and haircut in order to minimise the risk of excessive concentration<sup>32</sup>.

Notwithstanding the rationale behind the inclusion of certain covered bonds in level 1 assets, it ought to be noted that this category of assets is expected to be of unlimited availability in times of stress. Therefore, neither application of the 30% cap and the 7% haircut, nor creation of additional eligibility criteria<sup>33</sup> can justify such a derogation from prudential rules. The same remark applies to collective investment undertakings, which can be included in the liquidity buffer up to the amount of euro 500 million, and to sight deposits held in the central institution of a cooperative network or IPS, as their inclusion is not compatible with Basel III.

Another concern refers to the preferential treatment of sovereigns of the European Union Member States (MS), regardless of their actual credit quality and liquidity. By way of comparison, the Basel approach requires that sovereigns are 0% risk-weighted and meet additional conditions - they should be traded on large, deep and active repo or cash markets characterised by a low level of concentration, and have a proven record as a reliable source of liquidity on the repo or sale markets, even during stressed market conditions<sup>34</sup>. The EC explained that discrimination among various Member States would lead to a build-up of contagion risk, hence the proposed adjustment. The EBA supported this finding, claiming that the inclusion of sovereign bonds of all Member States in L1 assets would prevent fragmentation of the internal market and the bank-sovereign nexus<sup>35</sup>. However, if such an approach prevails, then important implications with regard to the extremely high quality covered bonds will certainly emerge for the MS assigned a credit quality lower than step 1, such as Poland. This is due to the fact that the credit quality of covered bonds is strictly related to the credit rating of the country in which they are issued. Therefore, it can be assumed that only a limited number of countries will benefit from their inclusion in the liquidity buffer. In order to decrease the risk of such discrimination, the EC allowed for the inclusion of credit quality step 2 covered bonds in L2A assets. What is more, the Commission is expected to report by 31 December 2015<sup>36</sup> on alternative tools to credit ratings with to the aim of removing all references to credit ratings in Union

See paragraph 8 of the delegated Regulation.

Additional eligibility criteria under Article 10 (f) of the delegated Regulation include, among others, credit quality (ECAI 1), transparency requirement, issue size of at least 500 million euro, coverage requirement.

<sup>34</sup> See paragraph 50(c) of the Basel III.

Report on appropriate uniform definitions of extremely high quality liquid assets (extremely HQLA)..., op. cit., p. 26.

 $<sup>^{36}</sup>$   $\,$  See paragraph 9 of the delegated Regulation.

law by 1 January 2020 and, accordingly, to replace the criteria for classifying assets by their credit risk.

Finally, the EC allowed for the inclusion of assets issued by promotional banks in the liquidity buffer, whereas the EBA recommended that such assets cannot be regarded as sufficiently liquid. These assets were not taken into consideration under Basel III, therefore a positive impact on the LCR should be expected.

It can be observed that the EC's approach to L1 assets, which are of the utmost importance in times of stress, is less strict than that proposed by the Basel Committee. The adjustments proposed by the EC are aimed at increasing the average level of liquidity coverage ratio.

As regards the expected impact on LCR of covered bonds<sup>37</sup>, it might be positive or insignificant, or it may vary across countries, as extremely high quality covered bonds were already included in level 2 assets under Basel III.

#### 2.3. Level 2 assets

Level 2 assets (L2) represent a part of the liquidity buffer which cannot be monetised within a 30 day period under stressed conditions with the same ease as L1 assets. The L2 assets can be subdivided into L2A and L2B assets, corresponding to a relatively higher and lower liquidity and credit quality, respectively. The L2 assets are assigned a 40% cap and a minimum haircut of 15% for L2A or 25–50% for L2B assets. The composition of L2A and L2B assets is presented in Table 2.

Table 2. Level 2A and 2B assets under the delegated act (the DA)

Item	Haircut	Сар	
Level 2A assets			
Qualifying securities from regional governments, local authorities or public sector entities assigned a 20% risk factor	min. 15%	40%	
Qualifying securities from the central bank, central or regional governments, local authorities or public sector entities of a third country, which can be assigned a 20% risk factor	min. 15%	40%	
Qualifying exposures in the form of high quality covered bonds <sup>a</sup>	min. 15%	40%	
Qualifying exposures in the form of covered bonds issued by credit institutions in third countries	min. 15%	40%	
Qualifying corporate debt securities <sup>b</sup>	min. 15%	40%	

 $<sup>^{37}</sup>$  See paragraph 52(b) of the Basel III.

Item	Haircut	Сар
Level 2B assets		
Qualifying exposures in the form of ABS, where the underlying	exposures	are:
– residential mortgage loans	25%	15%
- fully guaranteed residential loans	25%	15%
commercial loans, leases and credit facilities to small and medium-sized enterprises		15%
- auto loans and leases	25%	15%
– personal, family or household loans and credit facilities to individuals for consumer purposes		15%
Qualifying corporate debt securities <sup>c</sup>		15%
Qualifying shares	50%	15%
Qualifying central bank restricted-use committed liquidity facilities		15%
Qualifying exposures in the form of high quality covered bonds <sup>d</sup>	30%	15%
Level 2A or 2B assets		
Qualifying deposits and other funding held in the central institution or body by members of a cooperative network or IPS		40%/15%
Qualifying collective investment undertakings (CIUs)	20-45% <sup>f</sup>	EUR 500 million

 $<sup>^{\</sup>rm a}$  The qualifying L2A covered bonds should, among other factors, be assigned a credit quality of at least ECAI 2 (or a 20% risk weight), meet the transparency requirement, have an issue size of at least EUR 250 million and an asset coverage requirement of at least 7% (or 2% under certain conditions). See Article 11.1(c) of the delegated Regulation.

Source: own work based on Articles 11, 12, 13, 15 and 16 of the delegated Regulation.

 $<sup>^{</sup>m b}$  The qualifying L2A corporate bonds should be assigned a credit quality of at least ECAI 1, with an issue size of at least EUR 250 million, and a maximum time to maturity of 10 years. See Article 11.1(e) of the delegated Regulation.

 $<sup>^{\</sup>rm c}$  The qualifying L2B corporate bonds should be assigned a credit quality of at least ECAI 3, with an issue size of at least EUR 250 million, and a maximum time to maturity of 10 years. See Article 12.1(b) of the delegated Regulation.

 $<sup>^{</sup>m d}$  The qualifying L2B covered bonds should, among other factors, be assigned a 35% or lower risk weight, meet the requirement of transparency, have an issue size of at least EUR 250 million and an asset coverage requirement of at least 10%. See Article 12.1(e) of the delegated Regulation.

 $<sup>^{\</sup>rm e}$  Where the central institution is obliged to hold or invest deposits in liquid assets of a specified level or category, the deposits shall be treated as liquid assets of that same level or category. See Article 16(1) (a) of the delegated Regulation.

 $<sup>^{\</sup>rm f}$  The haircut depends on the type of underlying liquid assets: 20% for level 2A assets, 30% for level 2B securitisations backed by residential loans or auto loans, 35% for level 2B covered bonds, 40% for level 2B securitisations backed by commercial loans and loans and credit facilities to individuals, 45% for level 2B corporate debt securities. See Article 15(2) of the delegated Regulation.

The delegated act introduces a significant innovation with regard to the L2B assets. Unlike the Basel rules<sup>38</sup>, it enables ABS other than those backed by residential loans to be included in the liquidity buffer. This is also in contrast to the EBA's findings<sup>39</sup>. The European Commission stated that deviation from the recommendations of the BCBS and the EBA can be justified for several reasons<sup>40</sup>. Firstly, it will encourage diversification within the liquidity buffer and weaken the bank-sovereign nexus due to a low correlation between ABS backed by certain assets and government bonds. Secondly, it will convey a positive impression to investors and facilitate economic growth by financing the real economy. Thirdly, the Commission ascertained that some ABS, in particular those backed by loans and leases for the financing of motor vehicles, reflected price volatility and average spreads comparable to RMBS during the financial crisis. In addition, ABS backed by consumer credit exhibited a sufficient degree of liquidity. The abovementioned findings of the EC, however, were not supported by any empirical evidence. The Commission requires qualifying ABS to fulfil the criteria corresponding to simple, transparent and standardised securitisations, but still it seems that the primary intention of the EC in extending the range of eligible securitised assets was to support credit for small and medium enterprises and consumers, whereas the prudential aim of the Regulation was relegated to a secondary status. This adjustment, bearing in mind the higher haircuts and the 15% cap, will possibly lead to a higher level of LCR in those Member States in which securitisation markets are well developed. In this regard, a limited impact can be foreseen for the Polish banks.

Another derogation from the internationally agreed rules relates to the restricteduse committed liquidity facilities provided by central banks, which were only envisaged as a potential option for alternative treatment in Basel III<sup>41</sup>. Furthermore, the delegated act, in contrast to the Basel rules, allows for the treatment of deposits and other funding in cooperative networks and institutional protection schemes (IPS) maintained with the central institution in response to special needs of the credit institutions belonging to such networks and schemes<sup>42</sup> as liquid assets. Credit institutions will be also allowed to include shares or units in collective investment undertakings (CIUs) in the liquidity buffer<sup>43</sup>, in contrast to Basel III.

<sup>&</sup>lt;sup>38</sup> Under par. 54(a) of Basel II only residential mortgage backed securities can be included in the stock of liquid assets.

<sup>39</sup> See Report on appropriate uniform definitions of extremely high quality liquid assets (extremely HQLA)..., op. cit., p. 24.

<sup>&</sup>lt;sup>40</sup> See paragraph 10 of the delegated Regulation.

<sup>&</sup>lt;sup>41</sup> The delegated act specifies alternative liquidity approaches with reference to the currencies with constraints on the availability of liquid assets under Article 19 of the delegated Regulation.

 $<sup>^{42}</sup>$  Specific criteria for such treatment are described under Article 16 of the delegated Regulation.

 $<sup>^{43}</sup>$   $\,$  See Article 15 of the delegated Regulation.

# 3. LIQUIDITY FLOWS

The denominator of the liquidity coverage ratio is net liquidity outflows, which should be calculated as the difference between liquidity outflows and liquidity inflows over a 30 day stress period, with the assumption of a combined idiosyncratic and market-wide stress scenario<sup>44</sup>. A general rule is that the sum of expected inflows should not exceed 75% of the sum of expected outflows, with certain exceptions, which will be discussed further.

# 3.1. Liquidity outflows

The credit institutions are supposed to calculate expected liquidity outflows by multiplying the outstanding balances of liabilities and off-balance sheet exposures by the weights corresponding to their run-off (or draw down) rates. These weights have been explicitly defined under the delegated act, taking into account the results of an empirical analysis conducted by the EBA<sup>45</sup>. Table 3 presents the summary of those outflow categories of deposits, which deviate from the Basel accord, along with applicable run-off rates.

The approach proposed under the delegated act towards stable retail deposits is very similar to Basel III. A significant divergence refers to the category of less stable deposits subject to higher outflow rates. Fixed rates of 10-20% are proposed under the delegated act, whereas Basel III allowed for a 10% rate, which could be set at a higher level by competent authorities. What is more, this approach differs from the one currently in force. The CRR, under Article 421(3), delegates EBA to determine the conditions for identifying retail deposits subject to higher outflows. The EBA issued guidelines<sup>46</sup> in which it did not propose any specific rates, but recommended that the institutions develop internal models to assess appropriate outflow rates, while taking into account the conditions specified in the guidelines as well as certain additional factors. It seems that the approach proposed by the EBA enables the liquidity risk profile of an institution to be encapsulated better. This remark refers to the issue of setting fixed rates of outflows or inflows in general, while not allowing for an individual assessment of a particular bank. It supposedly promotes comparability across different institutions and jurisdictions, but it does not take account of the risk profile assigned to each institution.

<sup>44</sup> See Article 20 of the delegated Regulation.

<sup>&</sup>lt;sup>45</sup> Report on impact assessment for liquidity measures under Article 509(1) of the CRR, European Banking Authority, 20 December 2013.

<sup>&</sup>lt;sup>46</sup> Guidelines on retail deposits subject to different outflows for purposes of liquidity reporting under Regulation (EU) No 575/2013, on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (Capital Requirements Regulation – CRR), EBA/GL/2013/01, European Banking Authority, 06.12.2013.

Table 3. Outflow rates for selected deposits

Item	Run-off rate under the DA	Run-off rate under Basel III
Other retail deposits subject to higher outflow rates (Article 25 of the DA and par. 79–81	10–15% <sup>a</sup> 15–20% <sup>b</sup>	10% or more <sup>c</sup>
Cancelled deposits with a residual maturity of less than 30 calendar days and where pay-out has been agreed to another credit institution (Art. 25(4) of the DA)	100%	I
Operational deposits from credit institutions placed at the central institution that are considered liquid assets for the depositing credit institution (Art. 27(3) of the DA and par. of Basel III)	100%	-

<sup>&</sup>lt;sup>a</sup> According to Article 25.3(a) of the delegated Regulation a rate of 10–15% applies where the total deposit balance, including all the client's deposit accounts at that credit institution or group, exceeds EUR 500 000 or the deposit meets at least two additional criteria:

- the deposit is an internet only account, or
- the deposit offers an interest rate that significantly exceeds the average rate for similar retail products or is derived from the return on a market index or set of indices or is derived from any market variable other than a floating interest rate, or
- the deposit was originally placed as fixed-term with an expiry date within the 30 calendar day period or the deposit presents a fixed notice period shorter than 30 calendar days, or
- the depositor is resident in a third country or the deposit is denominated in a currency other than the euro or the domestic currency of a Member State.
- b According to Article 25.3(b) of the delegated Regulation a rate of 15–20% apply where the total deposit balance, including all the client's deposit accounts at that credit institution or group, exceeds EUR 500 000 and the deposit fulfils at least one additional criterion specified above, or the deposit fulfils or three or more criteria specified above. Additionally, according to Article 25.3(b) of the delegated Regulation a rate of 15–20% applies where the assessment of the retail deposits has not been carried out or is incomplete. What is more, competent authorities may apply a higher outflow rate on a case by case basis where justified by the specific circumstances of the credit institution. Under Article 25(5), a higher percentage outflow rate should be applied to retail deposits taken in third countries if such a percentage is provided for by the national law establishing liquidity requirements in that third country.
- $^{\rm c}$  Under par. 79–81 of Basel III supervisory authorities should set appropriate outflow rates of from 10% up to 100%.

Source: own work.

As regards operational deposits, the delegated act is broadly in line with Basel III. The only difference refers to sight deposits placed with the central institution. According to the delegated act, these deposits should be assigned a 100% run-off rate by the central institution if they are treated as liquid assets by other institutions belonging to the network or IP. In contrast, the Basel rules do not recognise such outflows. Additionally, the delegated act recognises funding committed by the central institution, which can be treated as liquid assets by the

members of a cooperative network or an IPS, and assigns a 75% run-off rate to the committed principal amount of this liquidity funding<sup>47</sup>.

Certain differences in terms of the outflow rates can be identified for other liabilities, as highlighted in Table 4.

Table 4. Liabilities resulting from secured lending and capital market-driven transactions maturing within 30 calendar days

Item	Run-off rate under the DA	Run-off rate under Basel III
Liabilities collateralised by assets that would qualify as L1 assets, except for extremely high quality covered bonds, or if the lender is a central bank	0%	0%
Liabilities collateralised by assets that would qualify as extremely high quality covered bonds	7%	15%
Liabilities collateralised by assets that would qualify as level 2A assets	15%	15%
Liabilities collateralised by residual loans, fully guaranteed residential loans or auto loans and leases	25%	100% (25%)a
Liabilities collateralised by assets that would not qualify as liquid assets and the lender is the domestic central government, a domestic public sector entity or a multilateral development bank	25%	25%
Liabilities collateralised by assets that would not qualify as liquid assets and the lender is the central government, a public sector entity of the Member State or of a third country in which the credit institution has been authorised or has established a branch, or a multilateral development bank	25%	100%
Liabilities collateralised by commercial loans or consumer loans	35%	100%
Liabilities collateralised by corporate debt securities that would qualify as level 2B assets	50%	50%
Liabilities collateralised by shares that would qualify as level 2B assets	50%	50%
Liabilities collateralised by assets that would not qualify as liquid assets, except where the lender is a central bank	100%	100%

 $<sup>^{\</sup>rm a}~$  A 25% run-off rate applies with regard to residential mortgage backed securities, according to par. 155 of Basel III.

Source: own work based on the Article 28(3) of the delegated Regulation and paragraph 11-115 of Basel III.

 $<sup>^{47}</sup>$   $\,$  See Article 31(7) of the delegated Regulation.

As can be seen from Table 4, the approach towards secured funding proposed under the delegated act is less strict than under Basel III, which might lead to a higher average level of LCR. The differences mainly concern the liabilities collateralised by those categories of assets which are subject to a preferential treatment under the delegated act, i.e. high quality covered bonds, auto loans and leases, and commercial or consumer loans. The delegated act also offers priority to liabilities collateralised by non-high quality liquid assets in the event that the counterparty is the central government, a public sector entity of the Member State or of a third country in which the credit institution has been authorised or has established a branch, or a multilateral development bank. In contrast, under Basel III, this derogation applies to liabilities that are not backed by Level 1 or 2 assets, only where the lender is the domestic sovereign, public sector entity or multilateral development bank.

In addition to the information presented in the tables above, the delegated act widens the scope of clients eligible to a 40% run-off rate<sup>48</sup> by adding credit unions and personal investment companies, which would be assigned a 100% runoff rate under Basel III<sup>49</sup>. Also, Article 30 of the delegated act specifies additional outflows related to collateral posted by a credit institution for off-balance sheet contracts and credit derivatives other than cash and L1 assets (with a 20% run-off rate) and collateral in extremely high quality covered bonds (with a 10% run-off rate). In contrast, collateral in extremely high quality covered bonds should be assigned a 20% run-off rate according to Basel III<sup>50</sup>. The delegated act also allows for the preferential treatment of deposits within a group or an IPS<sup>51</sup>. Competent authorities may, under certain conditions, authorise the application of symmetrical outflow and inflow rates for undrawn credit and liquidity facilities between two credit institutions belonging to a single group or to the same IPS, provided that the credit institutions are established in the same Member State<sup>52</sup>. The derogation may be applied to cross-border flows on the basis of additional criteria, including special legally binding arrangements, and the liquidity risk profile and liquidity risk management of the relevant credit institutions for this treatment.

A general overview of the outflow rates allows the assumption that the LCR will increase due to the divergences identified herein as regards the calculation of outflow rates.

<sup>48</sup> See Article 28(1) of the delegated Regulation.

<sup>49</sup> Compare par. 109–111 of Basel III.

<sup>50</sup> See par. 199 of Basel III.

<sup>51</sup> Compare Article 29 of the delegated Regulation.

 $<sup>^{52}</sup>$   $\,$  See Article 29 and paragraph 15 of the delegated Regulation.

# 3.2. Liquidity inflows

The credit institutions should calculate liquidity inflows over a 30 day period. The liquidity inflows should include contractual inflows as well as exposures that are not overdue, for which the credit institution has no reason to expect non-performance over 30 consecutive days<sup>53</sup>. Certain inflows should be subject to lower inflow rates. Table 5 presents several divergences from the Basel rules.

Table 5. Selected inflow rates

Item	Inflow rate under the DA	Inflow rate under Basel III
Monies due that the credit institution owing those monies treats as operational deposits, with the exception of deposits from credit institutions placed with the central institution which are considered liquid assets for the depositing credit institution (Art. 32.3(d) of the DA and par. 156–157 of the Basel III)	5%ª	0%
Undrawn committed liquidity facilities from the central bank which are recognised as liquid assets (Art. 32.3(g) of the DA)	0%	-
Assets with an undefined contractual end date (Art. 32.3(i) of the DA and par. 152 of the Basel III)	20%	0%
New obligations entered into (Art. 32(7) of the DA)	0%	_

 $<sup>^{\</sup>rm a}$  A 5% inflow rate shall only be applied when a corresponding symmetrical inflow rate cannot be established. See Article 32.3(d) of the delegated Regulation.

Source: own work.

The approach towards the calculation of inflows under the delegated act differs slightly from the Basel accord. One difference concerns monies due from customers, classified as operational deposits, which should receive a symmetrical inflow rate if possible or a 5% inflow rate, whereas they should be assigned a 0% inflow rate as stated by the Basel Committee. Another difference applies to assets with an undefined contractual end date, which should receive a 0% inflow rate under Basel III, but have been assigned a 20% rate under the delegated act. What is more, the approach to collateral swaps which mature within 30 calendar days differs in that an inflow under the delegated act should be calculated as the excess liquidity value of the assets lent net of the liquidity value of the assets borrowed, whereas there

 $<sup>^{53}</sup>$   $\,$  See Article 32 of the delegated Regulation.

are fixed rates set under Basel III, corresponding to the underlying asset type<sup>54</sup>. The delegated act also provides a possibility for the preferential treatment of inflow rates for undrawn credit and liquidity facilities within a group or an IPS, on condition that a competent authority allows for such treatment<sup>55</sup>.

The last area of concern in this study regards inflow caps. The reason for imposing the 75% cap on total expected cash outflows was to encourage banks to maintain a minimum amount of the liquidity buffer equal to 25% of the total cash outflows, while minimising the reliance on expected cash inflows<sup>56</sup>. The delegated act allows for certain derogations from the 75% cap, which are not compatible with Basel rules. The following inflows may be fully or partially exempted from the cap<sup>57</sup>:

- inflows where the provider is a parent or a subsidiary of the credit institution or another subsidiary of the same parent institution,
- ❖ inflows from deposits placed with other credit institutions within a group,
- interdependent inflows including inflows from loans related to mortgage lending, or promotional loans or from a multilateral development bank or a public sector entity that the credit institution has passed through.

What is more, specialised credit institutions may be exempted from the cap on inflows under certain conditions when they are dealing with businesses such as leasing and factoring, or they may be subject to the 90% cap if their main activities involve financing for the acquisition of motor vehicles or consumer credit<sup>58</sup>.

## 4. CONCLUSION

The delegated act proposed by the European Commission entails a number of adjustments which lead to certain divergences from the internationally acknowledged approach of the Basel Committee. A summary of these deviations is presented in table 6.

Taking the abovementioned adjustments into consideration, it may be assumed that the application of the delegated act will lead to an average increase in the liquidity coverage requirement. The consequences, however, may vary by country due to significant differences in the level of development of financial markets. A precise assessment of the scale of the impact would be possible if a quantitative study was proposed.

 $<sup>^{54}~</sup>$  See par. 145–146 of Basel III.

<sup>55</sup> See Article 34 of the delegated Regulation.

 $<sup>^{56}~</sup>$  See par. 144 of Basel III.

<sup>57</sup> See Article 33(2) of the delegated Regulation.

<sup>&</sup>lt;sup>58</sup> See Article 33(3)–33(5) of the delegated Regulation.

Table 6. Main divergences of the delegated act from the Basel accord  $\,$ 

Item	Adjustment proposed by the EC	Expected impact on the LCR
Diversification requirement	Widening the scope of exemptions	positive
Requirement to test market access	Widening the scope of exemptions	positive
High quality liquid assets	Broadening the range of high quality liquid assets through the inclusion of:  - deposits and other funding in cooperative networks and institutional protection schemes (IPS), and  - collective investment undertakings (CIUs)	positive
Eligible assets issuers	Extending the range of qualifying issuers of high quality liquid assets	positive
Liquid assets characteristics	Narrowing the list of liquid assets features	positive
Level 1 assets	Broadening the range of extremely high quality liquid assets by:  - the inclusion of covered bonds of credit quality step 1  - the preferential treatment of sovereigns of the European Union Member States	positive
Level 2B assets	Broadening the range of high quality liquid assets through the inclusion of:  - ABS other than those backed by residential loans,  - restricted-use committed liquidity facilities provided by central banks	positive
Liquidity outflows	Introduction of fixed outflow rates with regard to stable retail deposits	possibly negative
Liquidity outflows	Preferential treatment of liabilities collateralised by high quality covered bonds, auto loans and leases, commercial or consumer loans	positive
Liquidity outflows	Preferential treatment of funding committed to members of cooperative networks and IPS by the central institution	positive
Liquidity outflows	Preferential treatment of certain liabilities resulting from secured lending and capital market-driven transactions	positive
Liquidity outflows	Widening the scope of clients eligible for a 40% run-off rate	positive

Item	Adjustment proposed by the EC	Expected impact on the LCR
Liquidity outflows	Preferential treatment of collateral in extremely high quality covered bonds	positive
Liquidity outflows/ inflows	Preferential treatment of undrawn credit and liquidity facilities within a group or IPS	positive
Liquidity inflows	Application of an symmetrical inflow rate to operational deposits	positive
Liquidity inflows	Preferential treatment of assets with an undefined contractual end date	positive
Liquidity inflows	Altering the approach to collateral swaps	n/a
Liquidity inflows	Imposing exemptions regarding inflow caps	positive

Source: own work.

The adjustments proposed by the EC are mainly aimed at increasing the LCR and their main purpose is to facilitate lending and boost economic growth. Therefore, it can be concluded that the prudential objective of the liquidity requirement cannot be assured. Another drawback of the liquidity regulation, in general, is the creation of a set of uniform indicators, regardless of the liquidity risk profile of individual institutions.

#### **Abstract**

The article presents the principal conclusions from the analysis of the delegated act on the liquidity coverage requirement adopted by the European Commission in October 2014. The delegated act was analysed in line with the Basel IIII accord in order to identify the main differences and to assess whether the alterations proposed by the European Commission pose a threat to the prudential objective of the liquidity regulation. The main conclusion is that the prudential objective of the liquidity coverage requirement cannot be assured as the majority of changes proposed to the delegated act, as compared with the Basel rules, lead to an increase in the average level of the ratio, while the main purpose of the European Commission was to stimulate growth and facilitate lending to the real economy.

**Key words:** liquidity risk, bank risk management, liquidity regulation

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