

DWS USA Corporation

U.S. Liquidity Coverage Ratio Disclosures

For the quarter ended June 30, 2019

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The Liquidity Coverage Ratio (LCR)

The LCR is intended to promote short-term resilience in a bank's liquidity risk profile as measured over a 30 calendar-day period of significant stress. The ratio is defined as the amount of High Quality Liquid Assets (HQLA) that could be used to raise liquidity during the 30-day stress period, measured against the total volume of net cash outflows arising during the 30-day stress period from actual and contingent exposures. The LCR also takes into account potential maturity mismatches between contractual outflows and inflows during the 30 day stress period.

Deutsche Bank (DB), a banking group domiciled in Germany¹, is currently required to be compliant with the LCR as outlined in the "Commission Delegated Regulation (EU) 2015/61 of October 10, 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to Liquidity coverage requirements for Credit Institutions" and the corrigendum to "Regulation (EU) No 575/2013 of the European Parliament and of the Council of June 26, 2013 on prudential requirements for credit institutions and investment firms and amending regulation (EU) No 648/2012", published on November 30, 2013.

The Basel Committee on Banking Supervision (BCBS) published the international liquidity standards in December 2010 as part of the Basel III package and revised the liquidity standard in January 2013. On September 3, 2014, the U.S. regulators adopted the final rule that implements a quantitative liquidity requirement generally consistent with the LCR standard established by the BCBS. The final LCR rule applies to banks and bank holding companies (BHCs) that meet the applicability criteria of the LCR rule and to certain other regulated institutions, as determined by the Federal Reserve Board ("Federal Reserve" or "FRB").

The Enhanced Prudential Standards for Foreign Banking Organizations (FBOs) require FBOs, including DB, with non-Branch assets of \$50 billion or more to form a U.S. Intermediate Holding Company (IHC) to serve as the top-tier holding company for their non-branch U.S. subsidiaries. DWS USA Corporation (the Firm) is structured to serve as the top-tier holding company for the U.S. subsidiaries of DWS Group GmbH & Co. KGaA, a German based asset management company and majority owned subsidiary of Deutsche Bank AG. The Firm became subject to the LCR requirements as of October 1, 2018.

1 Deutsche Bank (DB) AG is a financial conglomerate as designated by the BaFin.

U.S. Disclosure Requirements

In December 2016, the Federal Reserve adopted a rule to implement public disclosure requirements (PDR) for the LCR. Under PDR, a BHC with \$50 billion or more in consolidated assets or \$10 billion or more in foreign exposure and certain other FRB regulated institutions are required to disclose publicly, on a quarterly basis, quantitative information about their LCR calculation and a discussion of the factors that have a significant effect on their LCR. Presently, the Firm is subject to these disclosure requirements. The information presented in this document is calculated in accordance with the LCR rule, unless otherwise stated. Table 6 presents the Firm's LCR.

U.S. Qualitative Disclosure Requirement

Main Drivers of LCR

The table below summarizes the Firm's average LCR for the 3 months ended June 30, 2019.

Table 1: Liquidity Coverage Ratio

Average Weighted Amounts (\$ in millions)	Three months ended June 30, 2019
HQLA	451.5
Net cash outflows	6.0
LCR (HQLA / Net cash outflows)	7539%
Excess HQLA vs. target of 1.1	444.9

Note: excess HQLA is the Amount of HQLA which exceeds 110% of net cash outflows

In the table above, HQLA is calculated after applying regulatory haircuts to eligible assets as defined by the LCR rule. Similarly, the Firm calculates its outflow and inflow amounts by applying the standardized set of regulatory outflow and inflow LCR weights to various asset and liability balances, including off-balance-sheet commitments, as prescribed in the LCR rule.

The Firm's LCR is largely driven by:

1. HQLA, which consists of U.S. Treasuries and sovereign bonds denominated in Euro with credit ratings in excess of AA-, which qualify for a zero haircut per the LCR rule;
2. Net cash outflows driven by derivative activity (derivatives are used to hedge seed investments in funds managed by DWS); and
3. Net cash outflows driven by outstanding TLAC² eligible Debt.

2 Total Loss Absorbing Capacity (TLAC):

The Federal Reserve Board requires IHCs of foreign global systemically important banks (GSIBs) to issue to their foreign parents Total Loss Absorbing Capacity (TLAC) debt, which can be written-off or converted to equity, if needed to facilitate an orderly resolution.

Changes in LCR

As provided above in Table 1, the Firm's average LCR for three months ended June 30, 2019 was 7,539% which represents a strong average LCR position and well above the required minimum of 100%. The average LCR for the quarter ended June 30, 2019 decreased to 7,539% compared to an average LCR of 16,696% for the quarter ended March 31, 2019 primarily driven by higher average net outflows in Q2 which were caused by lower average inflows primarily attributable to time deposit maturities in Q1. For additional details on the change in average LCR components quarter over quarter, please see Table 6.

Composition of eligible HQLA

HQLA represents the sum of eligible Level 1 liquid assets, Level 2A liquid assets, and Level 2B liquid assets, eligible for inclusion in the LCR after prescribed haircuts and asset composition limits. Eligible HQLA must also meet specific operational and general requirements, as prescribed under the LCR rule. Presently, in the HQLA portfolio the Firm only holds Level 1 liquid assets. Therefore, the Firm's liquidity buffer is entirely composed of Level 1 liquid assets.

The table below presents the daily weighted average amounts of the Firm's HQLA segregated into U.S. Treasuries and EU sovereign bonds for the three months ended June 30, 2019.

Table 2: High Quality Liquid assets

Average Weighted Amounts (\$ in millions)	Three months ended June 30, 2019
US Treasury Securities	338.1
EU Sovereign Bonds	113.4
Total Eligible Level 1 Assets	451.5

Other Liquidity Sources

The Firm holds a significant amount of cash with third party banks, only a portion of which is needed to meet ongoing operational needs of the Firm. As of June 30, 2019, the estimated amount of non-operating cash held by the Firm was \$80 million. This balance represents a \$140 million reduction versus prior quarter primarily due to additional investment of excess cash in US Treasury securities.

Additionally, the Firm holds seed investments, a portion of which could likely be liquidated quickly if needed, but they do not meet the requirements for HQLA.

Concentration of funding sources

The Firm does not take deposits, and is primarily funded through accumulated earnings from operations and the on-going receipt of management and advisory fees.

The Firm's primary activities, the collection of management and advisory fees and the payment of operating expenses, are not captured in LCR reporting. Rather, it is the Firm's balance sheet and off-balance sheet related inflows and outflows that are reported. Given the immaterial size of these flows versus flows from the Firm's operating activities, the LCR is expected to remain above target ratios even during severely adverse stress scenarios.

Other Outflows

The following table summarizes other outflows averaged over the three months ended June 30, 2019. The LCR impact of non-structured debt maturing in greater than 30 days is calculated as 3% of such amount. This Long-term debt is the Firm's TLAC debt issuance. The TLAC debt was issued in Euro and the proceeds of the debt were invested in Euro denominated sovereigns (HQLA eligible) to provide a currency offset.

Other cash outflows is the amount of certain expense-related adjustments payable to a number of current and former clients.

Table 3: Other Outflows

Average Weighted Amounts (\$ in millions)	Three months ended June 30, 2019
Non-structured debt maturing in greater than 30 days (TLAC)	3.5
Other Cash Outflows	0.1
Total Other Funding Obligations	3.6

Derivatives exposure and potential collateral calls

Derivative transaction means a financial contract whose value is derived from the values of one or more underlying assets, reference rates, or indices of asset values or reference rates. The Firm currently uses derivative contracts including interest rate derivative contracts, exchange rate derivative contracts and equity derivative contracts.

The Firm enters into derivative contracts to hedge seed investments in funds managed by the Firm. These derivatives are executed through third parties, are generally exchange traded, cleared through central clearing counterparties, and generally any outstanding exposure / variance margin is settled daily with the executing brokerage firm. The Firm places initial margin with the broker for such derivative exposures. Under our existing derivative contracts, the credit rating of the Firm would not lead to a collateral call.

The following table summarizes derivatives related net cash outflows for the three months ended June 30, 2019.

Table 4: Derivatives

Average Weighted Amounts (\$ in millions)	Three months ended June 30, 2019
Net Outflow related to derivative exposures and other collateral requirements	3.3

Cash Inflows

On average over the quarter, the Firm had more outflows reported on the LCR than inflows. Therefore, Net Outflows were calculated as Outflows less inflows. When inflows exceed outflows (as was the case in the prior quarter), allowable inflow amounts are capped at 75% of aggregate cash outflows to ensure that reporting entities hold a minimum HQLA of at least 25% of total cash outflows.

Cash inflows come primarily from the maturity of HQLA bonds (zero weight), the liquidation of seed investments (100% weight), dividends from seed and co-investments (100% weight), interest from cash accounts and HQLA (100% weight), maturing bank CDs (100% weight), and the collection of fee receivables (zero weight).

The following table summarizes the cash inflows.

Table 5: Cash Inflows

Average Weighted Amounts (\$ in millions)	Three months ended June 30, 2019
Securities cash inflow	0.4
Other cash inflow	0.7
Total Inflows	1.1

Liquidity Management

Liquidity risk is the risk arising from the potential inability to meet all payment obligations when they come due or only being able to meet these obligations at excessive costs. DWS USA Treasury is responsible for ensuring that the Firm can fulfill its payment obligations at all times and can manage liquidity and funding risks within its risk appetite.

To meet this objective, the Firm executes its liquidity management framework. The framework is comprised of six core elements – risk appetite, risk identification, risk measurement, risk monitoring, risk management and governance and oversight. These six elements of the liquidity management framework provide DWS USA Treasury the processes, tools and oversight to effectively manage the liquidity position of the Firm to meet its day-to-day payment obligations.

Treasury manages liquidity and funding in accordance with the DWS USA Corporation Board of Directors approved risk appetite across a range of relevant metrics and has a number of tools to monitor these and ensure compliance. In addition, Treasury works closely with Risk Management and the business to analyze and understand the underlying liquidity characteristics of the business portfolios. These parties are engaged in regular and frequent dialogue to understand changes in the Firm's liquidity position arising from business activities and market conditions. Business metrics have been established to ensure the Firm operates within its overall liquidity and funding appetite.

Liquidity Risk Management Framework

The Risk Management (RM) function is an independent function operating as part of the second line of defense and is responsible for overseeing and evaluating the effectiveness of the liquidity risk management activities performed by DWS USA Treasury. Through executing on its oversight and validation activities, RM plays a key role in supporting the US Chief Risk Officer in overseeing and maintaining the liquidity risk management framework.

Treasury is mandated to manage the overall liquidity and funding position of the Firm. Risk Management acts as an independent control function and is responsible for reviewing the liquidity risk framework, proposing the risk appetite to the DWS U.S. Management Risk Committee and validating liquidity risk methodologies which are developed by Treasury to measure and manage the liquidity risk profile.

Senior members of the DWS U.S. Management Risk Committee (U.S. MRC) and the DWS U.S. Capital and Liquidity Management Committee (U.S. CLMC) receive daily liquidity reports containing LCR reporting, Cash Flow Forecasting and Liquidity Stress Testing, both of which are projected for one year.

Monthly, the U.S. CLMC and U.S. MRC are informed of performance against the risk metrics via a liquidity dashboard, which includes early warning indicators. The U.S. Chief Risk Officer also informs the Risk Committee of the DWS USA Corporation Board of Directors on progress during regular

meetings. Escalations of any breaches of limits / thresholds are reported on a timely basis, and follow escalations paths as defined in the DWS USA Risk Appetite Statement.

Liquidity Stress Testing

Cash Flow Forecasting and Liquidity stress testing are the primary tools for measuring liquidity risk and evaluating the Firm's liquidity position. The Firm prepares both regulatory reporting (i.e., LCR) and internally designed stress tests. The internally designed stress tests are used to determine whether the current liquidity position is in line with the risk appetite and to set the liquidity buffer requirements and help to identify potential future liquidity shortfalls.

Internal stress testing models calculate the Firm's net liquidity position (i.e., measure net stress cash flows against liquidity buffers held) under three stress scenarios (Idiosyncratic loss event, Market downturn event and Combined Market / Idiosyncratic event).

Cash Flow Forecasting and Stress Testing is performed daily and assess the Firm's net liquidity position over the next year.

U.S. Quantitative Disclosures

The following table presents the Firm's average LCR and average un-weighted and weighted amount of HQLA, cash outflows and cash inflows for the quarter ended June 30, 2019 versus March 31, 2019.

Table 6:

Table 6:		June 30, 2019		March 31, 2019		Variance		
Quarter over Quarter Change: June 30, 2019 vs March 31, 2019		Avg. Unweighted Amount	Avg. Weighted Amount	Avg. Unweighted Amount	Avg. Weighted Amount	Avg. Unweighted Amount	Avg. Weighted Amount	Commentary on average weighted amounts
HIGH-QUALITY LIQUID ASSETS								
1	Total eligible high-quality liquid assets (HQLA), of which:	451.5	451.5	345.0	345.0	106.5	106.5	Due to additional purchase of U.S. Treasuries
2	Eligible level 1 liquid assets	451.5	451.5	345.0	345.0	106.5	106.5	
3	Eligible level 2A liquid assets							
4	Eligible level 2B liquid assets							
CASH OUTFLOW AMOUNTS								
5	Deposit outflow from retail customers & counterparties, of which:	-	-	-	-			Primarily due to fx translation on Euro denominated long term debt (TLAC), offset in HQLA assets above.
6	Stable retail deposit outflow	-	-	-	-			
7	Other retail funding outflow	-	-	-	-			
8	Brokered deposit outflow	-	-	-	-			
9	Unsecured wholesale funding outflow, of which:	-	-	-	-			
10	Operational deposit outflow	-	-	-	-			
11	Non-operational funding outflow	-	-	-	-			
12	Unsecured debt outflow	-	-	-	-			
13	Secured wholesale funding and asset exchange outflow	-	-	-	-			
14	Additional outflow requirements, of which:	5.8	3.3	6.9	3.4	(1.1)	(0.1)	
15	Outflow related to derivative exposures and other collateral requirements	5.8	3.3	6.9	3.4	(1.1)	(0.1)	
16	Outflow related to credit and liquidity facilities including unconsolidated strutured transactions and mortgage commitments	-	-	-	-			
17	Other funding obligations outflow	116.7	3.6	120.9	4.7	(4.1)	(1.1)	
18	Other contingent funding obligations outflow	-	-	-	-			
19	TOTAL CASH OUTFLOW	122.6	6.9	127.8	8.2	(5.2)	(1.2)	
CASH INFLOW AMOUNTS								
20	Secured lending and asset exchange cash inflow	-	-	-	-			liquidated in Q2 being assigned a weight of zero
21	Retail cash inflow	-	-	-	-			
22	Unsecured wholesale cash inflow	-	-	-	-			
23	Other cash inflows, of which:	101.6	1.1	117.2	86.4	(15.6)	(85.3)	
24	Net derivative cash inflow	-	-	-	-			
25	Securities cash inflow	68.2	0.4	61.0	61.0	7.2	(60.6)	
26	Broker-dealer segregated account inflow	-	-	-	-			Primarily due to large time deposit that matured in Q1
27	Other cash inflow	33.4	0.7	56.2	25.5	(22.8)	(24.7)	
28	TOTAL CASH INFLOW	101.6	1.1	117.2	86.4	(15.6)	(85.3)	
29	HQLA AMOUNT		451.5		345.0	-	106.5	Driven by lower cash inflows from maturing time deposits in Q2
30	TOTAL NET CASH OUTFLOW AMOUNT EXCLUDING THE MATURITY MISMATCH ADD-ON		5.85		2.04	-	3.81	
31	MATURITY MISMATCH ADD-ON		0.14		0.03	-	0.11	
32	TOTAL NET CASH OUTFLOW AMOUNT		5.99		2.07	-	3.92	Reduction is primarily driven by higher net outflows in Q2
33	LIQUIDITY COVERASGE RATIO (%)		7539%		16696%	0	-9157%	