# DISCOVER FINANCIAL SERVICES

## Liquidity Coverage Ratio Disclosure

## For the Quarterly Period Ended December 31, 2018

# DISCOVER FINANCIAL SERVICES
**Liquidity Coverage Ratio Disclosure**

## TABLE OF CONTENTS

## Company Overview

Discover Financial Services ("Discover" or the "Company") is a direct banking and payment services company. We were incorporated in Delaware in 1960. We are a bank holding company under the Bank Holding Company Act of 1956 as well as a financial holding company under the Gramm-Leach-Bliley Act and therefore are subject to oversight, regulation and examination by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). We provide direct banking products and services and payment services through our subsidiaries. We offer our customers credit card loans, private student loans, personal loans, home equity loans and deposit products. We also operate the Discover Network, the PULSE network ("PULSE") and Diners Club International ("Diners Club"). The Discover Network processes transactions for Discover-branded credit and debit cards and provides payment transaction processing and settlement services. PULSE operates an electronic funds transfer network, providing financial institutions issuing debit cards on the PULSE network with access to ATMs domestically and internationally, as well as point-of-sale ("POS") terminals at retail locations throughout the U.S. for debit card transactions. Diners Club is a global payments network of licensees, which are generally financial institutions, that issue Diners Club branded charge cards and/or provide card acceptance services.

Our main banking subsidiary, Discover Bank, offers credit card loans, private student loans, personal loans and home equity loans as well as certificates of deposit, savings and checking accounts and other types of deposit accounts. Discover Bank is chartered and regulated by the Office of the Delaware State Bank Commissioner, and is also regulated by the Federal Deposit Insurance Corporation (the "FDIC"), which insures its deposits up to applicable limits and serves as the bank's primary federal banking regulator.

## Liquidity Coverage Ratio ("LCR")

At the consolidated level, Discover is subject to the U.S. Liquidity Coverage Ratio Final Rule ("LCR Rule") and the LCR Public Disclosure Requirements Final Rule ("LCR Public Disclosure Rule"), both under 12 CFR Part 249 ("Regulation WW"). Firms subject to the LCR Rule must maintain an amount of eligible high-quality liquid assets ("HQLA") that is no less than 100% of the firm's projected total net cash outflows over a 30 calendar-day period during a hypothetical and severe stress event. Given its current asset size and exposures, Discover is subject to the "modified" LCR requirement in Subpart G of the LCR Rule, which requires the Company to calculate its total net cash outflow amount by multiplying total net cash outflows as calculated under the general rule by a factor of 70%.

The LCR Public Disclosure Rule requires firms to disclose, on a quarterly basis, their average LCR, as well as related quantitative and qualitative information. The information presented in this document is based on Discover's current interpretation and understanding of the LCR Rule and the LCR Public Disclosure Rule and may evolve as we discuss the interpretation and application of these rules with our regulators. This disclosure is available on our Investor Relations website (https://investorrelations.discover.com).

The following table summarizes the Company's average monthly LCR for the period from October 1, 2018 to December 31, 2018. The LCR and its components incorporate outflow and inflow rates prescribed by the LCR Rule and do not necessarily represent the Company's own liquidity projection in any particular stress environment.

**Table 1: LCR Calculation and Components**

| ($ in millions, three months ended December 31, 2018) | | | Average Unweighted Amount | | Average Weighted Amount |
|---|---|---|---|---|---|
| **HIGH-QUALITY LIQUID ASSETS** | | | | | |
| 1 | Total eligible high-quality liquid assets (HQLA), of which: | $ | 7,537 | $ | 7,473 |
| 2 | Eligible Level 1 liquid assets | | 7,110 | | 7,110 |
| 3 | Eligible Level 2A liquid assets | | 427 | | 363 |
| 4 | Eligible Level 2B liquid assets | | — | | — |
| **CASH OUTFLOW AMOUNTS** | | | | | |
| 5 | Deposit outflow from retail customers and counter parties, of which: | $ | 49,113 | $ | 5,713 |
| 6 | Stable retail deposit outflow | | 32,101 | | 963 |
| 7 | Other retail funding outflow | | 10,910 | | 1,876 |
| 8 | Brokered deposit outflow | | 6,102 | | 2,874 |
| 9 | Unsecured wholesale funding outflow, of which: | $ | 805 | $ | 801 |
| 10 | Operational deposit outflow | | — | | — |
| 11 | Non-operational funding outflow | | 472 | | 468 |
| 12 | Unsecured debt outflow | | 333 | | 333 |
| 13 | Secured wholesale funding and asset exchange outflow | $ | 600 | $ | 600 |
| 14 | Additional outflow requirements, of which: | $ | 110 | $ | 110 |
| 15 | Outflow related to derivative exposures and other collateral requirements | | 85 | | 85 |
| 16 | Outflow related to credit and liquidity facilities including unconsolidated structured transactions and mortgage commitments | | 25 | | 25 |
| 17 | Other contractual funding obligation outflow | $ | 561 | $ | 561 |
| 18 | Other contingent funding obligations outflow | $ | — | $ | — |
| 19 | **Total Cash Outflow** | $ | 51,189 | $ | 7,785 |
| **CASH INFLOW AMOUNTS** | | | | | |
| 20 | Secured lending and asset exchange inflow | $ | — | $ | — |
| 21 | Retail cash inflow | $ | 2,141 | $ | 1,071 |
| 22 | Unsecured wholesale cash inflow | $ | 714 | $ | 714 |
| 23 | Other cash inflows, of which: | $ | 18 | $ | 18 |
| 24 | Net derivative cash inflow | | 17 | | 17 |
| 25 | Securities cash inflow | | 1 | | 1 |
| 26 | Broker-dealer segregated account inflow | | — | | — |
| 27 | Other cash inflow | | — | | — |
| 28 | **Total Cash Inflow** | $ | 2,873 | $ | 1,803 |

| | | | **Average Amount[1]** |
|---|---|---|---|
| 29 | HQLA | $ | 7,473 |
| 30 | Total Net Cash Outflow Amount Excluding the Maturity Mismatch Add-on | | N/A |
| 31 | Maturity Mismatch Add-on | | N/A |
| 32 | Total Net Cash Outflow | $ | 4,187 |
| 33 | Liquidity Coverage Ratio | | 178% |

[1]The amounts reported in this column may not equal the calculation of those amounts using component amounts reported in rows 1-28 due to technical factors such as the application of the Level 2 liquid asset caps, the total inflow cap, and for depository institution holding companies subject to Subpart G, the application of the modification to total net cash outflows.

The values in the table above are calculated as the simple average of monthly observations for the three month period beginning October 1, 2018 and ending December 31, 2018. The "Average Unweighted Amount" column represents monthly average balances, while the "Average Weighted Amount" column represents the monthly average balances after adjusting for the prescribed factors.

**Drivers of LCR and Changes Over Time**

The Company's average LCR for the three months ended December 31, 2018 was 178%. Primary components of the Company's average LCR included:

- Eligible High-Quality Liquid Assets ("eligible HQLA"), which primarily consist of cash deposited at the Federal Reserve and unencumbered securities issued by the U.S. Government, U.S. Agencies, and Government Sponsored Entities ("GSEs"), as defined in the LCR Rule, and,

- Net cash outflows primarily related to deposits and wholesale funding, partially offset by contractual payments from customers and other sources.

The Company's average LCR may fluctuate from period to period due to changes in its HQLA and projected net cash outflows from ongoing business activity using rates prescribed by the LCR Rule. A primary driver of fluctuations in net cash outflows is the timing of liability maturities. This item appears as a cash outflow within the denominator of the LCR. Maturing liabilities primarily include brokered deposits, asset-backed securitizations, and unsecured debt. While DFS manages its debt maturities with prudent maturity concentration limits, debt maturities within various 30-day periods can vary materially, resulting in fluctuations in the LCR.

## High-Quality Liquid Assets ("HQLA")

The Company's HQLA consist of cash deposits at the Federal Reserve and unencumbered securities issued by the U.S. Government, U.S Agencies, and GSEs, as defined in the LCR Rule. The Company's Level 1 HQLA include cash held at the Federal Reserve Bank as well as U.S. Treasuries and Government National Mortgage Association ("Ginnie Mae") mortgage-backed securities. The Company's Level 2A HQLA consist of GSE mortgage-backed securities. Discover did not hold any Level 2B assets at the time of this report. The Company may change its mix of HQLA in the future and may add new security types to its holdings, subject to its Board-approved risk appetite. The Company's total HQLA averaged $17.2 billion for the three months ended December 31, 2018.

As required by the LCR Rule, the Company caps its eligible HQLA held at its subsidiary Discover Bank at the amount of the net cash outflows of Discover Bank through the 30th calendar day after the calculation date, plus any additional amount of assets, including proceeds from the monetization of assets, that would be available for transfer to the BHC during times of stress without statutory, regulatory, contractual or supervisory restrictions. The Company's eligible HQLA averaged approximately $7.5 billion during the three month period ending December 31, 2018.

The table below is a summary of the Company's quarterly average total HQLA and eligible HQLA, both on an unweighted and weighted basis.

**Table 2: HQLA Summary**

| ($ in millions, three months ended December 31, 2018) | Average Unweighted Amount | Average Weighted Amount |
|---|---|---|
| **HIGH-QUALITY LIQUID ASSETS** | | |
| Total high-quality liquid assets, of which: | $ 17,175 | $ 17,111 |
| Level 1 | 16,748 | 16,748 |
| Level 2A | 427 | 363 |
| Level 2B | — | — |
| Total eligible high-quality liquid assets | $ 7,537 | $ 7,473 |

## Other Liquidity Sources

As of December 31, 2018, in addition to assets reported in the Company's HQLA under the LCR Rule, the Company had $6.0 billion of committed conduit facilities of which $500 million was drawn. The Company also had approximately $31.5 billion of borrowing capacity at the Federal Reserve Bank discount window. Although available, the Company does not consider its borrowing capacity at the Federal Reserve Bank discount window as a primary source of liquidity. For additional information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Additional Funding Sources" section in the Company's Annual Report on Form 10-K.

## Funding Sources

The Company seeks to maintain stable, diversified and cost-effective funding sources and a strong liquidity profile in order to fund its business and repay or refinance maturing obligations under both normal operating conditions and periods of economic or financial stress. In managing its liquidity risk, the Company seeks to maintain a prudent liability maturity profile and ready access to an ample store of primary and contingent liquidity sources. The Company's primary funding sources include direct-to-consumer and brokered deposits and secured and unsecured borrowings. The Company seeks to manage these funding sources within Board-approved risk appetite limits on funding and maturity concentration.

### Retail Deposits and Other Retail Funding

The majority of the Company's funding comes from retail deposits and other retail funding. Retail deposits are primarily comprised of direct-to-consumer deposits held by Discover Bank, consisting of non-brokered retail deposits and brokered deposits gathered through corporate marketing partnerships, and retail sweep deposits. The table below summarizes LCR-implied retail deposit and other retail funding cash outflows for the three months ended December 31, 2018 using outflow rates prescribed by the LCR Rule. A large portion of the Company's non-brokered retail deposits are considered stable, as defined in the LCR Rule, and are subject to a 3% outflow rate. For the three months ended December 31, 2018, the Company had total average unweighted retail deposits and other retail funding of $49.1 billion, of which $32.1 billion were stable non-brokered retail deposits, $10.9 billion were other retail funding primarily including non-brokered retail deposits considered unstable and undrawn credit card cashback rewards, and the remaining $6.1 billion were brokered direct-to-consumer deposits and retail sweeps. For additional information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Funding Sources" section in the Company's Annual Report on Form 10-K.

**Table 3: Retail Deposit and Other Retail Funding Outflows**

| ($ in millions, three months ended December 31, 2018) | Average Unweighted Amount | Average Weighted Amount |
|---|---|---|
| Deposit outflow from retail customers and counterparties, of which: | $ 49,113 | $ 5,713 |
| Stable retail deposit outflow | 32,101 | 963 |
| Other retail funding | 10,910 | 1,876 |
| Brokered deposit outflow | 6,102 | 2,874 |

### Unsecured and Secured Wholesale Funding

In addition to retail deposits and other retail funding, Discover and its subsidiary Discover Bank receive funding from the issuance of unsecured debt. Discover Bank also receives funding from wholesale brokered certificates of deposits placed by third parties and the securitization of credit card receivables. The table below summarizes the Company's average unsecured and secured wholesale funding outflows using the criteria required by the LCR Rule. For the three months ended December 31, 2018, the LCR-implied average outflows related to the Company's securitization of credit card receivables totaled $600 million, which is reflected as a secured wholesale funding and asset exchange outflow (Line 13 of Table 1). The Company also calculated approximately $801 million of average LCR-implied unsecured wholesale funding outflows. For additional information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Funding Sources" in the Company's Annual Report on Form10-K.

**Table 4: Unsecured and Secured Wholesale Funding Outflows**

| ($ in millions, three months ended December 31, 2018) | Average Unweighted Amount | Average Weighted Amount |
|---|---|---|
| Unsecured and secured wholesale funding outflows, of which: | $ 805 | $ 801 |
| Operational deposit outflow | — | — |
| Non-operational funding outflow[1] | 472 | 468 |
| Unsecured debt outflow | 333 | 333 |
| Secured wholesale funding and asset exchange outflow | $ 600 | $ 600 |

[1] Primarily reflects wholesale brokered certificates of deposits.

## Liquidity Management

Discover’s Corporate Treasury manages liquidity and funding for the Company and Discover Bank. The Treasurer chairs the Asset Liability Committee (the “ALCO”) which regularly monitors liquidity and funding relative to limits consistent with a risk appetite approved by our Board of Directors. Corporate Treasury seeks to maintain a prudent liability maturity profile and ready access to an ample store of primary and contingent liquidity sources. In keeping with regulatory guidance and industry best practices, the Company operates a robust enterprise risk management framework for all of its primary risks. The framework promotes a strong risk management culture that starts at the top with the tone set by the Board of Directors and executive members of the Company’s governance bodies, such as the ALCO for liquidity risk management. Business units and corporate functions form the first line of defense, implementing processes to identify, measure, monitor, manage and report on liquidity risk. For liquidity risk management, Corporate Treasury forms the first line of defense. The second and third lines of defense, Corporate Risk Management (“CRM”) and Internal Audit, hold the first line accountable, conduct regular oversight of the first line’s risk management processes and activities, and help maintain the Company’s common risk infrastructure. For additional information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Liquidity" in the Company’s Annual Report on Form10-K.