

Presale:

Barclays Dryrock Issuance Trust (Series 2023-2)

November 7, 2023

Preliminary rating

Class	Rating	Interest rate (%)(i)	Amount (mil. \$(i)	Credit support (%)	Expected final payment date	Series legal maturity date
A	AAA (sf)	Floating	250.000	18.0	Oct. 15, 2025	Aug. 15, 2028
B	NR	Fixed	54.879	N/A	Oct. 15, 2025	Aug. 15, 2028

Note: This presale report is based on information as of Nov. 7, 2023. The ratings shown are preliminary. This report does not constitute a recommendation to buy, hold, or sell securities. Subsequent information may result in the assignment of final ratings that differ from the preliminary ratings. (i) Interest rates and amounts will be determined on the pricing date. Class A will accrue interest at a floating rate indexed to 30-day compounded SOFR plus a spread. NR--Not rated. N/A--Not applicable.

PRIMARY CREDIT ANALYST

Trang Luu
Austin
+ 1 (214) 765 5887
trang.luu
@spglobal.com

SECONDARY CONTACT

Paul Parys
Englewood
(1) 303-827-9400
paul.parys
@spglobal.com

Profile

Issuer	Barclays Dryrock Issuance Trust.
Collateral	Receivables generated from credit card accounts owned by Barclays Bank Delaware.
Originator, sponsor, servicer, and administrator	Barclays Bank Delaware.
Depositor and transferor	Barclays Dryrock Funding LLC.
Owner trustee	Wilmington Trust N.A.
Indenture trustee	U.S. Bank Trust Co. N.A.
Bank account provider	U.S. Bank N.A.

Rationale

The preliminary 'AAA (sf)' rating assigned to Barclays Dryrock Issuance Trust's (Dryrock) \$250.00 million class A floating-rate asset-backed notes series 2023-2 reflects:

- Our view that the 18.0% credit support provided by the subordinated class B notes is sufficient to withstand the simultaneous stresses we apply to our 7.00% base-case loss rate, 18.00% base-case payment rate, 16.75% base-case yield, as well as our stressed excess spread and purchase rate assumptions (see the S&P Global Ratings' Rating Scenarios below for our 'AAA' stressed assumptions).
- Our view that the 18.0% credit support is also likely to withstand a possible shift in the pool composition due to potential agreement termination of certain co-brand relationships and the resulting involuntary receivables removal from the trust's collateral pool.
- Our view that the 6.0% minimum transferor interest is sufficient in our stress assumptions to absorb dilutions, or noncash reductions, in the receivables.
- Our expectation that under a moderate ('BBB') stress scenario, all else being equal, the rating on the class A notes will be within our credit stability limits (see the Sensitivity Analysis section).
- The collateral characteristics of the credit card receivables together with our assessment of the collateral's credit risk and performance, our updated macroeconomic forecast for the U.S., and our forward-looking view of the credit card sector.
- Our view of Barclays Bank Delaware's (BBD) servicing experience and our opinion of its account origination, underwriting, account management, collections, and general operational practices.
- The series' bank accounts at U.S. Bank N.A., which do not constrain the preliminary ratings.
- Our expectation regarding the timely payment of periodic interest and principal by the final maturity date according to the transaction documents and based on stressed cash flow modeling scenarios, using assumptions commensurate with the assigned preliminary rating.
- Our view of the transaction's underlying payment structure, cash flow mechanics, and legal structure.

Environmental, Social, And Governance

Our rating analysis considers a transaction's potential exposure to ESG credit factors. For credit card asset-backed securities, we view the exposure to environmental credit factors as below average, to social credit factors as above average, and to governance credit factors as average (see "ESG Industry Report Card: Credit Card Asset-Backed Securities," published March 31, 2021). In our view, the exposure to ESG credit factors in this transaction is in line with our sector benchmark.

Social credit factors are generally viewed as above average given the relatively high interest rates for borrowers who carry a balance month to month. However, we believe our approach to determining yield stresses, which considers the impact of any potential legislation or regulatory actions on interest rates and fees, adequately accounts for this risk.

Governance factors are generally viewed as average, reflecting the originator's active role managing the revolving collateral pool over the transaction's life, exposing investors to the risk of

loosening underwriting standards or potential adverse selection. To account for this risk, we assumed that the pool's composition and quality will reflect the originator/servicer's track records, operational strategies, and the historical performance data across varying economic cycles, typically resulting in a higher expected loss than that of the actual pool.

SOFR Interest Rate Benchmark

The class A note coupon will initially be based on compounded SOFR plus a spread. The guidelines for using SOFR are broadly consistent with the Alternative Reference Rates Committee's report "Options for Using SOFR in New ABS, MBS, CMBS Products," published in March 2021. In rating the class A notes, our cash flow analysis modeled the coupon according to our stress ranges for a floating-rate bond described in Table 5 of

"U.S. Credit Card Securitizations: Methodology And Assumptions," published Aug. 24, 2017.

Transaction Overview

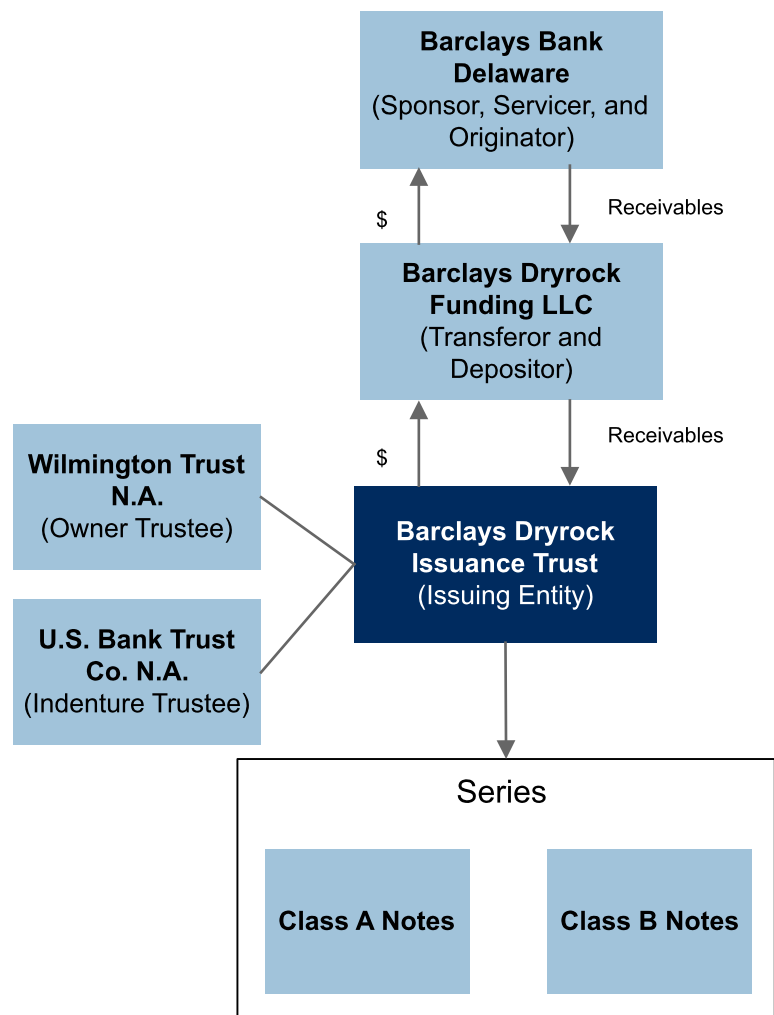
Barclays Dryrock Issuance Trust is a master trust that issues notes through separate discrete series. The series notes are supported by an undivided interest in the master receivables pool on a pari passu basis. The series 2023-2 notes will have a senior/subordinate structure consisting of publicly rated class A notes and unrated class B notes, which make up 18.0% of the total capital structure.

The series 2023-2 notes issued by the trust are backed by a revolving pool of U.S. credit card receivables originated and serviced by BBD, a Delaware-chartered banking entity regulated by the Federal Deposit Insurance Corp. BBD is a wholly owned subsidiary of Barclays Group US Inc., which in turn is a wholly owned subsidiary of Barclays US LLC. Barclays US LLC is a wholly owned subsidiary of Barclays Bank PLC (A+/Stable/A-1).

BBD will transfer the receivables from designated accounts to the transferor (a bankruptcy-remote, special-purpose, wholly owned subsidiary), which in turn, will transfer the receivables to Barclays Dryrock Issuance Trust. S&P Global Ratings will review all of the documentation that the transaction's parties have submitted to us to assess the transaction's consistency with our legal criteria.

Chart 1

Transaction structure



Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

Series 2023-2 Notes Summary

The series 2023-2 transaction structure has not changed from that of the previous series 2023-1, including the issuing entity, eligible accounts and receivables, payment priority, collection and allocation mechanics, early amortization events, and events of default.

The series 2023-2 issuance has the following key features:

- The class A notes pay interest monthly at a floating rate to be determined at pricing.
- Our preliminary rating on the notes addresses the full principal payment by the legal final maturity date.
- The class B notes will provide 18.0% credit support (of the total capital structure) to the class A notes.

- The notes also benefit from a 6.0% minimum transferor interest, which is available to absorb dilution/noncash reductions in the trust's receivables.

Trust Composition And Collateral Overview

As of Sept. 30, 2023, the trust included approximately \$8.1 billion in credit card receivables that were generated by 4.0 million designated accounts. Of these accounts, about 72.7% (84.9% of receivables) were co-branded with 14 different partners (see table 1). The trust also includes accounts that are not co-branded with any partner. Eligible accounts that are transferred to the trust in the future must be part of the approved portfolio, which contains accounts from co-branded and non-co-branded programs that BBD has selected. BBD may select additional co-branded and non-co-branded programs to include in the approved portfolio in the future.

Table 1

Composition by program(i)

Program	No. of accounts	% of total accounts	Total receivables (\$)	% of total receivables
American Airlines	709,280	17.56	1,803,101,773	22.39
JetBlue	412,302	10.21	1,577,636,275	19.59
Non Co-Branded	1,103,520	27.32	1,219,318,666	15.14
UPromise	295,882	7.32	662,106,867	8.22
Hawaiian Airlines	152,967	3.79	582,452,802	7.23
Carnival Cruise Lines	296,518	7.34	525,888,063	6.53
BlackCard	82,237	2.04	398,526,019	4.95
Wyndham Hotels	215,389	5.33	307,942,847	3.82
Priceline.com	204,271	5.06	229,478,664	2.85
RCI	139,602	3.46	220,393,716	2.74
Frontier Airlines	219,853	5.44	188,002,764	2.33
BlueGreen	88,605	2.19	179,080,260	2.22
Miles & More/Lufthansa	35,171	0.87	68,711,072	0.85
Barnes & Noble	64,784	1.60	60,589,130	0.75
Princess Cruise Line	19,495	0.48	30,099,286	0.37
Total	4,039,876	100.00	8,053,328,205	100.00

(i)As of Sept. 30, 2023.

Not all receivables in the approved portfolio have been transferred into the trust, and the approved portfolio's performance and characteristics may differ from those of the trust.

As of Sept. 30, 2023, the trust's designated portfolio included approximately \$8.1 billion in total receivables, which were generated by 4.0 million accounts. The trust portfolio had the following characteristics:

- The weighted average age was approximately 134.9 months.
- The average principal receivables balance was \$1,963.
- The average credit limit was approximately \$12,711.

Presale: Barclays Dryrock Issuance Trust (Series 2023-2)

- The average utilization rate was 15.7%.
- Accounts older than 60 months generated 84.8% of the receivables.
- Accounts 12 months old or younger generated 1.8% of the receivables.
- Of the accountholders, 96.5% made at least the minimum payments and 20.9% made full payments.
- The top five geographic concentrations were New York (11.0% of the receivables), California (9.8%), Florida (9.3%), Massachusetts (6.5%), and Texas (6.1%).
- Of the receivables, 9.2% came from obligors with no FICO scores or FICO scores less than 660, 63.2% were from obligors with FICO scores of at least 720, and 44.4% came from obligors with FICO scores higher than 750.

We believe that the characteristics of the trust's collateral have generally remained stable. We believe that certain key macroeconomic factors, including household debt levels and higher unemployment, could contribute to deterioration in credit card collateral performance. Our existing base-case assumptions for the trust incorporate stressed performance over various economic cycles (see S&P Global Ratings' Credit Rating Assumptions).

Performance Overview

Overall, the receivables in the trust exhibit similar performance trends to receivables in our bankcard CCQI with net loss and yield tracking slightly above and payment rate tracking below the CCQI (see charts 2-4). We began including the Dryrock credit card receivables' performance in our aggregate bankcard CCQI during the October 2012 collection month.

S&P Global Ratings' Ratings' Assumptions

In our cash flow analysis, we assess the availability of asset cash flows to meet the transaction's promised obligations under a variety of stress assumptions, while considering the transaction structure and available credit support. We also use our cash flow analysis in other aspects of our ratings analysis, including the testing of credit stability (sensitivity analysis) and legal final analysis.

Our cash flow analysis assumes an early amortization scenario, during which the stressed yield collections are applied to cover the transaction's monthly expenses (coupons, servicing fee, defaults, and other costs), and principal collection is passed through to investors to pay down the notes.

We applied the assumptions outlined in table 2 in our cash flow analysis to simulate stress scenarios that we believe are appropriate for the assigned preliminary rating. Our assumptions for the trust also considered the potential shift in collateral composition due to potential contract termination of certain co-brand relationships and the resulting involuntary receivables removal from the trust's collateral pool. We believe the assumptions adequately reflect our views regarding: the credit risk of the credit card receivables and corresponding performance; our updated macroeconomic forecast for the U.S.

Table 2

S&P Global Ratings' assumptions

	Net losses (i)	Total payment rate(ii)	Yield(ii)	Excess spread	Purchase rate(ii)
Base-case assumption (%)	7.00	18.00	16.75	(6.00)	N/A
'AAA' rating stresses(%)	37.00	9.00	11.00	(5.00)	2.00

(i)In the 'AAA' rating scenario, losses rise to the stressed level in 12 months. (ii)The total payment, yield, and purchase rates start at the stressed levels in the first month of our cash flow runs. N/A--Not applicable.

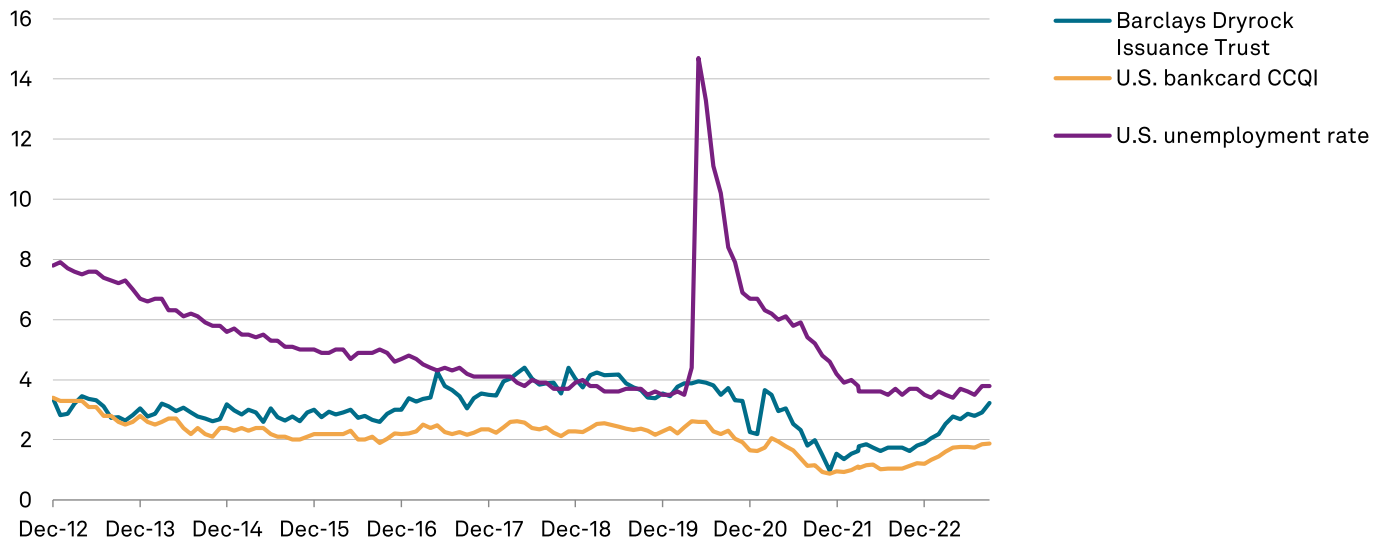
Loss Performance

Our base-case loss assumption for Dryrock is 7.0%. This is a forward-looking view that considers potential changes in the pool composition and incorporates macroeconomic variables, including S&P Global Ratings' 2023 unemployment forecast under our baseline economic scenario.

As of September 2023, net losses for the trust's portfolio were averaging about 3.2%, higher than the CCQI's 1.9% (see chart 2).

Chart 2

Net loss rate (%) (i)



(i)Based on S&P Global Ratings' CCQI data. CCQI--Credit Card Quality Index.

Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

For our loss rate assumptions, we use our U.S. bankcard CCQI as an industry benchmark against which we compare and measure outstanding pools based on collateral performance. The 'AAA' peak charge-off rate for the benchmark pool is 33.0%, which reflects our opinion of expected performance under extreme economic stress. When we review individual pools, we also use peer group comparisons in refining our evaluation of a specific pool relative to other similar portfolios

based on collateral characteristics.

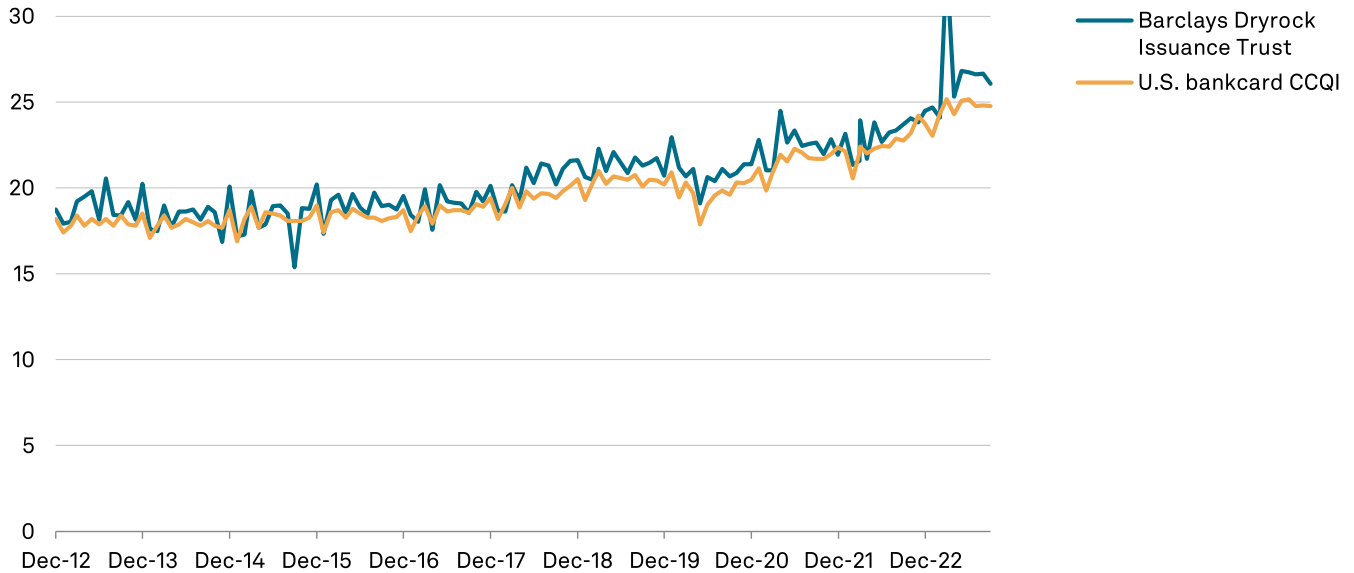
During the Great Recession, loss rates in the approved portfolio increased similarly to our aggregate loss rate in our bankcard CCQI based on annual averages. Both the approved portfolio's and the CCQI's loss rates increased by higher percentages than the U.S. unemployment rate over the same time period. Since then, both the approved portfolio and the trust portfolio loss rates have declined, but less than the CCQI. Our 37.0% 'AAA' stressed annualized peak loss assumption for this pool is higher than the 33.0% floor that we established for a benchmark pool in an extreme economic scenario for a 'AAA' rating. This reflects our view that loss rates could be less predictable in this pool in a stress scenario because of the relatively less-seasoned accounts, the shorter performance history of the trust and certain partners compared to other pools in our CCQI, and the potential shift in the pool composition, which could affect pool performance and credit quality.

Yield Performance

Our base-case yield assumption for Dryrock is 16.75%. The yield for the trust portfolio has been tracking slightly above the yield for the CCQI (see chart 3). Consistent with our criteria, in cash flows at the 'AAA' rating level for bank credit card pools, we generally assume yield to be compressed at 10.00%-13.00% by the time a trust enters rapid amortization. For this trust, our stress assumption of 11.00% at the 'AAA' rating level is 65.70% of our base-case assumption of 16.75%. The smaller haircut for this trust (relative to our example of haircut ranges listed in our criteria) reflects our assumption that because of the relatively high credit quality of the cardholders in the trust, we believe this pool is less likely to experience a sharp increase in delinquencies in a downturn, resulting in less volatility in stressed yield compared with pools that include a high portion of nonprime accounts. In addition, we consider the effect that legislation or regulatory actions could have on interest rates, fees, and competitive pressures, which could also result in a 10.00%-13.00% yield range.

Chart 3

Annualized yield (%)⁽ⁱ⁾



Note: There was a spike in performance in March 2023 due to a large account addition mid-month. (i)Based on S&P Global Ratings' CCQI data. CCQI--Credit Card Quality Index.

Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

Payment Rate Performance

Our base-case payment rate assumption is 18.0%. For the past few years, the trust's payment rate has been tracking consistently below the U.S. bankcard CCQI, at approximately 32.9% as of September 2023. Overall, payment rates in the CCQI have trended upwards since the onset of the pandemic, attributable to reduced consumer spending, government aid, and the credit quality of the trust pools (see chart 4).

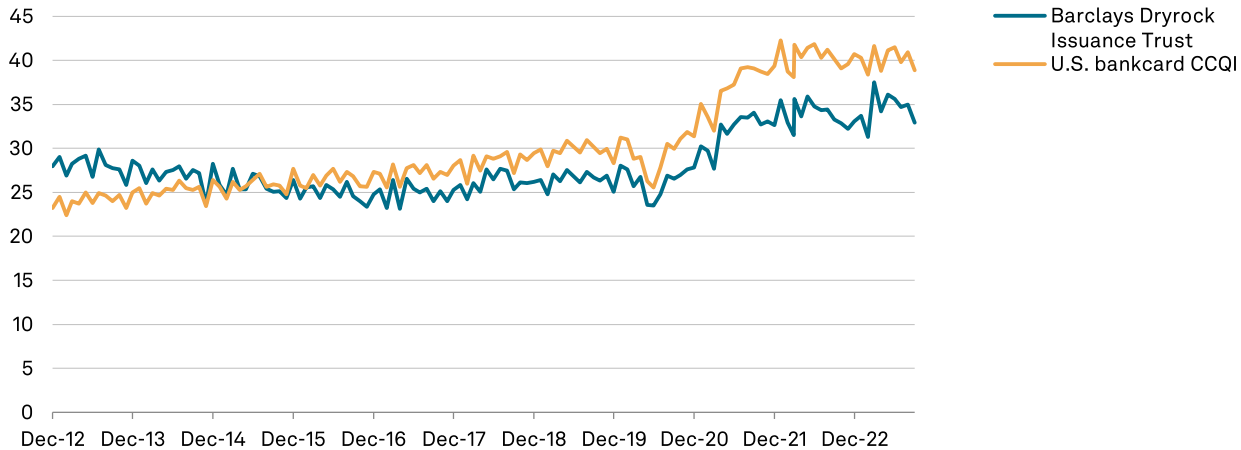
We consider the diversification of the co-branded programs in this pool to be a positive factor in our base-case assumption. A pool that relies on multiple relationships is less likely to lose all its programs simultaneously than a pool that relies on only one relationship. Nevertheless, our base-case assumption is lower than the trust portfolio's performance. This reflects hypothetical scenarios in which we remove one or more partners to reflect our view of the accounts' reliance on co-branded relationships, which typically attract convenience users who are likely to pay down all or most of their outstanding balances each month. In September 2023, 20.9% of accounts paid off the prior month's outstanding balance in full.

In our stress scenarios, consistent with our criteria, we assume that the number of convenience users in the pool will decline before the amortization period begins and the portion of revolving accounts (users who carry over some of their debt to subsequent months) will increase, which could result in a significant drop in payment rates. In our analysis, when modeling our 'AAA' rating

scenario, we assume that payment rates immediately decrease to the stressed level.

Chart 4

Monthly payment rate (%)⁽ⁱ⁾



(i)Based on S&P Global Ratings' CCQI data. CCQI--Credit Card Quality Index.
Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

Purchase Rate

The purchase rate is the rate at which new receivables are created and transferred to the trust as cardholders use their credit cards to make purchases or cash advances. The transfer of new receivables affects the level of principal receivables in the trust and the monthly collections available to repay the notes.

Our 'AAA' purchase rate assumption of 2.00% is based on our assessment of the credit quality of the originator relative to the preliminary rating assigned to the notes, the originator's ability to continue generating and transferring receivables to the trust, the originated receivables' credit characteristics, the originator's relationship with Barclays Bank PLC (the ultimate parent company; A+/Stable/A-1), and the diversity of the partners in the pool.

Dilution Analysis

Under the transaction's terms, the minimum transferor interest will equal at least 6.00% of the principal receivables to cover dilution, or noncash reductions, in the principal receivables balance. Noncash reductions generally include credits, fraud, and small balance adjustments. In our analysis, we reviewed the trust's available historical monthly fraud and return data, as well as peer data. Based upon the available data, we believe that the 6.0% minimum transferor interest remains sufficient in our stress scenarios to cover dilution.

Sensitivity Analysis

Our ratings incorporate credit stability as one of several factors that we use to determine an issuer's or an issue's creditworthiness.

Accordingly, we undertook sensitivity analysis assuming the pool's base-case loss rate would increase to our current 'BBB' stressed loss rate assumption. We believe that under a moderate ('BBB') stress scenario, all else being equal, our preliminary rating will be within the credit stability limits specified by section A.4 of the Appendix of (see "S&P Global Ratings Definitions," published June 9, 2023).

Structural Overview And Payment Priority

Finance charge waterfall

On each payment date, the servicer or the indenture trustee will apply finance charge collections on deposit in the collection account and available to the series 2023-2 notes in the priority shown in table 3.

Table 3

Finance charge waterfall

Priority	Payment
1	The class A notes' monthly interest and additional interest, if any.
2	The series 2023-2 servicing fee.
3	The class B notes' monthly interest and additional interest, if any.
4	The series 2023-2 default amount.
5	Reimburse investor charge-offs and reallocated principal, if any.
6	Make targeted deposits into the accumulation reserve account during the accumulation reserve account funding period.
7	Treat finance charge collections as available principal collections to pay the outstanding principal amount if the series 2023-2 notes are accelerated upon an event of default.
8	Any remaining amounts will be available to share with other series in the shared excess available finance charge collections group.
9	Apply to the holder of the transferor interest or other payment obligations based on the documents.

If available finance charge collections are not sufficient to pay the class A monthly interest or servicing fee, then principal will be reallocated from the class B notes' share of principal collections to pay those amounts (the monthly subordination amount).

During the accumulation period, the notes will also benefit from an accumulation reserve account totaling 0.50% of the series 2023-2 notes' outstanding dollar principal amount, which is available to cover negative carry (the difference between the available yield from the receivables and the reinvestment rate on the amounts accumulated in the funding account). This amount is available to pay monthly interest during the accumulation period and is funded from the finance charge collections; the funding of the reserve will begin between three and 12 months before the controlled accumulation period begins, depending on the quarterly excess spread percentage. For

example, if the quarterly excess spread percentage is at least 4.00%, then the account will be funded three months before the controlled accumulation period. However, if the quarterly excess spread percentage is less than 2.00%, then the account will be funded 12 months before the controlled accumulation period.

Principal Waterfall

All of the principal collections that are allocated to the series 2023-2 notes and the finance charge amounts that are available to reimburse charged-off receivables and reallocated principal, and to pay outstanding principal amounts upon an event of default, will be available to make the following deposits and payments:

- During the revolving period, principal collections that are deposited into the collection account and are available to the series 2023-2 notes will be treated as shared excess available principal collections, benefiting other series in the shared excess available principal collections group.
- During the controlled accumulation period, the series monthly principal will be deposited into the principal funding account so that the total accumulated amount is sufficient to pay the stated principal note amounts on the expected final payment date. The controlled accumulation period is scheduled to start 12 months before the expected final payment date, but the actual controlled accumulation period length could be shorter--up to one month before the expected final payment date depending on available principal collections in the trust at the time. On the expected payment date, the payments will be sequential: The class A noteholders will receive their class A stated principal amounts, and then the class B noteholders will get their class B stated principal amounts.
- During an early amortization period, the distribution and payment of available principal collections will be sequential. First, the series 2023-2 monthly principal will be distributed to the paying agent to pay the class A noteholders until the class A stated principal amount has been paid in full. Second, the series monthly principal will be distributed to the class B noteholders until the class B stated principal amount has been paid in full. Any remaining principal collections will be available to share with other series in the shared excess available principal collections group.

Early Amortization, Early Redemption, And Events Of Default

The early amortization events include the following:

- The issuer becomes an investment company according to the Investment Company Act.
- The quarterly excess spread percentage is less than zero.
- The transferor fails to transfer receivables in additional accounts within five business days after it is required based on the documents.
- The transferor or BBD becomes insolvent.
- BBD's ability to transfer credit card receivables to include in the issuing entity is restricted.
- A servicer default occurs, including its failure to make any payment, transfer, or deposit within five business days when due, or its failure to observe or perform its covenants or agreements, which has an adverse effect and continues unremedied for 60 days; the servicer makes an incorrect representation, warranty, or certification for 60 days; or the servicer becomes insolvent.

Presale: Barclays Dryrock Issuance Trust (Series 2023-2)

- The notes are not paid in full on the expected payment date.
- The notes are accelerated upon an event of default, including the issuer's failure for 35 days to pay note interest when due, its failure to pay the stated principal amount on the legal maturity date, its default for 90 days in its performance or breach of any of its covenants or warranties, or its bankruptcy or insolvency.
- The transferor fails to make a payment or deposit for five business days after it is due.
- The transferor fails to duly observe or perform its covenants or agreements, and that failure continues unremedied for 60 days.
- Any representation or warranty made by the transferor or any information contained in an account schedule is incorrect and continues unremedied for 60 days.

These early amortization events will trigger an early amortization period immediately without any notice or other action on the part of the indenture trustee or the noteholders, except for servicer default, the transferor's unremedied failure to duly observe or perform its covenants or agreements, or the unremedied incorrect representation, warranty, or information contained in an account schedule.

In our opinion, the 34-month period from the expected principal payment date to the series final maturity date allows sufficient time to realize interest and principal collections, recoveries, and other funds that could be used to pay down the notes. The stressed cash flow scenarios assumed 'AAA' payment and purchase rates to stress the transaction's liquidity.

Counterparty And Operational Risks

On or before the closing date, the bank accounts will be established with U.S. Bank N.A. (A+/Stable/A-1). Our assessment of the bank account provider is consistent with our counterparty criteria for a 'AAA' supported transaction given its replacement framework (see "Criteria | Structured Finance | General: Counterparty Risk Framework: Methodology And Assumptions," published March 8, 2019).

As servicer, Barclays Bank Delaware has an experienced management team that oversees origination, underwriting, servicing, collections, and general operational practices. Commingling risk is addressed by the requirement that all collections are deposited into the series collections account within two business days of collection. This requirement meets our counterparty criteria framework. Our operational risk assessment of Barclays Bank Delaware as servicer does not constrain the ratings (see "Global Framework For Assessing Operational Risk In Structured Finance Transactions," published Oct. 9, 2014).

Related Criteria

- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- Criteria | Structured Finance | General: Global Framework For Payment Structure And Cash Flow Analysis Of Structured Finance Securities, Dec. 22, 2020
- Criteria | Structured Finance | Legal: U.S. Structured Finance Asset Isolation And Special-Purpose Entity Criteria, May 15, 2019
- Criteria | Structured Finance | General: Counterparty Risk Framework: Methodology And

Assumptions, March 8, 2019

- Criteria | Structured Finance | General: Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions, Jan. 30, 2019
- Criteria | Structured Finance | ABS: Global Credit Card ABS Methodology And Assumptions, Oct. 9, 2014
- Criteria | Structured Finance | General: Global Framework For Assessing Operational Risk In Structured Finance Transactions, Oct. 9, 2014
- General Criteria: Global Investment Criteria For Temporary Investments In Transaction Accounts, May 31, 2012
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- Criteria | Structured Finance | General: Methodology For Servicer Risk Assessment, May 28, 2009

Related Research

- Economic Outlook U.S. Q4 2023: Slowdown Delayed, Not Averted, Sept. 25, 2023
- U.S. And Canada Credit Cards ABS Review, Feb. 23, 2023
- Global Structured Finance 2023 Outlook, Jan. 11, 2023

Copyright © 2024 Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.