S&P Global Ratings

Research

Presale:

Veridian Auto Receivables Trust 2023-1

May 18, 2023

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Preliminary ratings

Class	Preliminary rating	Type	Interest rate (i)	Preliminary amount (mil. $)	Legal final maturity date
A-1	A-1+ (sf)	Senior	Fixed	44.00	May 15, 2024
A-2	AAA (sf)	Senior	Fixed	112.50	Aug. 17, 2026
A-3	AAA (sf)	Senior	Fixed	75.60	March 15, 2028
A-4	AAA (sf)	Senior	Fixed	35.60	Dec. 15, 2028
B	AA (sf)	Subordinate	Fixed	11.80	April 16, 2029
C	A (sf)	Subordinate	Fixed	10.50	July 16, 2029
D	BBB (sf)	Subordinate	Fixed	10.00	Sept. 15, 2031

Note: This presale report is based on information as of May 18, 2023. 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)The interest rate for each class will be determined on the pricing date.

Profile

Expected closing date	May 30, 2023.
Collateral	Prime auto loan receivables.
Issuer	Veridian Auto Receivables Trust 2023-1.
Sponsor, originator, seller, servicer, and administrator	Veridian Credit Union.
Depositor	Veridian Auto Funding LLC.
Indenture trustee and paying agent	U.S. Bank Trust Co. N.A. (A+/Stable/A-1).
Backup servicer	Vervent Inc.
Owner trustee	Wilmington Trust N.A. (A-/Stable/A-2).
Bank account provider	U.S. Bank N.A. (A+/Stable/A-1).

Rationale

The preliminary ratings assigned to Veridian Auto Receivables Trust 2023-1's (VCU 2023-1's) asset-backed notes reflect our view of:

- The availability of approximately 14.38%, 10.91%, 7.79%, and 5.28% credit support (hard credit enhancement and haircut to excess spread) for the class A (collectively, class A-1, A-2, A-3, and A-4), B, C, and D notes, respectively, based on our stressed cash flow scenarios. These credit support levels provide coverage of at least 5.00x, 4.00x, 3.00x, and 2.00x our 2.30% expected cumulative net loss (ECNL) for the class A, B, C, and D notes, respectively (see the Credit Enhancement And Collateral and the Cash Flow Modeling Assumptions And Results sections below).
- Our expectation that under a moderate ('BBB') stress scenario (2.0x our expected loss level), all else being equal, our preliminary 'A-1+ (sf)'/'AAA (sf)', 'AA (sf)', 'A (sf)', and 'BBB (sf)' ratings on the class A, B, C, and D notes, respectively, are within our credit stability limits (see the Cash Flow Modeling Assumptions And Results section below).
- The timely payment of interest and principal by the designated legal final maturity dates under our stressed cash flow modeling scenarios, which we believe are appropriate for the assigned preliminary ratings.
- The collateral characteristics of the series' prime automobile loans, our view of the credit risk of the collateral, and our updated macroeconomic forecast and forward-looking view of the auto finance sector (see the Credit Enhancement And Collateral and the Macroeconomic And Auto Finance Sector Outlook sections below).
- The series' bank accounts at U.S. Bank N.A., which do not constrain the preliminary ratings.
- Our operational risk assessment of Veridian Credit Union (Veridian) as servicer, and our view of the company's underwriting and backup servicing arrangement with Vervent Inc.
- Our assessment of the transaction's potential exposure to environmental, social, and governance credit factors that are in line with our sector benchmark.
- The transaction's payment and legal structures.

Our ECNL for VCU 2023-1 is 2.30% and reflects:

- The managed portfolio's performance and the origination static pool performance;
- The transactions' collateral characteristics relative to those of peers; and
- Our forward-looking view of the auto finance sector.

Environmental, Social, And Governance (ESG) Factors

Our rating analysis considers a transaction's potential exposure to ESG credit factors. For the auto ABS sector, we view the exposure to environmental credit factors as above average, to social credit factors as average, and to governance credit factors as below average (see "ESG Industry Report Card: Auto Asset-Backed Securities," published March 31, 2021).

In our view, the exposure to ESG credit factors is in line with our sector benchmark. We generally view environmental credit factors as above average because the collateral pool primarily consists of vehicles with internal combustion engines (ICEs), which emit pollutants that contribute to climate transition risk. Although the adoption of electric vehicles and future regulation could lower ICE vehicle values over time, we believe our current approach to evaluating recovery values adequately accounts for vehicle values over the transaction's relatively short, expected life. As a result, we did not identify this as a separate material ESG credit factor in our analysis.

Key Rating Considerations

VCU 2023-1 is Veridian's first auto ABS transaction. Based on our review of Veridian's operations and performance history, and securitization pool characteristics, we considered the following strengths in rating this transaction:

- Veridian is an Iowa state-chartered credit union, regulated primarily by the Iowa Division of Credit Unions, and is also subject to federal regulations and regular examinations by the National Credit Union Administration (NCUA), who establishes, along with other regulations, capital and liquidity rules that Veridian needs to follow.
- Veridian has decades of experience providing diversified personal and business banking products and services, including savings and checking accounts, credit cards, mortgage, and auto loans.
- As of March 31, 2023, Veridian had total assets of $6.955 billion (approximately 45.3% of which is comprised of auto loans) and capital of $686.3 million.
- The April 30, 2023, the collateral pool had a weighted average credit score of 737.
- The backup servicer, Vervent Inc. (not rated by S&P Global Ratings), is experienced and skilled in servicing portfolios as a backup servicer for many ABS portfolios. We believe this enables a smoother servicing transition to the backup servicer, if necessary.

In addition to the strengths outlined above, we considered the following risks:

- Geographic concentration of its obligor base. Approximately 38% of the loans were originated in Iowa and 18% in Nebraska. Together, these two states account for approximately 56% of the total collateral pool. Veridian's top state concentrations are not as high compared to some of its credit union peers such as GTE and Oregon Community Credit Union.
- Longer term loans with original terms of 76-84 months comprise approximately 49% of the pool, and Veridian has provided static pool performance data starting from 2016.

Veridian Credit Union

Veridian Credit Union is an Iowa state-chartered credit union regulated by the Iowa Division of Credit Unions and the NCUA. It is a not-for-profit organization owned by its members and is headquartered in Waterloo, Iowa. Originally established in 1934 as the John Deere Employees Credit Union, Veridian Credit Union is now the second largest credit union in Iowa. Veridian is classified as "well capitalized" by the NCUA. To be categorized as well capitalized by the NCUA, Veridian must maintain a minimum net worth ratio of 9% of assets. As of March 31,2023, Veridian had total assets of $6.955 billion and capital of $686.3 million. Veridian has backup credit facilities with the Des Moines Federal Home Loan Bank (FHLB), Corporate Central Credit Union and National Cooperative Bank. Veridian also has a line of credit with the Federal Reserve Discount Window, if needed. Veridian provides a wide variety of deposit and lending services to its members, and its indirect lending program has significant market share in Iowa, Nebraska, and Minnesota.

Origination

Veridian provides direct financing for auto loans for its members via internet, phone, and in-branch application channels, and indirect financing for auto loans through its relationships with mostly franchised and some independent motor vehicle dealerships. Veridian Credit Union has agreements with various franchised dealerships that sell both new and used vehicles, and with certain dealerships that sell used vehicles. For VCU 2023-1, indirectly originated loans comprise 100% of the collateral loan pool.

Veridian's auto loan portfolio is highly concentrated in the Midwest region, with their top concentrations in Iowa, Nebraska, and Minnesota.

All receivables were either originated in electronic format or have been converted into electronic format. The e-Vault provider for the VCU 2023-1 transaction is DocMagic Inc. All of the contracts satisfy the uniform commercial code (UCC) requirement for control of the electronic contracts. Veridian has provided an electronic contract opinion for these loans as well as representations for perfection by control.

Underwriting

Veridian has policies and procedures in place to regulate the various aspects of its underwriting and credit decision process. Veridian's underwriting approach is intended to gauge the applicants' ability and willingness to repay the loan amount, and determine if the financed vehicle that is collateral for the loan is adequate. Each prospective obligor provides general demographic information, financial information, and employment history as part of the loan application.

The receivables included in this securitization were underwritten either by an underwriter or an automated-decision process as prescribed by Veridian's stated internal policies and procedures.

The underwriting process assigns each loan applicant to one of Veridian's seven credit tiers that are tied to specified credit score ranges. Along with the credit score, which is the main determinant, the loan term, model year, and loan-to-value ratio are also considered in Veridian's risk-based pricing. After a tier is assigned, applications are subject to Veridian's credit policies, lending guidelines, and underwriting analysis.

Veridian has guidelines including criteria for credit characteristics to provide consistency in its lending decisions. They include the debt-to-income, payment-to-income, and loan-to-value as a percentage of relative loan amount. Guidelines also include certain circumstances where additional proof of income or employment may be required.

All loans with balances that exceed $2,500 are required to have continuous comprehensive and collision insurance coverage with no lapses from the original funding date. Veridian monitors for required insurance through a third-party vendor. If an obligor fails to maintain the required physical loss and damage insurance, Veridian may at its option obtain insurance covering the related financed vehicle. If Veridian purchases force-placed insurance for a financed vehicle, the obligor is required to repay Veridian for that premium. Failure to maintain the required insurance is an event of default under each contract.

Servicing and collections

Veridian, as the servicer, will be responsible for managing, administering, servicing, tracking performance, and making collections/remittances on the receivables. Obligors may make payments using a variety of methods, including automatic clearing house (ACH), internal automated transfers, digital banking transfers, credit and debit card, coupon payment books, and in branch. Veridian has many decades of experience servicing and collecting on its originated auto loans.

Veridian uses targeted and efficient collection efforts in order to remediate delinquent accounts. The collection process focuses on early and frequent contact with past due obligors. Veridian manages its collections program in two stages: early stage (first 30 days delinquent) and late stage (greater than 30 days). For early-stage accounts, efforts start at day seven with an automated payment reminder via mail, text, or email messages. For late-stage accounts, opportunities to offset from funds on deposit are identified. Outbound attempts to contact an obligor may include a phone call, text message, and/or email, and a state-specific Notice of Right to Cure or Notice of Default letter is sent. If no resolution has been made by day 60, skip tracing is conducted and the account is recommended for involuntary repossession and moved to the repossession team.

Repossessions and charge-offs

Veridian's repossession review generally begins after 60 days from the date a loan becomes past due. The vehicle is typically sold at auction approximately 50 days after the repossession date. After the vehicle is sold, if a deficiency balance remains, additional collection efforts are made to mitigate a loss. If unsuccessful, the remaining deficiency balance is charged off the following month.

Skip-a-pay and loan modification

For more than 15 years, Veridian has a skip-a-pay program that it offers eligible obligors. Under the current program, an obligor may elect to skip two monthly payments in a rolling 12-month period. Each use of the skip-a-pay extends the term of the loan by one month, and interest continues to accrue. There is typically a $30.00 processing fee each time the skip-a-pay is used. Eligibility requirements include that the processing fee must be paid, and at least one borrower signs the skip-a-pay authorization form. Skip-a-pay may not be used for the first payment or for consecutive payments within the same calendar year. Loans with Collateral Protection Insurance (CPI) are not eligible for skip-a-pay.

Veridian also provides modifications to assist obligors that are experiencing a temporary financial hardship, which may include a reduction in the annual percentage rate (APR) or principal payment.

None of the receivables in the VCU 2023-1 collateral pool are in deferment, and any receivable that had a deferment in the past has subsequently made a payment and the account is not more than 30 days delinquent as of the cutoff date.

Any loan modifications that reduce the APR or amount financed, or extends the final scheduled payment past the class D legal final scheduled payment date (except as required by law, such as the Servicemembers Civil Relief Act) obligates the servicer to repurchase the receivable.

Credit Enhancement And Collateral Peer Comparison

Credit enhancement

Table 1 shows the credit enhancement for Veridian's inaugural transaction.

Table 1

Credit enhancement summary (%)(i)

	VCU 2023-1		
	Initial	Target	Floor
Class A			
Subordination	10.40	10.40	10.40
Reserve account	0.50	0.50	0.50
Overcollateralization	3.40	3.75	3.75
Total	14.30	14.65	14.65
Class B			
Subordination	6.60	6.60	6.60
Reserve account	0.50	0.50	0.50
Overcollateralization	3.40	3.75	3.75
Total	10.50	10.85	10.85
Class C			
Subordination	3.22	3.22	3.22
Reserve account	0.50	0.50	0.50
Overcollateralization	3.40	3.75	3.75
Total	7.12	7.47	7.47
Class D			
Subordination	0.00	0.00	0.00
Reserve account	0.50	0.50	0.50
Overcollateralization	3.40	3.75	3.75
Total	3.90	4.25	4.25
Estimated excess spread per year(%)(ii)	1.09	--	--
Initial aggregate receivables balance ($)	310,549,836	--	--
Total notes ($)	300,000,000	--	--

(i)Percentage of the initial aggregate pool balance. (ii)Estimated annual excess spread before note pricing. The estimates include the 1.00% servicing fee. VCU--Veridian Auto Receivables Trust.

Collateral characteristics

As of the April 30, 2023, cutoff date, the VCU 2023-1 pool consisted of $310.55 million with a weighted average credit score of 737 and a minimum credit score cutoff of 620, a weighted average LTV ratio of approximately 105.41%, and approximately seven months of weighted average seasoning. Loans with terms greater than 72 months accounted for approximately 59.98% of the pool.

We compared VCU 2023-1's pool with peers in the prime auto loan sector, including GTE Auto Receivables Trust 2023-1 (GTE 2023-1), OCCU Auto Receivables Trust 2022-1 (OCCU 2022-1), and Unify Auto Receivables Trust 2021-1 (UART 2021-1), which are transactions originated by credit unions (see table 2). Overall, we believe VCU 2023-1's pool characteristics are comparable to those of these peer transactions.

Table 2

Collateral comparison(i)

	VCU 2023-1	GTE 2023-1	OCCU 2022-1	UART 2021-1
Receivables balance (mil. $)	310.55	215.92	295.30	302.93
No. of receivables	14,022	10,117	10,030	11,204
Avg. original loan balance ($)	22,147	21,342	29,868	35,952
WA APR (%)	7.92	6.60	5.65	4.99
WA original term (mos.)	75	77	77	82
WA remaining term (mos.)	68	64	76	64
WA seasoning (mos.)	7	14	2	18
WA credit score	737	730	730	748
% of pool with original term more than 60 mos. (%)	85.26	92.19	89.51	98.14
% of pool with original term more than 72 mos.	59.98	76.52	66.60	88.03
WA LTV(ii)	105.41	102.40	110.10	108.46
New vehicles (%)	20.14	29.07	30.10	55.04
Used vehicles (%)	79.86	70.93	69.90	44.96
Top three state concentrations (%)				
	IA=38.37	FL=97.78	WA=46.55	NV=32.59
	NE=17.59	GA=0.38	OR=45.58	KS=14.96
	MN=11.90	NC=0.18	ID=4.30	CA=14.93
Initial expected CNL (%)(i)	2.30	2.10	2.25	2.75-3.00
Revised ECNL range (%)	N/A	N/A	N/A	1.50-2.00(iii)

(i)All percentages are of the initial receivables balance and reflect the statistical pool for each peer transaction. (ii)LTV is defined for new vehicles as the amount financed divided by the manufacturer's suggested retail price less rebates and incentives. For used vehicles, defined as the amount financed divided by National Automobile Dealers Assn. or Kelley Blue Book value. (iii)Revised March 2022. VCU-Veridian Auto Receivables Trust. OCCU--OCCU Auto Receivables Trust. UART–-Unify Auto Receivables Trust. GTE--GTE Auto Receivables Trust. WA--Weighted average. APR--Annual percentage rate. LTV--Loan-to-value ratio. CNL--Cumulative net loss. ECNL--Expected cumulative net loss. N/A--Not applicable.

Macroeconomic And Auto Finance Sector Outlook

In our view, changes to the unemployment rate are a key determinant of charge-offs in the auto finance industry. We have also observed that recovery values tend to weaken during recessionary periods.

In our analysis, we considered the economic data and forecasts outlined in table 3, and their baseline effect on collateral credit quality in determining our base-case expected loss level.

As the Federal Reserve's aggressive tightening of interest rates increases borrowing costs, we expect the economy to fall into a shallow recession later this year. We are forecasting slightly negative growth in the second and third quarters of 2023, with GDP averaging 0.7% growth for the year (see "Economic Outlook U.S. Q2 2023: Still Resilient, Downside Risks Rise," published March

27, 2023). With economic pressures worsening due to higher borrowing costs, businesses will need to trim payrolls in interest rate-sensitive sectors. The recent banking sector disturbance may also lead to credit tightening and a softer jobs market. We expect the unemployment rate to rise and peak at 5.4% in second-quarter 2024 and then decline in late 2025.

Inflation remains a concern because it is eroding wage gains and the savings cushion that was built during the COVID-19 pandemic, particularly for those with lower incomes and smaller cushions.

Table 3

U.S. economic factors

	Actual				
	2022	2023	2024	2025	2026
Real GDP (% year-over-year growth)	2.1	0.7	1.2	1.8	2.0
Unemployment rate (% annual average)	3.7	4.1	5.0	5.1	4.6
Consumer Price Index (% annual average)	8.0	4.2	2.4	1.6	1.5

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, and S&P Global Ratings' Economics forecasts.

In the auto market, as new vehicle supply imbalances continue to ease and borrowing rates continue to rise, we would expect used vehicle values to normalize to historical levels.

S&P Global Ratings' Expected Loss: 2.30%

We determined our expected loss for VCU 2023-1 by analyzing:

- The managed portfolio's performance and origination static pool data and their relative performances (see table 4 and chart 1); and
- The transaction's collateral characteristics relative to those of VCU 2023-1's peers (see table 3).

Given the lack of securitization performance, we placed more emphasis on origination static pool analysis, managed portfolio trends, and issuer peer comparisons. We complemented this analysis with our forward-looking view of the economy and the auto finance sector (see the Macroeconomic And Auto Finance Sector Outlook section above). Overall, we expect VCU 2023-1 to experience lifetime cumulative net losses (CNLs) of 2.30%.

Managed portfolio

Veridian is the receivables' originator, sponsor, and servicer. As of March 31, 2023, Veridian's managed portfolio of auto receivables totaled approximately $3.153 billion, a 30.0% increase year over year from approximately $2.426 billion as of March 31, 2022. Net charge-offs as a percentage of the average balance of contracts outstanding increased to 0.03% as of March 31, 2023, while total 30-plus-day delinquencies increased to 1.72% as of March 31, 2023, from 0.95% a year earlier, which are higher than the pre-pandemic COVID-19 levels. While net charge-offs continue to remain relatively low, delinquencies are normalizing above pre-pandemic levels after the lows experienced in 2020 and 2021.

Table 4

Veridian's managed portfolio

	Quarter ended March 31		Year ended Dec. 31						
	2023	2022	2022	2021	2020	2019	2018	2017	2016
Ending principal balance ($)	3,153,467,877	2,425,680,512	3,096,072,630	2,199,381,631	1,837,172,997	1,545,774,782	1,435,403,409	1,152,838,079	799,145,159
Average principal balance ($)	3,124,376,401	2,328,823,096	2,775,006,132	1,988,111,496	1,702,919,395	1,485,253,241	1,330,922,968	976,807,651	705,018,946
30-59 day delinquencies (% of outstanding balance)	1.10	0.64	1.21	0.68	0.48	0.83	0.75	0.69	0.75
60-89 day delinquencies (% of outstanding balance)	0.24	0.13	0.31	0.18	0.15	0.19	0.16	0.18	0.25
90-plus-day delinquencies (% of outstanding balance	0.38	0.17	0.39	0.17	0.26	0.34	0.31	0.51	0.40
30-plus-day delinquencies (% of outstanding balance)	1.72	0.95	1.92	1.03	0.89	1.37	1.22	1.38	1.41
Net charge-offs as % of the avg. receivables outstanding principal amount	0.03	0.01	0.10	0.10	0.20	0.33	0.40	0.29	0.67

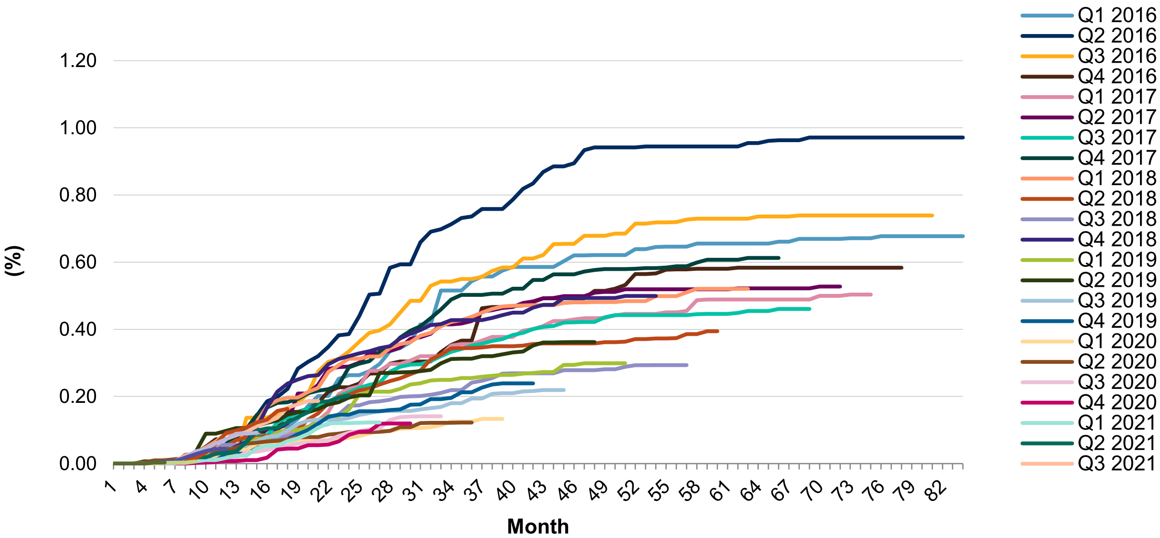
Origination static pool analysis

Our analysis is based on approximately seven years (2016-2022) of static pool data. To derive the base-case loss for the transaction, we analyzed quarterly origination static pool data in aggregate, as well as broken out into various one- (credit score and original term) and two-dimensional credit tiers (credit score and term, credit score and new/used) consistent with this pool of receivables. We used the issuer's historical loss curves to develop expected net loss projections for each of the tiers/cohorts. We then weighted these projections based on the various cohort concentrations in the series 2023-1 pool.

Veridian's origination vintage CNL performance since 2016 shows losses trending higher overall in 2016 compared to the more recent vintages. A factor in the better performance trends of recent years may be attributable to COVID-19-related stimulus and government assistance in recent years, and to higher than normal vehicle recovery rates.

Chart 1

Quarterly indirect origination vintages | cumulative net loss performance | 2016-2022



Legal Overview And Transaction Structure

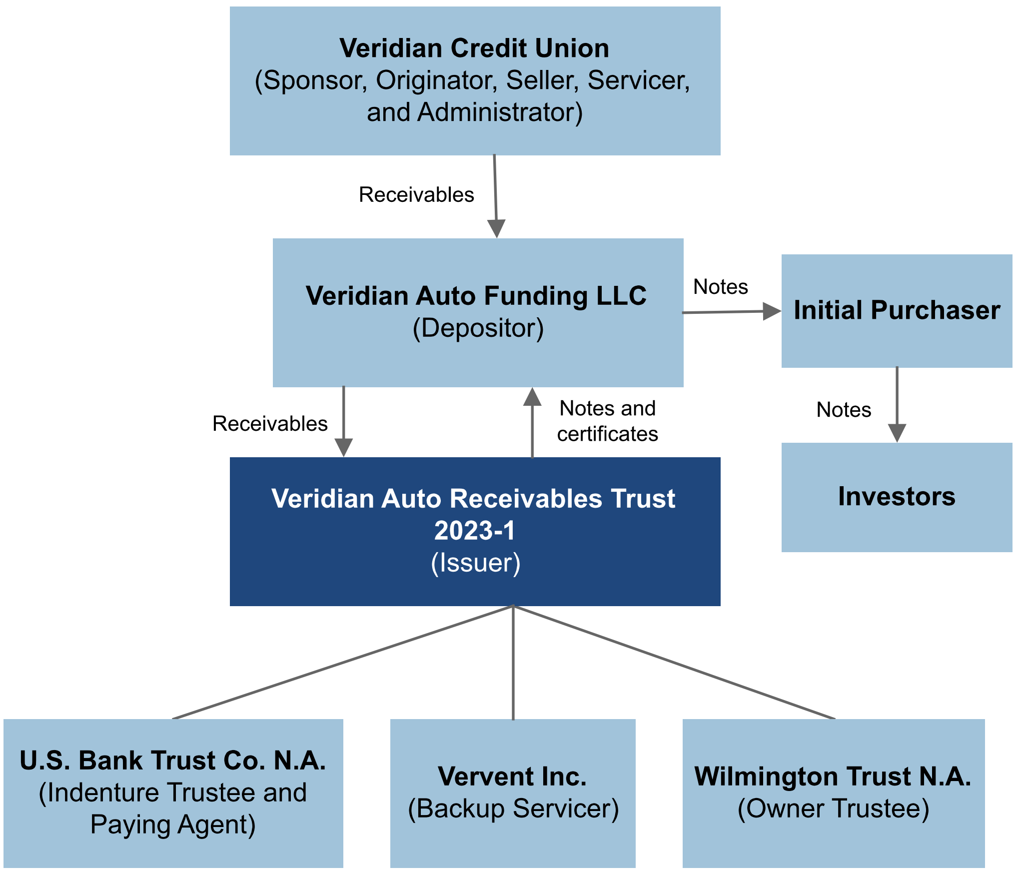
Legal overview

In rating this transaction, S&P Global Ratings will review the legal matters it believes are relevant to its analysis, as outlined in its criteria.

The transaction is structured as a sale of the receivables from Veridian (the sponsor, originator, seller, administrator, and servicer) to Veridian Auto Funding LLC (the depositor). On the closing date, the depositor will then transfer all of its interest in the receivables to Veridian 2023-1, the issuing entity (the trust). The trust will then pledge its interest in the receivables to the indenture trustee on the noteholders' behalf (see chart 2).

Chart 2

Transaction structure



NCUA securitization safe harbor opinion

On June 21, 2017, the NCUA's Office of General Counsel provided their opinion that, consistent with the Federal Credit Union Act and NCUA's regulations, an FCU has the authority to issue and sell securities incidental to its operation. Current regulations allow the safe harbor treatment of any assets transferred in connection with a securitization. Veridian is not the first known credit union seeking to execute a publicly rated auto loan securitization under the aegis of this opinion.

Transaction structure

The VCU 2023-1 transaction incorporates the following structural features:

- A sequential-pay mechanism among the notes that should result in increased credit enhancement for the senior notes as the pool amortizes;

- Initial overcollateralization of 3.40%, building to a target of 3.75% of the initial pool balance, which is also the overcollateralization floor; and
- A non-amortizing reserve fund that will equal 0.50% of the initial adjusted pool balance.

Payment Priority

Distributions will be made from available collections according to the payment priority shown in table 5.

Table 5

Payment waterfall

Priority	Payment
1	Servicing fee of 1.00% per year.
2	If the backup servicer becomes the servicer, one-time successor servicer fee of $25,000.
3	Fees to the indenture trustee, owner trustee, backup servicer, independent manager, successor administrator (if any), successor custodian (if any), and rating agencies.
4	Expenses and indemnifications to the owner trustee and the indenture trustee capped at $150,000 annually.
5	Class A note interest to the class A noteholders, sequentially.
6	First priority principal distributable amount (if the class A notes' outstanding amount exceeds the adjusted pool balance), paid sequentially.
7	Class B note interest to the class B noteholders.
8	Second-priority principal distributable amount (if the class A and B notes' outstanding amount exceeds the adjusted pool balance), paid sequentially.
9	Class C note interest to the class C noteholders.
10	Third-priority principal distributable amount (if the class A, B, and C notes' outstanding amount exceeds the adjusted pool balance), paid sequentially.
11	Class D note interest to the class D noteholders.
12	Fourth-priority principal distributable amount (if the class A, B, C, and D notes' outstanding amount exceeds the adjusted pool balance), paid sequentially.
13	To the reserve account, any additional amounts required to restore it to its specified reserve account balance.
14	Principal, paid sequentially, to achieve the specified overcollateralization amount (the regular principal distributable amount).
15	Pro rata to the owner trustee, indenture trustee, backup servicer, successor servicer (if any) and administrator, fees, and expenses not previously paid.
16	Any remaining available funds to the certificateholders.

Events of default

The occurrence of any of the following events will constitute an event of default under the indenture:

- A default in the payment of interest due on any note of the controlling class that continues for five business days or more.

- A default in the payment of the principal of any note on its final scheduled payment date or redemption date.
- Any failure by the issuing entity to duly observe or perform any of its covenants or agreements or a breach of any of its representations or warranties, which failure or breach has a material adverse effect on the noteholders and which continues unremedied for a period of 60 days after notice.
- The occurrence of certain events (which, if involuntary, remain unstayed for a period of 60 consecutive days), including bankruptcy, insolvency, receivership, or liquidation of the issuing entity.

Payment distribution after an event of default

Following an event of default, the payment priorities will change. On each payment date after the notes have been accelerated following an event of default, the indenture trustee will distribute the available funds according to the payment priority shown in table 6.

Table 6

Payment waterfall following an event of default

Priority	Payment
1	To the servicer, the servicing fee for the related collection period and all accrued and unpaid servicing fees with respect to any prior collection periods.
2	On a pro rata basis, to the owner trustee, indenture trustee, the rating agencies and the backup servicer, any successor servicer, any successor administrator and any successor custodian, fees, expenses, and indemnification amounts (uncapped).
3	Sequentially, class A interest.
4	Class A-1 principal until paid in full.
5	Class A-2 principal until paid in full.
6	Class A-3 principal until paid in full.
7	Class A-4 principal until paid in full.
8	Class B note interest.
9	Class B note principal until paid in full.
10	Class C note interest.
11	Class C note principal until paid in full.
12	Class D note interest.
13	Class D note principal until paid in full.
14	To the administrator, any administrator fee not previously paid.
15	Any remaining funds to the certificateholders.

Servicer default

Any of the following events will constitute a servicer default:

- The servicer's failure to deliver any required payment to the indenture trustee for deposit in the collection account or reserve account that remains unremedied for five business days;

- The servicer's failure to observe or perform any covenants or agreements, other than the NCUA Rule Covenant, that materially and adversely affects the rights of the noteholders or certificateholders and continues unremedied for 90 days;
- At any time when Veridian is the servicer, the occurrence of a Servicer Net Worth Event (see below); or
- An occurrence of an insolvency event with respect to the servicer.

A Servicer Net Worth Event means that, as of the last day of any calendar quarter, the servicer's net worth is less than 4% of its total assets. Veridian Credit Union provides this information to the NCUA in a quarterly call report.

If a servicer default occurs as a result of the occurrence of any of the four items listed above, a majority vote by the noteholders of the controlling class may terminate the servicer's rights and obligations.

Cash Flow Modeling Assumptions And Results

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. In addition, we use our cash flow analysis in other aspects of our ratings analysis, including the testing of credit stability (sensitivity analysis) and legal final analysis.

Break-even analysis

For the VCU 2023-1 transaction structure, we applied the assumptions outlined in table 7 to our cash flow analysis to simulate stress scenarios that we believe are appropriate for the assigned preliminary ratings. To assign a rating to a class, we consider the class's lower break-even (maximum net losses the class can withstand without defaulting) and generally expect it to be equal to or greater than the rating stressed scenario break-even requirement.

Based on our stressed cash flows, the break-even net loss results show that the class A, B, C, and D notes are credit-enhanced to the degree appropriate for the assigned preliminary ratings (see table 8).

Table 7

Break-even cash flow assumptions

Voluntary ABS (%)	1.50
Servicing fee (%)	1.00
Recovery rate (%)	50.00
Charge-off and recovery lag (mos.)	5
CNL timing mos. (12/24/36/48/60)(%)	
Front-loaded loss curve	25/65/85/95/100
Back-loaded loss curve	10/40/65/90/100

ABS--Absolute prepayment speed. Mos--Months.

Table 8

Cash flow assumptions and results

	Class			
	A	B	C	D
Scenario (preliminary rating)	AAA (sf)	AA (sf)	A (sf)	BBB (sf)
CNL by months (12/24/36/48/60) (%)				
Front-loaded loss curve	27/68/87/96/100	27/68/87/96/100	27/68/87/96/100	27/68/87/96/100
Back-loaded loss curve	12/45/70/92/100	12/45/70/92/100	12/45/70/92/100	12/45/70/92/100
Approximate break-even net loss levels (%)(i)				
Required	11.50	9.20	6.90	4.60
Available: front-loaded loss curve	14.38	10.91	7.79	5.28
Available: back-loaded loss curve	14.52	11.05	8.00	5.43

(i)The maximum cumulative net losses with 90.0% credit to any excess spread the transaction can withstand without triggering a payment default on the relevant class of notes. CNL--Cumulative net loss.

Sensitivity analysis

In addition to running break-even cash flows, we undertook sensitivity analysis using the assumptions outlined in table 7. We believe that under a moderate ('BBB') stress scenario (2.00x of 2.30% expected loss level) and with 90.0% credit to any excess spread, all else being equal, our preliminary ratings will be within the credit stability limits specified by section A.4 of the Appendix of "S&P Global Ratings Definitions," published Nov. 10, 2021 (see table 9).

Table 9

Credit stability as a limiting factor on ratings

	Maximum projected deterioration associated with rating levels for one-year and three-year horizons under moderate stress conditions					
Horizon	**AAA**	**AA**	**A**	**BBB**	**BB**	**B**
One year	AA	A	BB	B	CCC	D
Three years	BBB	BB	B	CCC	D	D

(i)These credit-quality transitions do not reflect our view of the expected degree of deterioration that rated issuers or obligations could experience over the specified time horizons. Nor do they reflect the typical historical levels of deterioration among rated issuers and securities.

Chart 3

Sensitivity analysis--coverage multiple (front-loaded loss curve)

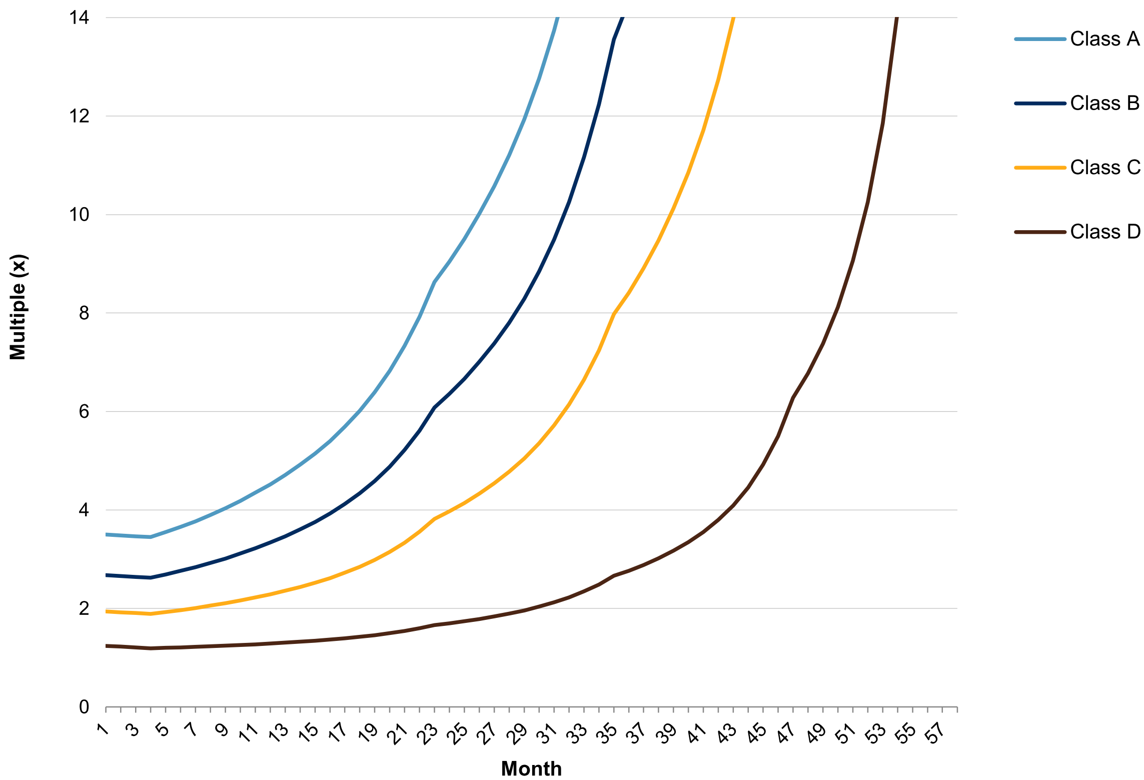
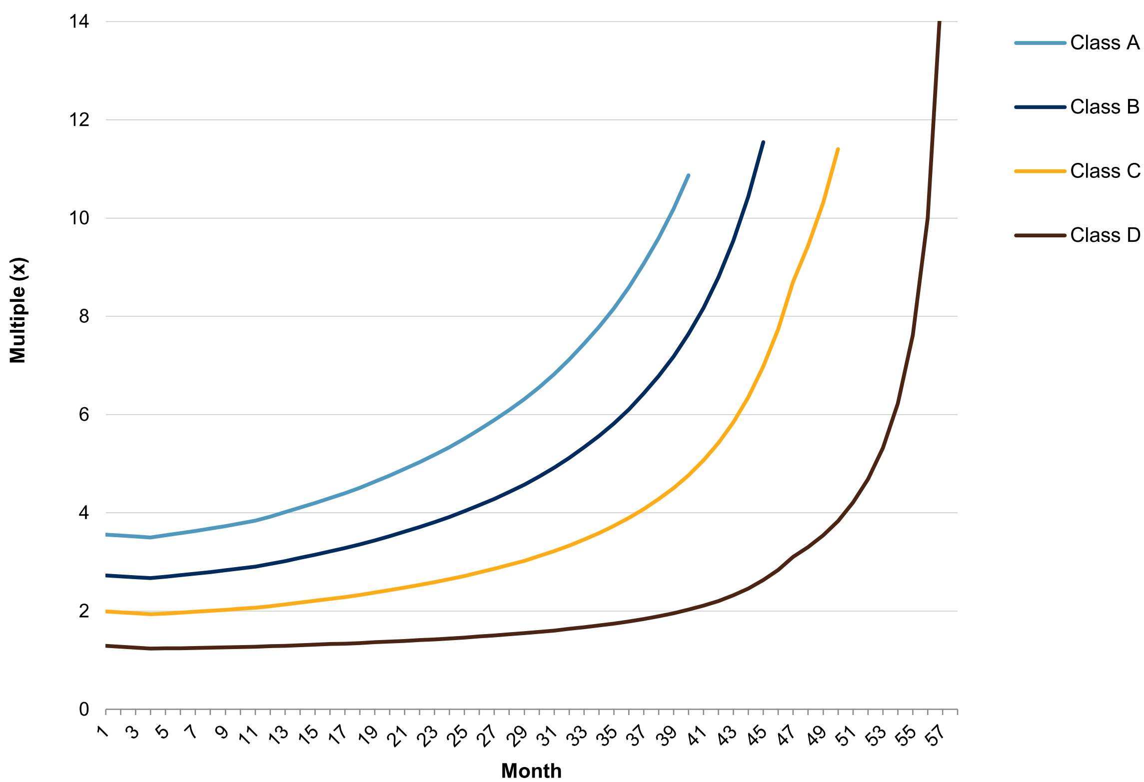


Chart 4

Sensitivity analysis--coverage multiple (back-loaded loss curve)



Money market tranche

The proposed money market tranche (class A-1) has a legal final maturity date of May 15, 2024. To test whether the money market tranche can be repaid by then, we ran cash flows using assumptions to delay the principal collections during the time period.

We assumed zero defaults and 0.25% prepayments for our cash flow analyses, and we observed that the money market tranche would be paid off in full at least a month prior to the legal final maturity date.

Legal final maturity

To test the legal final maturity dates for the classes A-2, A-3, A-4, B, and C, we determined the date on which the respective notes would fully amortize in a zero-loss, zero-prepayment scenario, then added three months to the result. Furthermore, in the break-even scenario for each respective rating level, we confirmed that there was sufficient credit enhancement both to cover losses and to repay the related notes in full by their legal final maturity date. For the longest-dated security (class D), we added 16 months to the tenor of the longest receivable in the pool to accommodate the maximum months of extensions on the receivables.

Counterparty And Operational Risks

Bank account provider

On or before the closing date, the VCU 2023-1 bank accounts will be with U.S. Bank N.A. in the name of the indenture trustee U.S. Bank Trust Co. N.A., as segregated accounts or as segregated trusts accounts. The bank account provider is consistent with our counterparty criteria for a 'AAA' supported transaction (see "Counterparty Risk Framework: Methodology And Assumptions," published March 8, 2019).

Servicer

As servicer, Veridian has an experienced management team that oversees origination, underwriting, servicing, collections, and general operational practices. A back-up servicer, Vervent Inc., is engaged for outstanding series. Veridian is not rated by S&P Global Ratings, and commingling risk is addressed by the requirement that all collections are deposited into the series collections account within two business days of collection. Our operational risk assessment of Veridian as servicer does not constrain the ratings (see "Global Framework For Assessing Operational Risk In Structured Finance Transactions," published Oct. 9, 2014).

Related Criteria

- Criteria | Structured Finance | ABS: Global Auto ABS Methodology And Assumptions , March 31, 2022
- 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
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings , April 7, 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. Auto Loan ABS Tracker: February 2023 Performance, April 12, 2023
- Credit Conditions North America Q2 2023: Coalescing Stresses, March 28, 2023
- Economic Outlook U.S. Q2 2023: Still Resilient, Downside Risks Rise, March 27, 2023