

Presale:

# GM Financial Consumer Automobile Receivables Trust 2023-3

July 6, 2023

## Preliminary ratings

Class	Preliminary rating	Type	Interest rate(i)	Base amount (mil. \$)	Upsized amount (mil. \$)	Legal final maturity date
A-1	A-1+ (sf)	Senior	Fixed	241.19	287.18	July 16, 2024
A-2-A/A-2-B(ii)	AAA (sf)	Senior	Fixed/floating	488.88	582.24	Sept. 16, 2026
A-3	AAA (sf)	Senior	Fixed	428.88	510.63	June 16, 2028
A-4	AAA (sf)	Senior	Fixed	80.01	95.17	Dec. 18, 2028
B	AA+ (sf)	Subordinate	Fixed	21.05	25.07	Jan. 16, 2029
C	AA (sf)	Subordinate	Fixed	19.73	23.49	Feb. 16, 2029
D(iii)	NR	Subordinate	Fixed	16.46	19.60	Feb. 18, 2031

Note: This presale report is based on information as of July 6, 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)The interest rates will be determined on the pricing date. (ii)The allocation of the initial principal amount between the class A-2-A and A-2-B notes will be determined during pricing, although the class A-2-B principal amount will not exceed \$244.44 million (\$291.12 million if upsized). The class A-2-B notes, if issued at closing, will accrue interest at a floating rate indexed to a compounded SOFR (30-day average) plus a margin. (iii)The class D notes will initially be retained by the depositor or an affiliate. SOFR--Secured overnight financing rate. NR--Not rated.

## Profile

Collateral	Prime auto loan receivables.
Issuer	GM Financial Consumer Automobile Receivables Trust 2023-3.
Sponsor and servicer	AmeriCredit Financial Services Inc., doing business as GM Financial, a subsidiary of General Motors Financial Co. Inc. (BBB/Stable/--).
Depositor	AFS SenSub Corp.
Trustee and trust collateral agent	Citibank N.A. (A+/Stable/A-1).
Owner trustee	Wilmington Trust Co.
Bank account provider	Citibank N.A (A+/Stable/A-1).

## PRIMARY CREDIT ANALYST

**Cara McGonigle**  
New York  
+1 (212) 438-1792  
cara.mcgonigle@spglobal.com

## SECONDARY CONTACTS

**Jennie P Lam**  
New York  
+ 1 (212) 438 2524  
jennie.lam@spglobal.com

**Van Thomas**  
Englewood  
+1 3037214211  
van.thomas@spglobal.com

## **Rationale**

S&P Global Ratings' preliminary ratings assigned to GM Financial Consumer Automobile Receivables Trust 2023-3's (GMCAR 2023-3) auto loan asset-backed notes reflect:

- The availability of approximately 8.6%, 7.2%, and 6.1% (both base and upside) credit support for the class A (classes A-1, A-2, A-3, and A-4, collectively), B, and C notes, respectively (based on stressed cash flow scenarios including excess spread). These credit support levels provide coverage of at least 5.0x, 4.5x, and 4.0x our 1.2% expected cumulative net loss (ECNL) for the class A, B, and C notes, respectively, and are commensurate with the assigned preliminary 'A-1+ (sf)', 'AAA (sf)', 'AA+ (sf)', and 'AA (sf)' ratings (see the S&P Global Ratings' Expected Loss and Cash Flow Modeling sections).
- The timely interest and full principal payments made under stressed cash flow modeling scenarios appropriate for the assigned preliminary ratings (see the Cash Flow Modeling section). In our modeling approach, we used a bifurcated pool method, in which the low-annual percentage rate (low-APR) loans (those with APRs at or below our APR bifurcation threshold) prepay and default at lower rates than the high-APR loans.
- The expectation that under a moderate ('BBB') stress scenario (2.0x our expected loss level), all else being equal, our preliminary ratings will be within the credit stability limits specified by section A.4 of the Appendix contained in "S&P Global Ratings Definitions," published June 9, 2023.
- 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).
- The series' bank accounts at Citibank N.A., which do not constrain the preliminary ratings.
- Our operational risk assessment of GM Financial, a subsidiary of General Motors Financial Co. Inc., as servicer, along with our views of the company's underwriting.
- Our assessment of the transaction's potential exposure to environmental, social, and governance (ESG) credit factors, which are in line with our sector benchmark.
- The transaction's payment and legal structure.

Our ECNL for GMCAR 2023-3 is 1.20%, unchanged from the last transaction that we rated (GMCAR 2023-2). It reflects:

- Our view that the series 2023-3 collateral characteristics are generally consistent with that of series 2023-2;
- GM Financial's outstanding GMCAR series, which continue to perform in line with or better than our initial expectations; and
- Our forward-looking view of the macroeconomy and auto finance sector.

## **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 in this transaction is in line with our sector benchmark. Environmental credit factors are generally viewed as above average, given that the collateral pool primarily comprises vehicles with internal combustion engines (ICE), which emit pollutants that contribute to climate transition risks. While the adoption of electric vehicles and future regulation could in time lower ICE vehicle values, we believe that our current approach to evaluating recovery and residual values adequately accounts for vehicle values over the relatively short expected life of the transaction. As a result, we have not separately identified this as a material ESG credit factor in our analysis.

## Credit Enhancement And Collateral

### Structural changes from GMCAR 2023-2

Notable structural changes from GMCAR 2023-2 include that:

- The initial yield supplement overcollateralization amount (YSOA) discount rate and YSOA step-down rate decreased to 8.30% and 7.80%, respectively, from 8.40% and 7.90%.
- The initial YSOA as a percent of the initial adjusted pool balance decreased to 7.36% (7.40% if upsized) from 8.61%.

Table 1 shows the credit enhancement changes from recent transactions.

Table 1

### Credit enhancement summary (%) (i)

	GM Financial Consumer Automobile Receivables Trust				
	2023-3 (base)	2023-3 (upsized)	2023-2	2023-1(ii)	2022-4
<b>Subordination</b>					
Class A	4.35	4.35	4.35	4.35	4.35
Class B	2.75	2.75	2.75	2.75	2.75
Class C	1.25	1.25	1.25	1.25	1.25
Class D(iii)	N/A	N/A	N/A	N/A	N/A
<b>Overcollateralization</b>					
Initial	1.50	1.50	1.50	1.50	1.50
Target	2.00	2.00	2.00	2.00	2.00
Floor	2.00	2.00	2.00	2.00	2.00
<b>Reserve fund</b>					
Initial	0.25	0.25	0.25	0.25	0.30
Target	0.25	0.25	0.25	0.25	0.30
Floor	0.25	0.25	0.25	0.25	0.30
<b>Total initial hard credit enhancement</b>					
Class A	6.10	6.10	6.10	6.10	6.15
Class B	4.50	4.50	4.50	4.50	4.55

Table 1

**Credit enhancement summary (%) (i) (cont.)**

	GM Financial Consumer Automobile Receivables Trust				
	2023-3 (base)	2023-3 (upsized)	2023-2	2023-1(ii)	2022-4
Class C	3.00	3.00	3.00	3.00	3.05
Class D	1.75	1.75	1.75	1.75	1.80
<b>Additional enhancement</b>					
Initial YSOA discount rate (%)	8.30	8.30	8.40	8.25	7.30
Initial YSOA (\$)	96,907,315	115,885,347	134,895,668	152,354,099	106,711,921
Initial YSOA as percentage of initial adjusted receivables balance (%)	7.36	7.40	8.61	9.72	8.41
Initial YSOA as percentage of the initial aggregate receivables balance (%)	6.86	6.89	7.93	8.86	7.75
YSOA discount rate stepdown (%) (iv)	7.80	7.80	7.90	7.75	6.80
Estimated annual excess spread(v)	2.06	2.06	1.93	N/A	1.60
Initial aggregate receivables balance (\$)	1,412,809,842	1,682,725,760	1,701,737,703	1,719,195,780	1,376,173,676
Initial adjusted receivables balance (\$)	1,315,902,256	1,566,840,413	1,566,842,034	1,566,841,681	1,269,461,755
Total securities (\$)	1,296,200,000	1,543,380,000	1,543,370,000	1,543,370,000	1,250,430,000

(i) The initial, target, and floor credit enhancement is a percentage of the initial adjusted receivables balance. (ii) Not rated by S&P Global Ratings. (iii) Not rated. (iv) The YSOA discount rate will step down to the lower rate after class A-2-B is fully repaid. If no class A-2-B notes are issued at closing, the YSOA discount rate will step down to the lower rate on the first distribution date and remain at this level for the transaction's life. (v) The estimated annual excess spread shown is before pricing and is calculated based on initial YSOA-adjusted annual percentage rate minus the weighted average cost of debt and 1.0% annual servicing fee. N/A--Not applicable. YSOA--Yield supplement overcollateralization amount.

**Collateral changes from GMCAR 2023-2**

Notable changes in the collateral composition in GMCAR 2023-2 include that:

- The weighted average FICO score decreased slightly to 782 from 783;
- The weighted average seasoning increased to 10 months from nine; and
- The percentage of loans by principal balance with original terms greater than 60 months decreased to 73.91% (73.94% if upsized) from 74.64%, while the percentage with original terms of 76-84 months increased to 21.62% (21.79% if upsized) from 19.95%.

In our view, the series 2023-3 pool is generally comparable to the series 2023-2 pool (see table 2).

Table 2

**Collateral characteristics(i)**

	GM Financial Consumer Automobile Receivables Trust				
	2023-3 (base)	2023-3 (upsized)	2023-2	2023-1(ii)	2022-4
Pool size (bil. \$)	1.413	1.683	1.702	1.719	1.376
No. of receivables	41,038	48,979	49,094	49,697	40,395
Avg. principal balance (\$)	34,427	34,356	34,663	34,594	34,068
Weighted avg. APR (%)	5.21	5.19	4.69	4.18	3.86
Weighted avg. original term (mos.)	70	70	69	69	69
Weighted avg. remaining term (mos.)	60	60	60	60	61
Weighted avg. seasoning (mos.)	10	10	9	9	8
Weighted avg. FICO score	782	782	783	781	781
Weighted avg. LTV ratio (%)	97	97	97	97	97
Loans with an original term of 61-72 months (% of pool balance)	44.20	44.09	45.44	46.56	48.44
Loans with an original term of 73-75 months (% of pool balance)	8.09	8.05	9.25	9.51	10.36
Loans with an original term of 76-84 months (% of pool balance)	21.62	21.79	19.95	17.91	17.85
New vehicles (%)	79	80	79	79	80
Used vehicles (%)	21	20	21	21	20
<b>Top three state concentrations (%)</b>					
	TX=16.83	TX=16.82	TX=16.56	TX=17.52	TX=15.14
	FL=8.15	FL=8.12	FL=8.47	CA=8.55	CA=8.97
	CA=7.04	CA=7.03	CA=7.60	NY=4.83	FL=7.29

(i)All percentages are of the initial aggregate receivables balance. (ii)Not rated by S&P Global Ratings. APR--Annual percentage rate. LTV--Loan to value.

Starting with series 2020-3, GM Financial has been including 76- to 84-month term loans in its GMCAR pools. The percentage mix has steadily increased with each transaction to 21.62% for series 2023-3.

Compared to the 0- to 72-month term loans, the 76- to 84-month term loans have a lower average FICO score, higher LTV ratio, and a higher percentage of new vehicles. Compared to the 73- to 75-month term loans, the 76- to 84-month term loan characteristics compare better by FICO score, LTV ratio, seasoning, and new-used vehicle mix (see table 3). The 76- to 84-month term loans' stronger credit quality is also reflected in higher custom scores and credit tier distributions than the 73- to 75-month term loans' (see table 3 below).

Table 3

**Collateral characteristics by term(i)**

	GMCAR 2023-3 (base)			GMCAR 2023-3 (upsized)			GMCAR 2023-2		
	0-72 months	73-75 months	76-84 months	0-72 months	73-75 months	76-84 months	0-72 months	73-75 months	76-84 months
% of total pool balance	70.29	8.09	21.62	70.16	8.05	21.79	70.80	9.25	19.95
Weighted avg. seasoning (mos.)	8	9	15	8	9	15	8	8	14
Weighted avg. FICO score	789	757	770	789	756	770	789	757	771
Weighted avg. LTV ratio (%)	93	111	106	93	110	106	94	110	106
New vehicle (%)	80	56	86	80	56	87	80	58	87
Used vehicle (%)	20	44	14	20	44	14	20	42	13

(i) All percentages are of the initial aggregate receivables balance. GMCAR--GM Financial Consumer Automobile Receivables Trust. LTV--Loan to value.

**Macroeconomic And Auto Finance Sector Outlook**

In our view, changes in 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 4, and their baseline effect on collateral credit quality in determining our base-case expected loss level.

Despite 500 basis points of official rate hikes, the U.S. economy has remained resilient. First-quarter 2023 real GDP growth came in at 1.3% annualized, and second-quarter GDP is tracking close to 2.0% annualized. In light of the economic resilience, our baseline scenario has a shallower and more attenuated slowdown than previously. Importantly, our baseline U.S. forecast no longer contains a recession. Our updated forecast is for real GDP growth to slow to under 1.0% in the second half of 2023 and register only 1.3% and 1.5% in 2024 and 2025, respectively. Unemployment will gradually rise to an average of 4.5% in 2025 (see "Economic Outlook U.S. Q3 2023: A Sticky Slowdown Means Higher For Longer," published June 26, 2023).

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 4

**U.S. economic factors**

	Actual				
	2022	2023	2024	2025	2026
Real GDP (% year-over-year growth)	2.1	1.7	1.3	1.5	1.8
Unemployment rate (% annual average)	3.6	3.5	4.0	4.5	4.6

Table 4

**U.S. economic factors (cont.)**

	Actual				
	2022	2023	2024	2025	2026
Consumer Price Index (% annual average)	8.0	4.3	2.7	2.3	2.1

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: 1.20%**

We determined our expected loss for GMCAR 2023-3 by analyzing:

- The transaction's collateral characteristics relative to those of outstanding series (see tables 2 and 3);
- The managed portfolio performance and origination static pool data and their relative performances (see table 5); and
- The outstanding series' performance (see table 6 and chart 1).

Given GM Financial's established performance track record as a consistent issuer, we placed more emphasis on the outstanding series' performance when determining the expected loss for this series, while also adjusting for potential incremental risk due to the inclusion of longer-term loans. 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 GMCAR 2023-3 to experience lifetime CNLs of 1.20%, unchanged from GMCAR 2023-2.

**Managed portfolio**

GM Financial's total retail auto loan portfolio, which consists of its prime and subprime originations, increased approximately 14.3% to \$63.26 billion as of March 31, 2023, from \$55.34 billion as of March 31, 2022.

While total delinquencies as a percentage of the period end balance increased year-over-year to 2.18% as of March 31, 2023, from 2.01% in 2022, delinquencies remain below pre-COVID-19 pandemic levels. Similarly, net credit losses as a percentage of average retail finance receivables ticked up slightly to 0.18% as of March 31 2023, compared to 0.12% in 2022, but remain well-below pre-COVID-19 pandemic levels, which is largely attributed to strong vehicle recoveries.

Table 5

**Managed portfolio**

	Three months ended March 31		Year ended Dec. 31			
	2023	2022	2022	2021	2020	2019
Retail finance receivables portfolio at end of period (bil. \$)	63.26	55.34	61.17	54.20	46.66	36.80

Table 5

**Managed portfolio (cont.)**

	Three months ended March		Year ended Dec. 31			
	31					
	2023	2022	2022	2021	2020	2019
Average retail finance receivables (bil. \$)	62.32	54.83	57.65	51.36	41.83	36.77
<b>Delinquencies (% of period end receivables balance)</b>						
31-60 days	1.73	1.61	2.16	1.87	2.19	3.40
61-90 days	0.31	0.29	0.45	0.37	0.53	0.77
91 days or more	0.14	0.12	0.18	0.13	0.17	0.31
Total delinquencies	2.18	2.01	2.79	2.37	2.90	4.48
Total repossessed assets (% of the portfolio)	0.07	0.07	0.06	0.06	0.07	0.12
Net credit loss (bil. \$)	0.11	0.07	0.33	0.19	0.43	0.53
Net credit losses (% of average retail finance receivables)	0.18	0.12	0.58	0.36	1.04	1.43

**Origination static pool analysis**

To derive our base-case loss for the GMCAR 2023-3 transaction, we analyzed the static pool CNL performance of GM Financial's originations under the prime auto loan platform since inception in 2014. The data we received were segmented by FICO score, original term, LTV ratio, and credit tier. We also incorporated an analysis of static pool performance of the 76- to 84-month term loans, given their inclusion in the GMCAR 2023-3 pool. We determined net loss projections for each cohort using GM Financial's historical prime origination loss timing curve. We then weighted these projections based on the actual concentration of each segment in the GMCAR 2023-3 pool.

**Securitization Performance**

We currently maintain ratings on 10 of 15 outstanding GMCAR transactions: series 2020-1, 2020-2, 2020-4, 2021-1, 2021-3, 2021-4, 2022-1, 2022-2, 2022-4, and 2023-2. The paid-off GMCAR transactions from 2017-2019 experienced lifetime CNLs of 0.41%-0.77%.

On Nov. 28, 2022, we revised our ECNLs for eight series (2019-2, 2019-3, 2020-1, 2020-2, 2020-4, 2021-1, 2021-3, and 2021-4). Performance on these transactions were stronger than our original and prior ECNLs, and we lowered our loss expectations accordingly (see "Various Rating Actions Taken On 36 Classes From Eight GM Financial Consumer Automobile Receivables Trust Transactions").

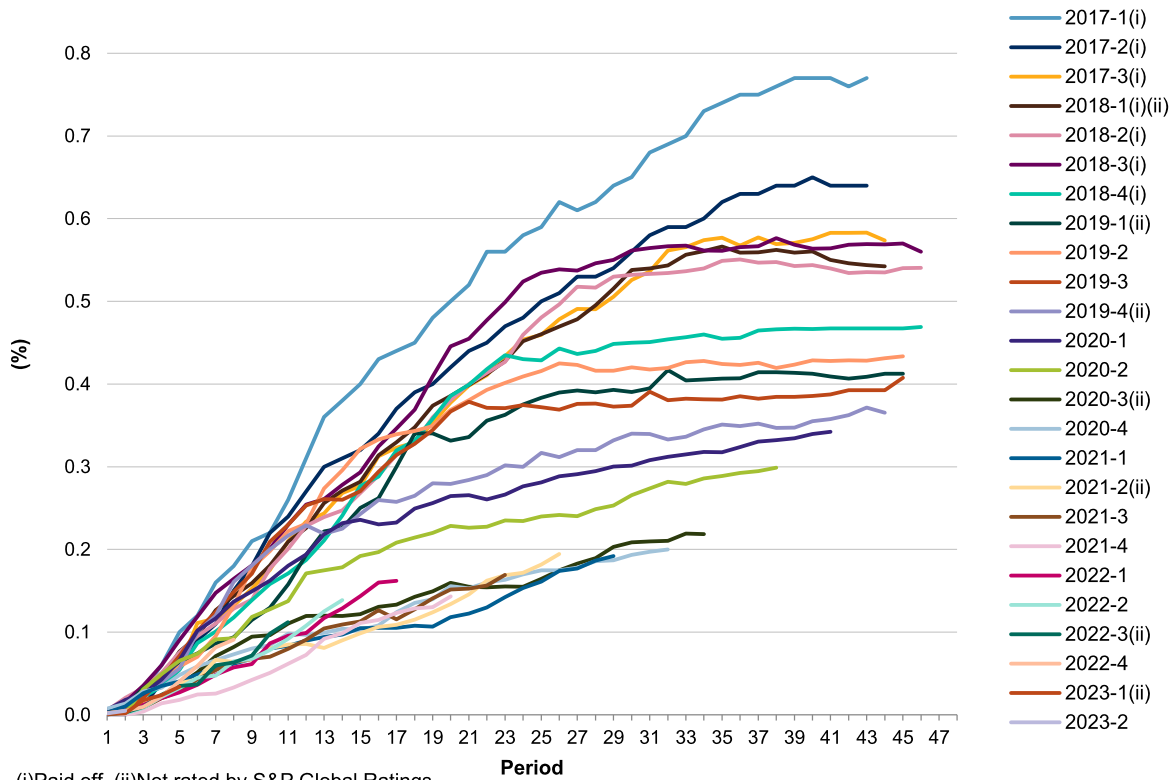
On May 19, 2023, we revised our ECNLs for two series (2022-1 and 2022-2). Performance on these transactions were stronger than our original and prior ECNLs, and we lowered our loss expectations accordingly (see "Ten GM Financial Consumer Automobile Receivables Trust Ratings From Two Transactions Affirmed").

As of the June 2023 distribution date, the outstanding transactions are experiencing CNLs below 0.37%, and delinquencies remain relatively steady compared to historical trends (see chart 1 and table 6). We will continue to monitor the performance of all the outstanding transactions to ensure that the credit enhancement remains sufficient, in our view, to cover our ECNLs under our stress scenarios for each of the rated classes.



Chart 1

**Cumulative net loss performance by securitization**  
As of the March 2023 distribution



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Table 6

**Collateral performance and CNL expectations for outstanding GMCAR transactions**

As of the June 2023 distribution date

Series	Mo.	Pool factor (%)	61+ day delinq. (%)	Current CNL (%)	Initial lifetime CNL expectation (%)	Current lifetime CNL expectation (%) (i)
2019-4(ii)	43	10.04	0.35	0.37	N/A	N/A
2020-1	41	12.50	0.38	0.34	1.00-1.20	Up to 0.45
2020-2	38	16.14	0.29	0.30	1.30-1.50	Up to 0.45
2020-3(ii)	34	22.46	0.28	0.22	N/A	N/A
2020-4	32	25.31	0.21	0.20	1.40-1.60	0.65

Table 6

## Collateral performance and CNL expectations for outstanding GMCAR transactions (cont.)

As of the June 2023 distribution date

Series	Mo.	Pool factor (%)	61+ day delinq. (%)	Current CNL (%)	Initial lifetime CNL expectation (%)	Current lifetime CNL expectation (%) <sup>(i)</sup>
2021-1	29	29.92	0.19	0.19	1.40-1.60	0.65
2021-2(ii)	26	36.10	0.19	0.19	N/A	N/A
2021-3	23	43.21	0.25	0.17	1.20	0.80
2021-4	20	49.19	0.15	0.14	1.20	0.80
2022-1	17	54.62	0.18	0.16	1.20	0.85
2022-2	14	61.77	0.19	0.14	1.20	0.90
2022-3(ii)	11	68.74	0.15	0.11	N/A	N/A
2022-4	8	75.80	0.13	0.09	1.20	N/A
2023-1(ii)	5	83.62	0.09	0.03	N/A	N/A
2023-2	2	90.73	0.03	0.00	1.20	N/A

(i)Lifetime expected CNLs were revised on Nov. 28, 2022, for series 2020-1, 2020-2, 2020-4, 2021-1, 2021-3, and 2021-4.

Lifetime expected CNLs were revised on May 19, 2023, for series 2022-1 and 2022-2.

(ii)Not rated by S&P Global Ratings.

GMCAR--GM Financial Consumer Automobile Receivables Trust.

CNL--Cumulative net loss. N/A--Not applicable.

## Legal Overview And Transaction Structure

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

The transaction is structured as a true sale of the receivables from GM Financial to AFS SenSub Corp. (AFS; the depositor). Through this true sale, AFS will sell the acquired assets to the trust, a bankruptcy-remote special-purpose entity, which will pledge its interest in the receivables to the trustee on the noteholders' behalf (see chart 2).

## Transaction Structure

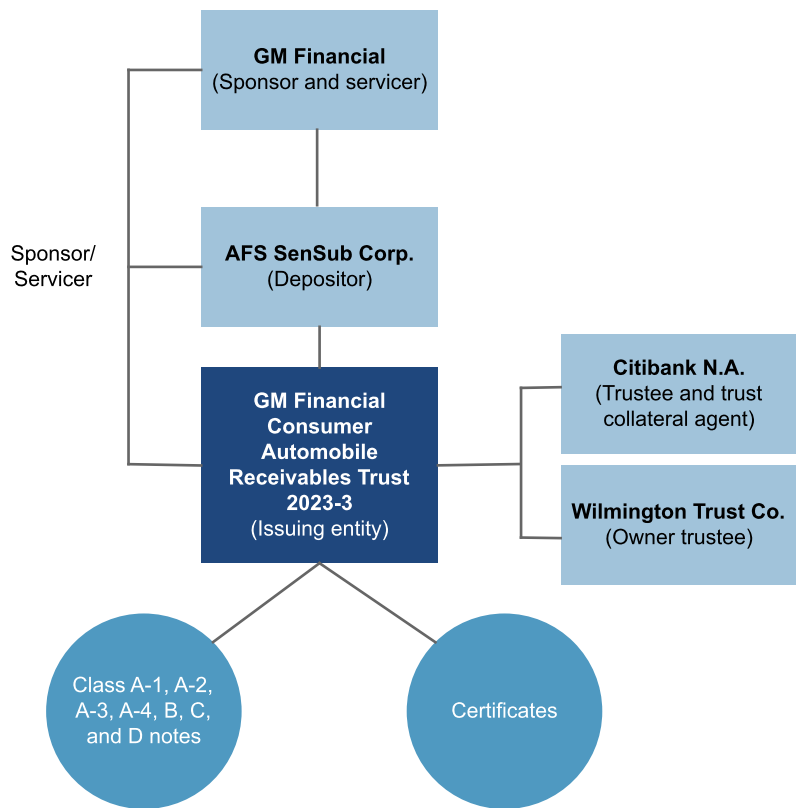
The GMCAR 2023-3 transaction incorporates certain structural features:

- A dynamic YSOA that initially comprises approximately 6.86% of the initial aggregate pool balance (6.89% if upsized) and will be calculated each month as the pool amortizes based on the difference between the aggregate receivables balance outstanding and the present value of the receivables balance, discounted at the greater of 8.30% per year or the receivables' actual APR. The YSOA is sized so that the yield on the contracts with APRs below the YSOA-required

- rate is raised to the required rate. The YSOA-required rate will step down to 7.80% after the class A-2-B notes are paid in full. If no class A-2-B notes are issued at closing, the YSOA-required rate will step down to 7.80% of the first distribution date.
- A sequential principal payment structure in which the subordinated classes will provide nonamortizing credit enhancement to the senior classes.
  - Notes that mainly pay a fixed interest rate. Class A-2-B, if issued, will pay a variable interest rate indexed to a 30-day average secured overnight financing rate (SOFR) plus a margin.
  - An initial 1.50% overcollateralization amount that builds to a target of 2.00% of the initial adjusted pool balance.
  - A fully funded nonamortizing reserve account amount that will not be less than 0.25% of the initial adjusted pool balance.
  - Excess spread, to the extent available after covering net losses, which pays principal on the outstanding notes to build credit enhancement to the target level.

Chart 2

**Transaction Structure**



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## Payment Priority

Interest and principal are scheduled to be paid on the rated notes on each monthly distribution date. The payment priority, before an acceleration of the notes following an event of default, dictates how the available auto loan collections will be used to make the distributions (see table 7). In addition, the reserve account's funds will be available to cover interest shortfalls, pay priority principal, and pay principal that is due on the notes' final maturity dates.

Table 7

### Payment waterfall

Priority	Payment
1	To the servicer, the 1.0% servicing fee, any supplemental servicing fees, any reimbursements for mistaken deposits and other related amounts, and certain other amounts due on the auto loan contracts that the servicer is entitled to retain. To GM Financial, amounts deposited into the collection account that are not related to interest, principal, or extension fees due on the auto loan contracts.
2	To the trustee, owner trustee, trust collateral agent, and the asset representations reviewer, any due and unpaid fees, expenses, and indemnities, each capped annually.
3	Interest on the class A notes, which will be paid pari passu to the class A(i) noteholders.
4	First-priority principal distribution amount (the amount by which the class A note balance exceeds the adjusted pool balance), if any, provided that for the final scheduled distribution date of any class A notes, the first priority principal distribution amount will equal the amount necessary to reduce the outstanding principal amount of the affected class A notes to zero.
5	Interest on the class B notes.
6	Second-priority principal distribution amount (the amount by which the combined principal balance of the class A and B notes exceeds the adjusted pool balance), if any, provided that for the class B notes' final scheduled distribution date, the second priority principal distribution amount will equal the amount necessary to reduce the class B notes' outstanding principal amount to zero.
7	Interest on the class C notes.
8	Third-priority principal distribution amount (the amount by which the combined principal balance of the class A, B, and C notes exceeds the adjusted pool balance), if any, provided that for the class C notes' final scheduled distribution date, the third priority principal distribution amount will equal the amount necessary to reduce the class C notes' outstanding principal amount to zero.
9	Interest, if any, on the class D notes.
10	Fourth-priority principal distribution amount (the amount by which the combined principal balance of the class A, B, C, and D notes exceeds the adjusted pool balance), if any, provided that for the class D notes' final scheduled distribution date, the fourth priority principal distribution amount will equal the amount necessary to reduce the class D notes' outstanding principal amount to zero.
11	To the reserve account, the amount necessary to cause the amount deposited to equal the specified reserve account amount.
12	To pay principal to achieve the specified overcollateralization amount.
13	To the trustee, owner trustee, trust collateral agent, and asset representations reviewer, any fees, expenses, and indemnities due that exceed the related cap or annual limitation on each.
14	All remaining amounts to the certificateholders.

(i) Class A comprises classes A-1, A-2-A, A-2-B, A-3, and A-4, collectively.

## 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.

In a stressed scenario, liquidity risk could arise due to interest shortfalls resulting from the yield on the loans being lower than the yield on the bonds (negative carry risk), especially because the bonds pay sequentially, leading to higher coupon debt remaining outstanding at the tail-end of the transaction. In this transaction, negative carry risk is being addressed through YSOA.

## Break-even analysis

For the GMCAR 2023-3 transaction, we used a bifurcated-pool method and applied the assumptions outlined in table 8 in 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 requirement (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.

Under this approach, we bifurcated the pool between low-APR (subvened) loans and high-APR (non-subvened) loans and applied different prepayment and default assumptions between the two pools. In our bifurcation, we defined low-APR loans as those with APRs less than or equal to 5.00% and high-APR loans as those with APRs greater than 5.00%. We stressed the transaction's excess spread by applying faster prepays and disproportionately higher defaults to the high-APR loans than the low-APR loans. These combined assumptions caused the pool's weighted average APR to decrease faster over time and increases the likelihood that the YSOA will be used for yield enhancement rather than credit enhancement, thereby decreasing break-even loss levels.

Table 8

### Break-even cash flow assumptions

#### Cumulative net loss timing: front-loaded(% of losses per year)

Subvened(i)	30/55/75/90/100
Nonsubvened(i)	40/65/90/100

#### Cumulative net loss timing: back-loaded (% of losses per year)

Subvened(i)	20/45/70/85/95/100
Nonsubvened(i)	30/55/80/95/100

#### Loss allocation (% of total losses)(ii)

Subvened(i)	40.00
Nonsubvened(i)	60.00

#### Voluntary ABS (%)

Subvened(i)	0.25
Nonsubvened(i)	1.50
Recovery rate (%)	50.00

Table 8

**Break-even cash flow assumptions (cont.)**

Recovery lag (mos.)

4

(i) The subvened/nonsubvened cutoff APR is 5.00%. (ii) Disproportionate loss allocation: approximately 52.00% of the pool with APRs of 5.00% or below are allocated 40.00% of total losses and 48.00% of the pool with APRs greater than 5.00% are allocated 60.00% of total losses.

ABS--Absolute prepayment speed. APRs--Annual percentage rates.

We modeled both issuance scenarios assuming: Class A-2-B notes are issued at the 50.00% maximum of the total A-2 class (collectively, class A-2-A and A-2-B) and the YSOA is at the 8.30% required rate and will step down to 7.80% after class A-2-B is fully repaid; and no class A-2-B notes are issued at closing and the YSOA required rate steps down to 7.80% on the first distribution date. Based on our stressed cash flows, the break-even net loss results show that the class A, B, and C notes are credit-enhanced to the degree appropriate for the assigned preliminary ratings (see table 9).

The class A-2 notes may consist of fixed-rate class A-2-A notes and floating-rate class A-2-B notes, which will accrue interest at a floating rate benchmarked to 30-day average SOFR plus a spread. For the floating-rate tranche, we applied our stressed interest rates for one-month SOFR, as described in our criteria "Methodology To Derive Stressed Interest Rates In Structured Finance," published Oct. 18, 2019, using a SOFR curve starting at 5.00%.

Table 9

**Break-even cash flow results**

	Class		
	A	B	C
Preliminary rating	AAA(sf)	AA+(sf)	AA(sf)
<b>CNL timing mos. (12/24/36/48/60/72)(%)</b>			
<b>Front-loaded</b>			
Aggregate	37/63/86/97/100	37/63/86/97/100	37/63/86/97/100
Subvened(i)	33/61/80/93/100	33/61/80/93/100	33/61/80/93/100
Nonsubvened(i)	40/65/90/100	40/65/90/100	40/65/90/100
<b>Back-loaded</b>			
Aggregate	28/55/80/94/100	28/55/80/94/100	28/55/80/94/100
Subvened(i)	24/54/79/93/99/100	24/54/79/93/99/100	24/54/79/93/99/100
Nonsubvened(i)	30/55/80/95/100	30/55/80/95/100	30/55/80/95/100
<b>Approximate break-even CNL levels%(ii)</b>			
Required	6.0	5.4	4.8
Available (if class A-2-B notes are issued at maximum size)--base	8.7	7.5	6.3
Available (if all fixed-rate notes are issued)--base	8.6	7.2	6.1
Available (if class A-2-B notes are issued at maximum size)--upsized	8.7	7.5	6.3

Table 9

**Break-even cash flow results (cont.)**

	Class		
	A	B	C
Available (if all fixed-rate notes are issued)--upsized	8.6	7.2	6.1

(i)The subvented/nonsubvented cutoff APR is 5.0%.(ii)The maximum CNLs the transaction can withstand without triggering a payment default on the relevant class of notes. CNL--Cumulative net loss.

Although the class B and C notes' lowest break-even levels may satisfy our minimum requirement for the preliminary rating assigned to the class immediately above, given its relative subordinated position and distribution of losses within the transaction's structure, the assigned rating is structurally constrained (see table 9 and "S&P Global Ratings Definitions," published June 9, 2023).

**Sensitivity analysis**

Under the 2.40% moderate stress loss scenario (2.0x our ECNL), we used a bifurcated pool method again, in which the high-APR (nonsubvented) collateral default and prepay at higher rates than the low-APR (subvented) collateral. In addition, the nonsubvented collateral was allocated a higher proportion of the total losses than its representative proportion of the total loan pool balance (see table 10 and charts 3a-3d).

Table 10

**Scenario analysis summary: moderate stress loss scenario**

CNL level (% of initial pool balance)	2.40
<b>CNL timing mos. (12/24/36/48/60/72)(%)</b>	
<b>Front-loaded</b>	
Aggregate	37/63/86/97/100
Subvented(i)	33/61/80/93/100
Nonsubvented(i)	40/65/90/100
<b>Back-loaded</b>	
Aggregate	28/55/80/94/100
Subvented(i)	24/54/79/93/99/100
Nonsubvented(i)	30/55/80/95/100
<b>Loss allocation (% of total losses)(ii)</b>	
Subvented(i)	40.00
Nonsubvented(i)	60.00
<b>Voluntary ABS (%)</b>	
Subvented(i)	0.25
Nonsubvented(i)	1.50
Recovery rate (%)	50.00
Recovery lag (mos.)	4

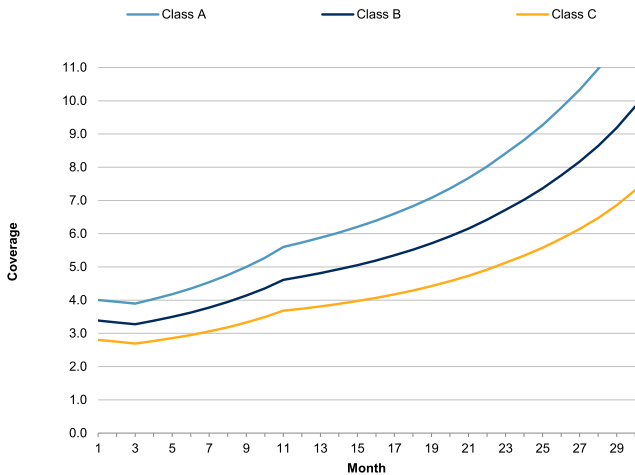
Table 10

Scenario analysis summary: moderate stress loss scenario (cont.)

(i)The subvened/nonsubvened cutoff APR is 5.00%. (ii)Disproportionate loss allocation: approximately 52.00% of the pool with APRs of 5.00% or below are allocated 40.00% of total losses and 48.00% of the pool with APRs greater than 5.00% are allocated 60.00% of total losses. CNL--Cumulative net loss. ABS--Absolute prepayment speed. APRs--Annual percentage rates.

Chart 3a

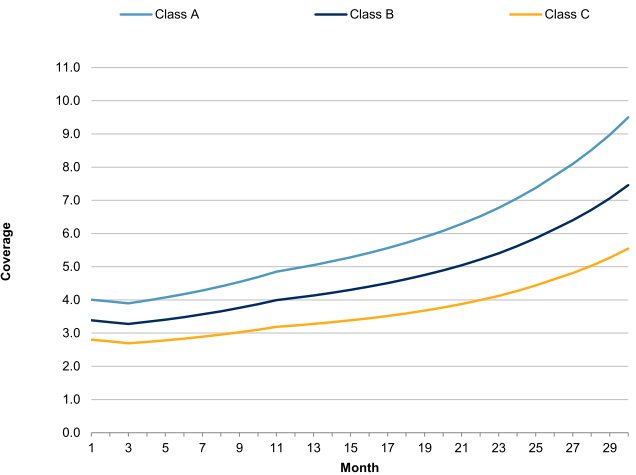
'BBB' sensitivity net loss coverage multiples--base  
 Front-loaded loss curve



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Chart 3b

'BBB' sensitivity net loss coverage multiples--base  
 Back-loaded loss curve

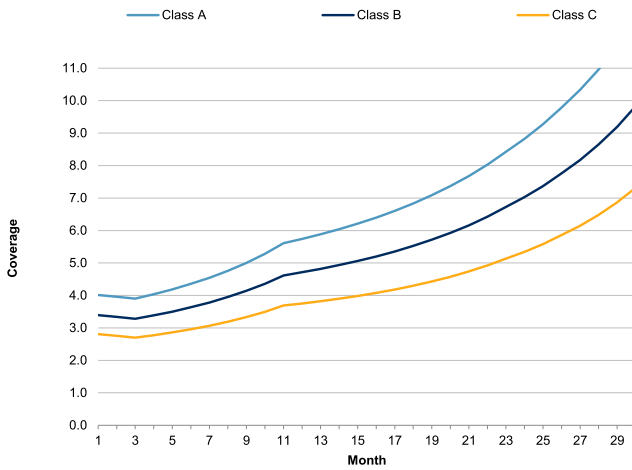


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Chart 3c

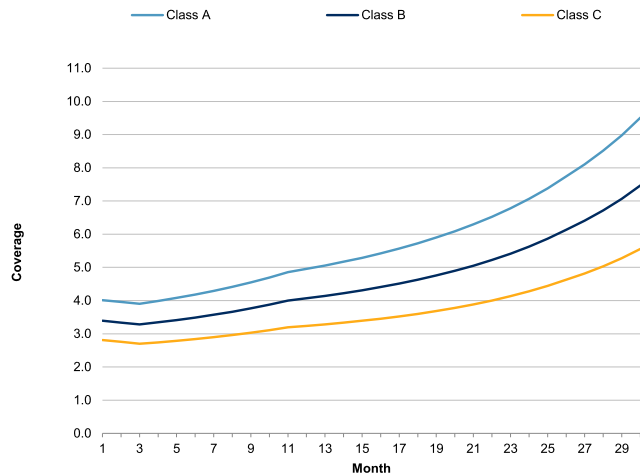
'BBB' sensitivity net loss coverage multiples--upsized  
Front-loaded loss curve



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Chart 3d

'BBB' sensitivity net loss coverage multiples--upsized  
Back-loaded loss curve



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In our view, the assigned preliminary ratings on the class A, B, and C notes are consistent with the credit stability limits specified by section A.4 of the Appendix of "S&P Global Ratings Definitions," published June 9, 2023 (see table 11 and chart 3a-3d). This indicates that we would not assign 'AAA', 'AA+', and 'AA' ratings if, under moderate stress conditions, the ratings would be lowered by more than one category within the first year.

Table 11

### Credit stability as a limiting factor on ratings

Maximum projected deterioration associated with rating levels for one- 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.

## Money Market Tranche Sizing

The proposed legal final maturity date for the money market tranche (class A-1) is July 16, 2024. To test whether the money market tranche can be repaid by the proposed legal final maturity date, we ran cash flows using assumptions to delay the principal collections during that time period. We assumed zero defaults, and we saw that the money market tranche would be paid off in full before the legal final maturity date, assuming a zero absolute prepayment speed for the subvened collateral and 0.50% absolute prepayment speed for the nonsubvened collateral.

## Legal Final Maturity

To test the legal final maturity dates set for classes A through C, we determined when the respective notes would be fully amortized in a zero-loss, zero-prepayment scenario and then added three months to the result. To test the legal final maturity date for the class D notes, we determined the latest maturing loan's distribution date and then added at least eight months to accommodate extensions. Furthermore, in the break-even scenario for each respective rating level, we confirmed that there was sufficient credit enhancement to both cover losses and repay the related notes in full by the legal final maturity date.

## Counterparty And Operational Risks

### Bank account provider

On or before the closing date, the series bank accounts will be established with the Citibank N.A., the indenture trustee and bank account provider, 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, GM Financial has an experienced management team that oversees origination, underwriting, servicing, collections, and general operational practices. GM Financial satisfies our requirements for commingling risk by the requirement that all collections are deposited into the series collections account within two business days of collection. Our operational risk assessment of GM Financial as servicer does not constrain the ratings (see "Global Framework For Assessing Operational Risk In Structured Finance Transactions," published Oct. 9, 2014).

## GM Financial

The sponsor, GM Financial, is a wholly owned subsidiary of General Motors Financial Co. Inc., which is the wholly owned captive finance subsidiary of General Motors Co. (GM) and the global provider of automobile financing solutions for GM. GM Financial, also known as AmeriCredit Financial Services Inc. (AmeriCredit), has been operating in the auto finance business since September 1992. GM Financial began a strategic relationship with GM in September 2009 and was acquired by GM in October 2010 to provide captive financing capabilities to serve GM's markets. During this time, AmeriCredit's corporate parent was renamed GM Financial. As part of its broader captive capabilities, GM Financial added prime auto loan financing in the U.S. in 2014 and became the exclusive provider of subvented loans for GM in January 2016.

The sponsor purchases auto loan contracts, generally without recourse, for new and used vehicles that consumers purchase from GM-franchised dealers and non-GM-franchised dealers while also conducting business with a limited number of independent dealers. The sponsor's consumer loan program includes full credit spectrum lending under the GM Financial brand and a subprime lending product under the AmeriCredit brand. As of March 31, 2023, the sponsor serviced a portfolio in North America of approximately 2.4 million auto loan contracts with an aggregate outstanding balance of approximately \$62 billion. GM Financial also offers auto leases to

consumers and commercial lending services for GM-franchised dealers.

The sponsor maintains a team of regional sales and credit representatives, with credit centers located in major markets throughout the U.S. and Canada, and services its loan portfolio using automated loan servicing and collection systems. The sponsor funds its auto-lending activities through its credit facilities, securitization transactions, and unsecured debt.

## **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 | General: Methodology To Derive Stressed Interest Rates In Structured Finance , Oct. 18, 2019
- 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**

- Credit Conditions North America Q3 2023: Risks vs. Resilience, June 27, 2023
- Economic Outlook U.S. Q3 2023: A Sticky Slowdown Means Higher For Longer, June 26, 2023
- U.S. Auto Loan ABS Tracker: April 2023 Performance, June 9, 2023
- Ten GM Financial Consumer Automobile Receivables Trust Ratings From Two Transactions Affirmed, May 19, 2023
- Various Rating Actions Taken On 36 Classes From Eight GM Financial Consumer Automobile Receivables Trust Transactions, Nov. 28, 2022

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