



## Presale:

# **BA Credit Card Trust Class A(2023-1)**

June 8, 2023

## **Preliminary rating**

Class	Preliminary rating	Amount (mil. \$)	• • • • • • • • • • • • • • • • • • • •	Expected maturity date	Legal maturity date
A(2023-1)	AAA (sf)	500	31.75	May 15, 2026	May 15, 2028

Note: This presale report is based on information as of June 8, 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.

#### **Profile**

Issuer trust collateral	The collateral certificate, series 2001-D, which represents an undivided interest in credit card receivables generated by revolving credit card accounts designated to BA Master Credit Card Trust II.
Issuing entity	BA Credit Card Trust.
Originator, sponsor, and servicer	Bank of America N.A. (A+/Stable/A-1).
Transferor and depositor	BA Credit Card Funding LLC.
Indenture trustee	The Bank of New York Mellon.
Owner trustee	Wilmington Trust Co.
Bank account provider	The Bank of New York Mellon.

## Rationale

The preliminary 'AAA(sf)' rating assigned to BA Credit Card Trust's (BACCT's) BAseries class A(2023-1) notes reflects:

- The 31.75% credit support that the outstanding class B and C notes, as well as the class D certificate, provide. However, we only consider 21.25% as available to the class A notes under our 'AAA' stress scenario because we assume the class D certificate (10.50% credit support) is completely written down before amortization. We believe that the 21.25% available credit support is sufficient to withstand the simultaneous stresses we apply to our 6.50% base-case loss rate, 15.00% base-case payment rate, 15.00% base-case yield, and 3.00% purchase rate assumptions for the credit card receivables backing the notes. In addition, we used stressed

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excess spread and note interest rate assumptions to assess whether, in our opinion, sufficient credit support is available for the notes. All of the stress assumptions outlined above are based on our current criteria and assumptions (for more information, see "U.S. Credit Card Securitizations: Methodology And Assumptions," published Aug. 24, 2017).

- Our view that the 4.00% minimum transferor interest will be insufficient in our 'AAA' stress scenario to absorb dilutions (noncash reductions in the receivables) stress of 5.00%. As such, our 'AAA' rating stress reflects 1.00% uncovered dilution, which is captured in our cash flow analysis.
- The timely payment of interest each month and full principal repayment made by the legal final maturity date under our stressed cash flow modeling scenarios for the assigned preliminary rating.
- Our expectation that under a moderate ('BBB') stress scenario, all else being equal, the preliminary 'AAA (sf)' rating will be within our credit stability limits.
- Our view of the credit risk that is inherent in the collateral loan pool (based on our economic forecast), the master trust portfolio's historical performance, the collateral characteristics, and vintage performance data.
- That the trust receivables performance has remained steady throughout 2022 and 2023. We believe our base-case and stressed assumptions continue to adequately capture the credit risks of the credit card receivables and corresponding performance, our updated macroeconomic forecast for the U.S., and our forward-looking view of the credit card sector.
- Our view of Bank of America N.A.'s (BANA; 'A+/Stable/A-1') servicing experience and account origination, underwriting, account management, collections, and general operational practices.
- Our view of the transaction's payment structure, cash flow mechanics, and legal structure.

# Environmental, Social, And Governance (ESG) Factors

Our rating analysis considers a transaction's potential exposure to ESG credit factors. For credit card ABS, 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. Governance credit 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 performance data.

# Class A(2023-1) Note Terms Summary

All aspects of the note structure are unchanged from the prior transaction, including the issuer, eligible accounts and receivables, payment priority, collections and allocation mechanics, early redemption events, and events of default.

Key features of the class A(2023-1) issuance include the following:

- The notes will pay fixed-rate interest monthly on the 15th day of each calendar month, or if it is not a business day, the next business day, beginning in August 2023.
- The class B and C BAseries notes, as well as the class D certificate, will provide credit support to the class A(2023-1) notes. Based on the transaction documents, BACCT may issue additional tranches of class A notes as long as the minimum class B and C BAseries notes and class D certificate requirement is outstanding to support them.
- Based on the transaction's documents, the class B and C BAseries notes' minimum subordination percentages required to support the class A notes are 14.28571% and 12.69841%, respectively, when expressed as a percentage of the class A notes' adjusted outstanding dollar principal amount. When expressed as a percentage of the entire capital structure, these credit support levels translate to 11.25% and 10.00% credit support from the class B and C notes, respectively. The minimum required class D certificate's investor interest percentage that benefits the class A notes is 10.50% of the BAseries notes outstanding principal amount.

#### **Transaction Overview**

BACCT is a master trust that issues notes through separate series, supported by a collateral certificate (series 2001-D) issued by BA Master Credit Card Trust II. Currently, the BAseries is the only issued and outstanding series of BACCT. The BAseries is structured in which delinked tranches can be issued as long as certain issuance conditions are met, such as ensuring the minimum required credit support is available for each class of notes.

The BAseries has a senior-subordinated capital structure consisting of class A, B, and C notes, with sequential payment of interest and principal in order of class seniority. The class A, B, and C notes issuances are independent of each other. However, BACCT cannot issue additional notes unless the required credit enhancement for that class of notes (classes B and C for class A, and class C for class B) is available.

Based on the capital structure, the class A notes are supported by 11.25% subordination from the class B notes and 10.00% subordination from the class C notes. The class B notes are supported by 10.00% subordination from the class C notes. The class C notes benefit from a dynamic cash reserve account that begins funding if the BAseries' three-month average excess spread is less than 4.50%. Additionally, all BAseries notes are supported by 10.50% of the total outstanding principal amount of the BAseries notes from the class D certificate issued by BA Master Credit Card Trust II.

#### **Collateral Overview**

BACCT's primary asset is the series 2001-D collateral certificate, which represents an undivided interest in BA Master Credit Card Trust II, which in turn, is collateralized by a revolving pool of Visa

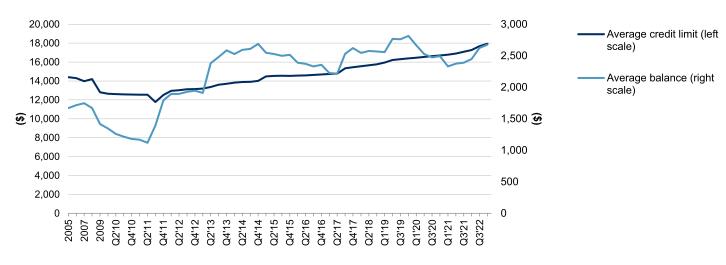
Chart 1

Chart 2

and MasterCard credit card receivables generated by consumer credit card accounts that are originated and serviced by BANA.

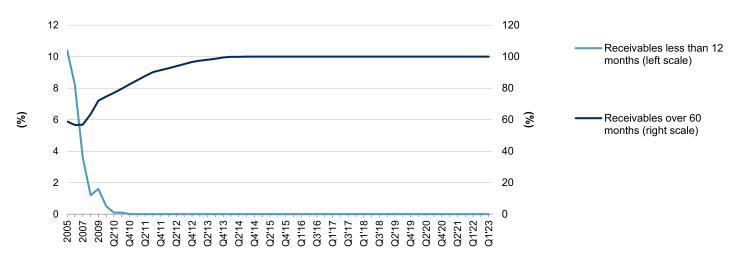
We believe the receivables in this portfolio are geographically diverse and are from well-seasoned prime accounts. Both the average credit limit and average balance have been relatively stable during the past several years. As of April 1, 2023, 100.0% of the total receivables were generated by accounts older than 72 months. In addition, the receivables representing FICO scores greater than 720 have continued to steadily rise over the past several years (see charts 1-3).

Historical master trust average account balance and credit limit



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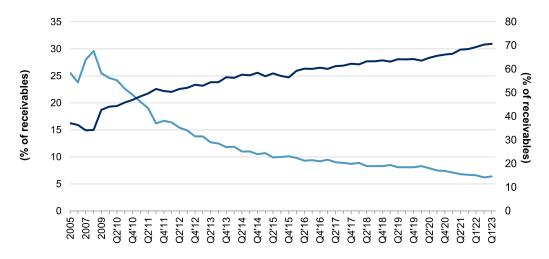
Historical master trust seasoning



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Chart 3

#### Historical master trust FICO scores



FICO 660 and below (left scale)

FICO 720 and above (right scale)

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The trust's credit profile and performance trend are stable. We believe our base-case and stressed assumptions continue to adequately reflect our view regarding credit risk of the credit card receivables and corresponding performance, our updated macroeconomic forecast for the U.S., and our forward-looking view of the credit card sector.

We compared the master trust's performance with our U.S. bankcard Credit Card Quality Index (CCQI). The trust's loss rate has historically trended above the CCQI. The trust's yield and payment rate have historically trended below the CCQI (see charts 4-6).

# S&P Global Ratings' Assumptions

Generally, our base-case assumptions reflect our view of the trust's expected performance during multiple economic scenarios and forecasted economic variables for the next 18-24 months based on trust-specific performance trends (i.e., delinquency, delinquency roll rates, pool stratification quality and consistency, underwriting, and account management); trust performance relative to peers; and trust sensitivity to our forecasted economic variables, such as unemployment and bankruptcy rates.

A summary of the stresses we used when assigning our preliminary rating to the class A(2023-1) notes is shown in table 2.

Table 2

## S&P Global Ratings' rating scenarios

	Net losses (%)(i)	Total payment rate (%)(ii)	Yield (%)(ii)	Purchase rate (%)(ii)	Uncovered dilution
Base-case assumption (%)	6.50	15.00	15.00	N/A	N/A

Table 2

# S&P Global Ratings' rating scenarios (cont.)

	Net losses	Total payment rate		Purchase rate	
	(%)(i)	(%)(ii)	Yield (%)(ii)	(%)(ii)	Uncovered dilution
'AAA' rating stress assumption (%)	38.25	7.50	10.00	3.00	1.00

(i)In our 'AAA' rating scenario, losses rise to the stressed multiple over 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.

Our loss rate assumption is generally above the trust's current performance, and our payment rate and yield assumptions are generally below the trust's current performance because we believe that revolving pools could change over time and performance could weaken if unseasoned accounts with lower credit quality are included in the trust. The stresses we use are commensurate with 'AAA' level rating scenarios and are based on our criteria "U.S. Credit Card Securitizations: Methodology And Assumptions," published Aug. 24, 2017.

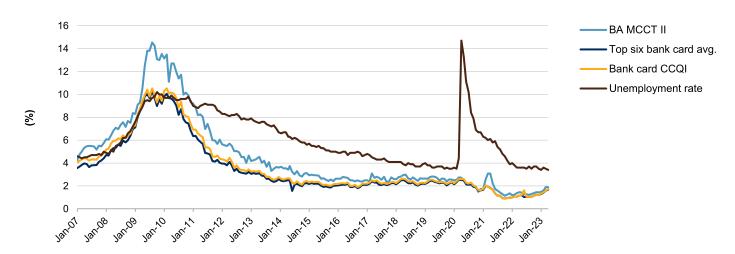
## **Loss Rate**

Our 6.50% base-case loss assumption for BACCT is a forward-looking view that considers macroeconomic variables, including S&P Global Ratings' unemployment forecast under our baseline economic scenario.

Our stressed annualized peak loss assumption for this pool is higher than the 33.00% that we established for a benchmark pool in an extreme economic scenario for a 'AAA' rating. The higher stress we apply reflects our opinion that this pool could perform weaker than the benchmark pool during a downturn, based on our observation of higher and more volatile losses in this pool than those of the benchmark pool during the last recession. The trust's loss rate is historically slightly higher than the CCQI industry average and is averaging approximately 1.7% for first-quarter 2023 (see chart 4). Delinquency rates have been generally stable attributable to the trust's strong collateral credit characteristics. We continue to monitor the evolving economic environment and expect the master trust loss rates to remain relatively stable over the next 18-24 months based on the current pool composition.

Chart 4

#### Loss rate



BA MCCT II--BA Master Credit Card Trust II. CCQI--Credit card quality index. Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

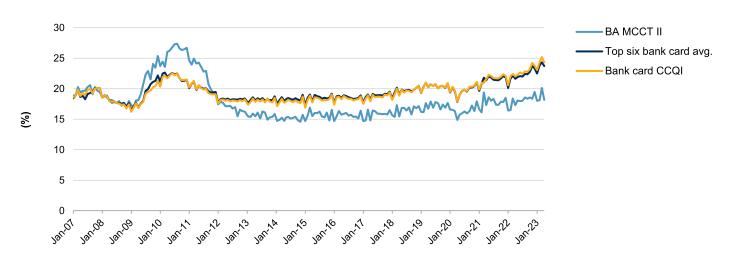
## Yield

Our base-case yield assumption for the pool is 15.00%. This pool's receivables have generally produced yields that are lower than our CCQI (see table 1 above and chart 5 below). In cash flows at the 'AAA' rating level for bank credit card pools, we generally assume the yield will be compressed in the 10.00%-13.00% range by the time a trust enters rapid amortization.

For BACCT, our 'AAA' stressed yield is 10.00%, which is 67.00% of the base case. The smaller haircut for this trust (relative to our example of haircut ranges listed in our criteria) reflects our assumption that, due to high credit quality, seasoned cardholders are more likely to experience smaller increases in delinquencies than nonprime accounts in a downturn. This results in less volatility in stressed yield than pools that include a high portion of nonprime accounts. In addition, we also consider the effect legislation or regulatory actions could have on interest rates, fees, and competitive pressures, which could result in a yield in the 10.00%-13.00% range.

Chart 5

#### Yield



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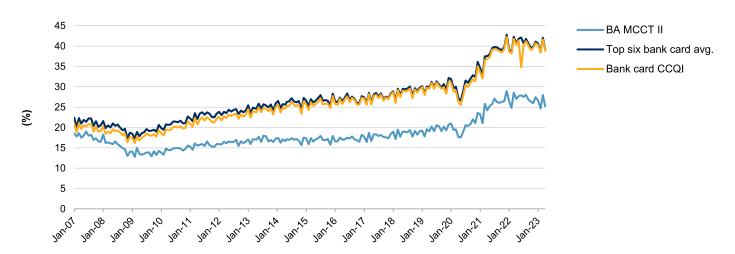
# **Payment Rate**

Our base-case total payment rate assumption for the pool is 15.00%. Total payment rates have steadily increased over the past few years, averaging around 22.0% since 2018 partly due to a steady increase in convenience-users paying the balance in full each month (see chart 6). As of the end of first-quarter 2023, about 20.20% of the obligors in the pool paid down their balances in full each month (see chart 7).

Although the portfolio's payment rate has steadily increased, our stress scenarios assume that the number of convenience users in the pool declines and that the portion of revolvers (who carry at least some of their debt over to subsequent months) increases before the amortization period begins. Therefore, our 15.00% base-case assumption is well-below the actual monthly payment rates. The trust has a lower proportion of full payers relative to peers, which results in a lower payment rate in this trust compared with the CCQI and its peers.

Chart 6

## Payment rate

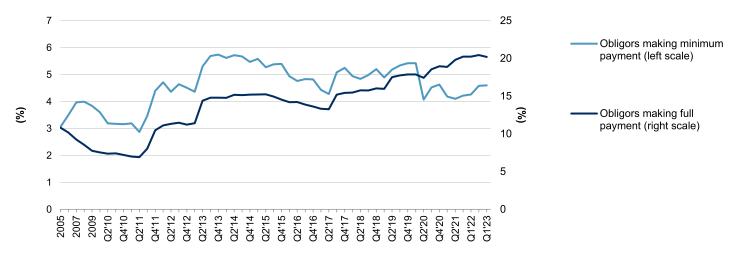


BA MCCT II--BA Master Credit Card II. CCQI--Credit card quality index.

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Chart 7

# Historical master trust obligor minimum and full payments



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# **Purchase Rate**

We assumed a purchase rate of 3.00% in our 'AAA' rating scenario. Our purchase rate assumption accounts for our credit rating on the originator relative to the rating we assigned to the notes, the

originator's ability to continue generating and transferring receivables to the master trust, and the originated receivables' credit characteristics.

For BACCT, our purchase rate assumptions consider the issuer credit rating assigned to BANA (A+/Stable/A-1), the originator. In our view, BANA's performance is strong as both the originator and servicer of BACCT's credit card accounts and receivables. We believe that BANA has proven it can consistently originate, manage, and service accounts and receivables throughout economic and business cycles.

# **Dilution Analysis**

Under the transaction's terms, the minimum transferor interest will equal at least 4.00% of the average principal receivables to cover dilution, or noncash reductions, in the principal receivables balance. Dilution includes refunds, rebates, and credit adjustments.

In our analysis, we reviewed the trust's available historical monthly dilution data, as well as peer data. Based upon the available data, we believe that the 4.00% minimum transferor's interest will be insufficient in our 'AAA' stress scenario to cover our dilution stress of 5.00%. Our 'AAA' stress reflects a 1.00% uncovered dilution, which is captured in our cash flow analysis.

# **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 Nov. 10, 2021).

## Structural Overview

These notes are part of the BAseries, in which delinked tranches can be issued as long as they meet certain issuance conditions, including sufficient subordination to provide the required credit support. The notes are secured by credit card receivables generated by revolving credit card accounts owned by BANA.

# **Payment Priority**

The issuer allocates available finance charge collections to the BAseries notes on each distribution date in the priority shown below (see table 3).

Table 3

#### Finance charge waterfall

Priority	Payment
1	Accrued and unpaid interest on each tranche of the class A notes.
2	Accrued and unpaid interest on each tranche of the class B notes.
3	Accrued and unpaid interest on each tranche of the class C notes.
4	Due and unpaid servicing fees.

Table 3

## Finance charge waterfall (cont.)

Priority	Payment	
5	Cover the investor default amounts(i) exceeding the class D investor interest.	
6	Reimburse the class A, B, and C nominal liquidation amount deficit.	
7	Deposit into accumulation reserve account.	
8	Deposit into the class C reserve account, if necessary.	
9	Any other payments or deposits required for any tranche of notes.	
10	Cover the class D investor default amount(ii).	
11	Reimburse the class D nominal liquidation amount deficit.	
12	Share the excess available funds.	
13	Remainder to issuing entity.	

(i)The investor default amount is defined in the transaction's documents as the class D investor default amount minus the class D investor interest. (ii)The class D investor default amount is defined in the transaction's documents as the total investor default allocated to the BAseries notes until the class D investor interest has been reduced to zero.

Under the payment structure outlined in the payment waterfall, the available finance charge collections will be used to fund the class C reserve account before covering the class D investor defaults if the trust breaches the excess spread trapping trigger. This may result in insufficient excess spread being available to cover the class D investor default amount, which could cause the entire class D certificate balance to be written-down during the revolving period. In our preliminary 'AAA' rating scenario, we assume that the class D certificate amount will be fully written down and unavailable as credit enhancement for the class A notes; we assume that only the 21.25% credit support that the class B and C notes provide will be available as credit enhancement for the class A notes.

If the available finance charge collections are insufficient to pay the monthly interest payments or the servicing fee, the shortfalls will be paid by reallocating amounts from the BAseries notes' available principal collections that are allocable to the subordinated classes of the BAseries notes, to the extent available. Reallocated principal collections and unreimbursed investor charge-offs, if any, will reduce the BAseries notes' investor interest.

During the revolving period, principal collections that are allocated to the BAseries notes will be paid to the transferor, and the transferor will then reinvest the amount in new receivables. If the required transferor's interest and the required minimum principal receivables tests are not maintained, the principal collections will be deposited into the excess funding account to meet these thresholds before being released to the transferor. During the controlled accumulation period, collected principal will be deposited into a principal funding account daily for distribution to the noteholders on the expected final payment date. The transaction documents provide that a reserve account, which will be funded to 0.50% of the class A, B, and C notes' nominal liquidation amounts from the excess cash flow, will be available to cover any negative carry risk if the investment earnings on the cash that is deposited into the principal funding account are less than the amount needed to make monthly interest payments on the notes during the accumulation period.

If an early redemption event occurs at any time, the principal collections allocated to the BAseries notes will be immediately distributed to the noteholders in the following priority:

- To the class A notes until paid in full;

- To the class B notes until paid in full; and then
- To the class C notes until paid in full.

Early redemption events include the following:

- The transaction fails to make principal payments on the expected principal payment date;
- The three-month average excess spread percentage for any monthly period is less than zero;
- The issuing entity becomes an "investment company" as defined by the Investment Company Act of 1940; and
- A pay-out event occurs under BA Master Credit Card Trust II.

BA Credit Card Trust II's pay-out events include the following:

- The transaction fails to make interest or principal payments to the noteholders when due and payable;
- The transferors breach any material representations or warranties;
- A servicer default occurs;
- The seller or transferor cannot, for any reason, transfer receivables to the trust;
- The transferor or originator enters insolvency or bankruptcy; and
- The entity becomes an "investment company" as defined by the Investment Company Act of 1940

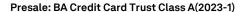
#### Related Criteria

- 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: U.S. Credit Card Securitizations: Methodology And Assumptions , Aug. 24, 2017
- 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**

- U.S. Credit Card Quality Index: Monthly Performance--April 2023, May 26, 2023
- Economic Outlook U.S. Q2 2023: Still Resilient, Downside Risks Rise, March 27, 2023
- U.S. and Canada Credit Cards ABS Review, Feb. 23, 2023
- Global Structured Finance 2023 Outlook, Jan. 11, 2023



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