S&P Global Ratings

Research

Presale:

GMF Floorplan Owner Revolving Trust (Series 2023-1)

June 15, 2023

PRIMARY CREDIT ANALYST

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Preliminary ratings

Class	Preliminary rating	Interest rate	Preliminary amount (mil. $)	Credit support (% of collateral balance)(i)	Expected maturity date	Final maturity date
A-1/A-2(ii)	AAA (sf)	Fixed/floating	500.000	27.87	June 15, 2026	June 15, 2028
B	AA (sf)	Fixed	34.246	22.87	June 15, 2026	June 15, 2028
C(iii)	A (sf)	Fixed	30.808	18.37	June 15, 2026	June 15, 2028
D(iii)	BBB (sf)	Fixed	27.397	14.37	June 15, 2026	June 15, 2028

Note: This presale report is based on information as of June 15, 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)Credit support consists of overcollateralization, a reserve account, and subordination, as applicable. (ii)The allocation of the principal amount between the class A-1 and A-2 notes will be determined on or before the date of pricing. The entire initial principal amount may be allocated to either the class A-1 or A-2 notes. Interest on the A-2 notes will be based on 30-day average SOFR. (iii)The class C and D notes will be initially retained by the depositor. SOFR--Secured overnight financing rate.

Profile

Expected closing date	June 28, 2023.
Expected maturity date	June 15, 2026.
Final maturity date	June 15, 2028.
Interest payment date	The 15th of each month, or the next business day, beginning July 17, 2023.
Collateral	A revolving pool of receivables arising from floorplan financing agreements between GM Financial and retail auto dealers, primarily dealers of General Motors Co. (BBB/Stable/--) vehicles, to finance the dealers' inventory of new and used autos and light- and medium-duty trucks and vans.
Sponsor and servicer	AmeriCredit Financial Services Inc., doing business as GM Financial, a subsidiary of General Motors Financial Co. Inc. (BBB/Stable/--).

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Profile (cont.)

Depositor	GMF Wholesale Receivables LLC.
Indenture trustee	Computershare Trust Company N.A. (BBB/Stable/--).
Owner trustee	Deutsche Bank Trust Co. Delaware.
Lead underwriter	Barclays Capital Inc.

Rationale

The preliminary ratings assigned to GMF Floorplan Owner Revolving Trust's (GFORT) asset-backed notes series 2023-1 reflect:

- Our view that the 27.87%, 22.87%, 18.37%, and 14.37% hard credit support (expressed as a percentage of the series 2023-1 nominal liquidation amount) for the class A, B, C, and D notes, respectively, is sufficient to withstand our stress scenarios commensurate with the assigned preliminary 'AAA (sf)', 'AA (sf)', 'A (sf)', and 'BBB (sf)' ratings, respectively.
- Our issuer credit rating (ICR) on the primary manufacturer, General Motors Co. (GM; BBB/Stable/--).
- The transaction's three-month payment rate triggers of 25.0%, 22.5%, and 20.0%, which, when breached, cause a step-up period in which the transaction's required credit enhancement will increase as a percentage of the initial aggregate invested amount (see the Credit Enhancement Step-Up Period Overview section below). In each instance, if sufficient credit enhancement is not provided, an early amortization event will occur.
- The transaction's 17.50% three-month average payment rate trigger, which cannot be cured and will lead to an immediate early amortization period.
- Our expectation that under a moderate ('BBB') stress scenario, all else being equal, our ratings will remain within the credit stability limits specified in section A.4 of the Appendix in "S&P Global Ratings Definitions," published June 9, 2023.
- Our view of the relative financial strength of the dealers that have accounts designated to the trust (the underlying obligors of the floorplan loans), GM's leading market share and competitive position in the U.S., manufacturer concentrations in the trust, and our view of the overall quality of the collateral (i.e., the vehicles securing the floorplan loans).
- Our view of General Motors Financial Co. Inc.'s (GM Financial; BBB/Stable/--) servicing experience and our view of the quality and consistency of the company's account origination, account management, and collateral auditing practices.
- Our view of the adequacy of GM Financial's servicer transition plan and the successor servicer's ability to assume those duties if required.
- Our expectation for the timely payment of periodic interest and principal by the final maturity date according to the transaction documents, based on stressed cash flow modeling scenarios using assumptions consistent with the assigned preliminary ratings.
- The transaction's underlying payment structure, legal structure, and cash flow mechanics.

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Environmental, Social, And Governance (ESG) Factors

Our rating analysis considers a transaction's potential exposure to ESG credit factors. In our view, the transaction has material exposure to environmental credit factors due to the collateral pool, which primarily comprises of vehicles with internal combustion engines (ICEs) that emit pollutants contributing to climate transition risks. While the adoption of electric vehicles and future regulation could, in time, lower ICE vehicle values, we believe our current approach to evaluating recovery values adequately accounts for vehicle values over the relatively short expected life of the transaction.

The transaction has exposure to governance risk, in our view. Given the revolving collateral pool and the originator's more active role over the transaction's life, there is the risk of loosening underwriting standards or potential adverse selection. We believe this risk is mitigated by the performance-based triggers that are incorporated in the transaction structure, including the payment rate and credit enhancement triggers. Additional mitigating factors include the transaction's asset eligibility and concentration limits (see Credit Support, Structural Overview And Payment Priority sections below for more details). As a result, we have not separately identified this as a material ESG credit factor in our analysis.

Transaction Overview

The trust's collateral consists of receivables and the related collateral security in vehicles that are financed from revolving lines of credit that GM Financial extends primarily to GM retail dealers throughout the U.S. to finance inventories of new and used cars and light- and medium-duty trucks and vans. Each receivable is an obligation in which the dealer agrees to repay the loan amount that it incurred when purchasing a vehicle for its inventory. GM Financial generally charges monthly interest on the outstanding loans at a rate generally indexed to the prime rate, plus or minus a designated spread. The dealer must repay the principal balance of the floorplan loans a few days after the related vehicles are sold.

GFORT series 2023-1 is a securitization of dealer floorplan loans originated by GM Financial. The trust is a master owner trust that can issue notes through discrete series. The series 2023-1 issuance will consist of class A, B, C, and D notes, where class A may consist of class A-1 fixed-rate notes and A-2 floating-rate notes. Interest payments on the notes will be due on the 15th day of each month (or the next business day) beginning July 17, 2023.

The transaction is scheduled to pay principal to the noteholders for each class on June 15, 2026, the expected maturity date. However, our preliminary ratings address principal payments by June 15, 2028, the final maturity date.

The payment rate triggers and initial hard credit support levels are consistent with the trust's previous series that we have rated. Additionally, we reviewed the collateral composition and the trust performance over time (see the Collateral Overview And Master Trust Statistics section below).

Changes From The Series 2020-1 Transaction

Notable changes from the series 2020-1 issuance (last S&P Global Ratings-rated GFORT series) include:

- Used vehicle concentration limit increased to 35% from 20%.

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- Series 2023-1 includes a make-whole payment requirement payable to noteholders in the event the issuing entity exercises an optional redemption, in whole but not in part, to redeem the notes on any earlier distribution date prior to the note redemption period but not earlier than one year after the closing date. Our preliminary ratings do not address whether make-whole payments will be made.
- A discount option whereby the depositor, at its discretion, may designate up to 2% of the series 2023-1 allocable principal collections to be allocated as series 2023-1 interest collections if additional yield is needed to cover note interest and payables. Currently, this option is not being utilized. An exercise of this option will require notice to the indenture trustee and rating agencies and delivery of an officer's certificate by the depositor.

Additionally, amendments implemented in 2020 and 2021 for the outstanding series that also apply to this series include the following: Interest collections or principal collections allocated to the transferor may voluntarily be shared with any of the outstanding series of notes;

- Allows the sponsor to make servicer advances;
- Excess funding account trigger amended to 70% for six consecutive months from 30% for three consecutive months; and
- Interest sharing across series and use of principal collections during excess funding period for interest shortfall coverage.

These changes and prior amendments, in our view, do not adversely affect the series. The structural enhancements may provide more flexibility and additional funding sources for the notes.

General Motors Co.

GM is the primary manufacturer of the vehicles securing the receivables sold to the trust. As of March 31, 2023, approximately 96% of the trust pool by receivables balance consisted of GM franchise dealers. GM is one of the world's largest automakers, and in 2022, it had the number one market share in North America. GM manufactures vehicles under several brands, including Buick, Cadillac, Chevrolet, and GMC, for which GM Financial provides wholesale financing.

Manufacturer-related risks

The obligors of a non-diversified auto dealer floorplan (ADFP) pool are predominantly franchised dealers. Therefore, we view their financial health as being largely dependent on the financial health of the related manufacturer (GM in this transaction). Accordingly, we believe a manufacturer bankruptcy--an event risk in non-diversified ADFP transactions--could decrease the manufacturer's support, such as sales incentives and other payments, to the dealer. Under this stressed scenario, the related dealer may be left with a relatively large supply of vehicles in inventory from a bankrupt manufacturer that is not providing sales support or payment reimbursements. Therefore, we view our ICR on GM as a differentiating factor affecting the credit quality of the floorplan loans sold to the trust.

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GM Financial

GM Financial is the servicer of the dealer accounts designated to the trust. GM Financial has been actively originating and servicing wholesale dealer floorplan assets since 2012. As of March 31, 2023, the average principal balance of the company's U.S. serviced portfolio of dealer floorplan assets was $7.366 billion.

Servicing overview

GM Financial, the servicer, will deposit all interest and principal collections into the collections account within two business days of those receivables' processing date. However, if certain provisions in the transaction documents are met, including that our rating on the servicer is 'A-' or higher, the servicer may make a single collections deposit into the collections account no later than two days before any distribution date.

Our criteria generally limit our ratings on non-diversified ADFP ABS to six-to-nine notches higher than the rating on the servicer or manufacturer--unless provisions are in place to address servicing transfer risk. If the servicer or the manufacturer is rated 'A-' or higher, no provisions may be necessary. If the servicer or the manufacturer is in the 'BBB' rating category, which is the case with GM Financial and GM, a servicer transition plan or other provisions should be in place at the transaction's closing to address servicing transition risk.

We analyze the details of any servicing transition plan, including the trustee's role in facilitating a servicing transfer, and the relevant experience and capacity of the trustee or successor servicer. In this analysis, we view the trustees and successor servicers with successful histories of servicing floorplan pools as a positive factor. If the servicer or the manufacturer has a speculative-grade rating ('BB+' or lower), a formal backup servicing agreement would be necessary. In all instances, the rating on the ABS transaction could be influenced by a change to the servicer or manufacturer rating (see "Global Non-Diversified Auto Dealer Floorplan Rating Methodology And Assumptions," published Feb. 5, 2015).

We reviewed GM Financial's servicing transition plan and the successor servicer's ability and willingness to assume those duties if required.

Legal Structure

GM Financial, the originator, will sell all of the receivables generated from designated accounts, as well as the collateral security for the accounts, to GMF Wholesale Receivables LLC, the depositor. GMF Wholesale Receivables LLC, a bankruptcy-remote special-purpose entity, will grant a first-priority perfected security interest in the receivables and the collateral security to the trust, which, in turn, will grant a first-priority perfected security interest to the indenture trustee on the noteholders' behalf. In rating this transaction, S&P Global Ratings will review the relevant legal matters outlined in its criteria.

Credit Support

According to the transaction documents, the credit support for the class A, B, C, and D notes will total 27.87%, 22.87%, 18.37%, and 14.37% of the nominal liquidation amount (the collateral balance), respectively. Credit support will consist of overcollateralization (13.50%), a cash reserve

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account (0.86%), and subordination, as available. The credit support expressed as a percentage of the series 2023-1 initial aggregate invested amount is 32.21%, 26.43%, 21.23%, and 16.61% for the class A, B, C, and D notes, respectively. Additionally, the available credit support will be required to step up to a higher amount in certain instances where the three-month average monthly payment rate declines below certain thresholds.

Credit enhancement step-up period overview

The required overcollateralization amount or required reserve account amount will increase to a specific percentage of the initial invested amount based on the trust's three-month average payment rate as outlined below. All listed credit support measurement percentages are as a percentage of the initial invested amount:

- The required overcollateralization amount will increase to 18.50% from 15.61% if the three-month average payment rate is less than 25.00% but at least 22.50%. Alternatively, the seller may increase the reserve account amount--in lieu of increasing the overcollateralization amount--to 3.15%. Failure to increase either the overcollateralization or the reserve account amounts will result in an early amortization event.
- The required overcollateralization amount will increase to 21.68% from 18.50% if the three-month average payment rate is less than 22.50%, but at least 20.00%. Alternatively, the seller may increase the reserve account amount--in lieu of increasing the overcollateralization amount--to 5.50%. Failure to increase either the overcollateralization or the reserve account amounts will result in an early amortization event.
- The required overcollateralization amount will increase to 25.14% from 21.68% if the three-month average payment rate is less than 20.00% but at least 17.50%. Alternatively, the seller may increase the reserve fund--in lieu of increasing the overcollateralization amount--to 8.05%. Failure to increase either the overcollateralization or the reserve account amounts will result in an early amortization event.

The transaction also contains a 17.50% payment rate trigger, which, if breached, will not be curable and will lead to an early amortization event.

The series 2023-1 transaction structure also incorporates an incremental overcollateralization feature. If the collateral characteristics exceed the concentration limits established in the transaction documents (see the Concentration Limits section below) or the receivables become ineligible, the required overcollateralization amount will increase by an amount equal to the excess concentration amounts or the ineligible receivables balances. Under the transaction documents, the amortization period will begin immediately on any distribution date on which the required overcollateralization is not present.

The reserve account

The amounts held in the reserve account will be available to cover any shortfalls in monthly interest, monthly servicing fees, uncovered defaults, and unreinstated reallocated principal on any payment date. Amounts in the reserve account above the required amount will be released to the transferor as long as no early amortization event occurs. On the final maturity date, any amounts remaining in the reserve fund will be treated as available noteholder principal collections and applied sequentially to the class A, B, C, and D notes until paid in full.

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Structural Overview And Payment Priority

Allocations

The series 2023-1 transaction has three distinct allocation periods: revolving, accumulation, and early amortization. The revolving period will be in effect from the closing date until the earlier of the accumulation period start date and the business day immediately preceding an early amortization event.

For all three periods, the interest collections (interest, fees, investment earnings, and recoveries) will be allocated to the notes based on the floating allocation percentage or the notes' proportional share of the trust receivables.

For all three periods, the principal collections will be allocated to the series 2023-1 notes based on the principal allocation percentage. The principal allocation percentage will equal the series' nominal liquidation amount share of the trust's assets during the revolving period (i.e., before any amortization). Once the revolving period ends, the principal allocation percentage will still equal the series' nominal liquidation amount share of the trust's assets as of the day immediately before the revolving period ends. The principal allocation percentage may result in a faster amortization of the notes than if the collections were distributed based on the series' proportional share of the trust's receivables at each distribution. In general, during the revolving period, principal allocable to series 2023-1 will be used first to cover any principal shortfalls for other outstanding series and then to acquire receivables to the extent necessary to ensure the adjusted pool balance at least equals the required participation amount. In general, during the accumulation period, principal allocable to series 2023-1 will be deposited into the accumulation account to build up cash sufficient to redeem the outstanding notes at maturity. During the early amortization period, principal allocable to series 2023-1 will be applied sequentially to the outstanding notes until each class is paid off.

Payment priority--interest collections

The series 2023-1 available interest collections deposited in the collections account will be used to make payments on each distribution date in the priority shown in table 1.

Table 1

Payment waterfall

Priority	Payment
1	Indenture and owner trustee fees, capped at $100,000 cumulatively in any 12-month period.
2	Monthly servicing fee.
3	Class A monthly interest.
4	Class B monthly interest.
5	Class C monthly interest.
6	Class D monthly interest.
7	Series defaulted amounts(i).
8	Reallocated principal collections that haven't been previously reimbursed.
9	Maintain the reserve fund requirement.

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Table 1

Payment waterfall (cont.)

Priority	Payment
10	If the notes have been accelerated after an event of default, the remaining interest to be recharacterized as principal and distributed accordingly.
11	To pay any portion of the monthly servicing fee that was previously waived by the servicer on the related distribution date and has not been previously reimbursed.
12	To cover interest shortfalls for other series of notes in excess interest sharing group one.
13	Pro rata to each of the indenture and owner trustees, all amounts due to the extent not paid in item 1, disregarding the annual cap.
14	To repay the servicer for any outstanding advances; then to repay the transferor for amounts previously paid to cover interest shortfall, if any; and then all remaining amounts to the holder of the transferor interest.

(i)In item 7, the available interest collections will be used to cover any current monthly defaults and other items that would otherwise reduce the pool balance. The remaining amounts will then be used to make principal payments to restore any previous reductions to the series 2023-1 investment and to reestablish the subordination amount at its required level.

If the available interest collections for the series 2023-1 notes are insufficient to cover the monthly expenses, a shortfall will occur. Shortfalls will first be covered by the available excess interest collections from other series in the trust, then by the transferor's allocable share of interest collections, then by advances from the servicer at its election, then by the available amounts in the reserve fund, and then by the reallocated principal collections. Available shared excess interest, transferor's allocable share of interest collections, and servicer advances can be applied to any shortfalls arising in items 1-9, reserve account draws can be applied to any shortfalls arising in items 1-8, and reallocated principal can be applied to any shortfalls arising in items 3-6. Any unreimbursed reallocated principal collections will result in a write-down of the available credit enhancement. If the overcollateralization is below the required levels for any month, an early amortization period will begin.

Payment priority--principal collections

During the revolving period, the principal collections that are allocated to the series 2023-1 notes will be paid to the transferor in exchange for the new receivables that are sold to the trust. If the non-overconcentrated pool balance (the pool balance minus any overconcentrated receivables) is less than the requirement, then the principal collections that would otherwise be allocated to the transferor will be deposited into the excess funding account to the extent necessary to cure the shortfall in the trust's non-overconcentrated pool balance (see the Collateral Overview And Master Trust Statistics section below for more information on concentration limits).

The controlled accumulation period is scheduled to begin on the first day of the December 2025 collection period, though the servicer may extend the revolving period and postpone the controlled accumulation period. During the controlled accumulation period, the principal collections will be deposited monthly into the accumulation account, up to the monthly principal, with the excess principal continuing to be reinvested in new receivables or shared across other series as needed. The amounts held in the accumulation account during the accumulation period will be distributed to the noteholders in a soft bullet payment on the expected maturity date.

The reallocated principal collections, reserve fund, transferor's share of interest collections, and servicer's advances (if elected to be made) will be available to make interest payments on the series 2023-1 notes, including any shortfalls that occur from negative carry during the

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accumulation period after principal collections are deposited in the accumulation account. This reallocation may reduce the overcollateralization.

The series 2023-1 transaction structure incorporates early amortization events that will occur under certain circumstances, which will initiate the early amortization period and effectively terminate the revolving or controlled accumulation period. During the early amortization period, the available principal collections deposited into the note distribution account or note defeasance account will be used on each payment date to make full principal distributions sequentially to the class A, B, C, and D notes. Any remainder will be paid to the holders of the transferor's interest.

Amortization events

An early amortization event will occur if any of the following events occurs:

- The issuing entity, depositor, GM Financial, or servicer (if GM Financial is no longer the servicer), as applicable, fails to make any required deposits, deliver a monthly servicer's certificate on the date required, or observe or perform any covenant or agreement, and it remains unremedied for 60 days after written notice;
- Any representation or warranty made by GM Financial or the depositor in any transaction document, or any information required to be delivered by GM Financial or the depositor, is incorrect when made or delivered, and it remains unremedied for 60 days after written notice and materially and adversely affects the noteholders' interests;
- A GM insolvency event occurs;
- The overcollateralization amount available on any distribution date is less than the required amount for that distribution date;
- Any servicer termination event occurs that adversely affects any noteholder's interest, or GM Financial no longer acts as servicer under the transfer and servicing agreement;
- A 17.5% three-month average payment rate trigger occurs on any determination date;
- The notes become immediately due and payable as a result of an event of default;
- For six consecutive months, the amounts on deposit in the excess funding account exceed 70% of the sum of the invested amounts of all outstanding series issued by the issuing entity;
- The notes are not paid in full by the expected final distribution date;
- A transferor or seller insolvency event occurs;
- The transferor fails to transfer to the issuer receivables in additional accounts within 10 business days after it must convey those receivables under the transfer and servicing agreement; and
- The issuer or the transferor must register as an investment company under the Investment Company Act of 1940.

Collateral Overview And Master Trust Statistics

The collateral consists of receivables generated under lines of credit that GM Financial extends to retail auto dealers throughout the U.S. The dealers use floorplan financing to purchase new and used motor vehicles. Floorplan loan repayments are due a few days after the related vehicles are sold or on a specified date based on the account's risk.

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As of the March 31, 2023, statistical calculation date, the trust's portfolio consisted of 1,801 designated dealer accounts and approximately $6.9 billion in total principal receivables. The average principal balance of receivables in each account was approximately $3.8 million. The pool consists of new vehicles (77%), used vehicles (16%), and fleet lease and daily rental vehicles (6%). The portion of new and used vehicles in the trust has historically been stable. As of March 31, 2023, GM Financial charges the dealers in the pool a weighted average annual spread that is 0.60% below the prime rate.

Concentration limits

The trust incorporates the following concentration limits, which are each shown as a percentage of the pool balance:

- A used vehicle concentration limit of 35%;
- A fleet account concentration limit of 2%;
- A medium/heavy truck concentration limit of 2%;
- A dealer demonstration/service loaner vehicle concentration limit of 7.5%;
- A GM-owned dealership (defined as GM or its affiliates having a 5% or greater equity interest in the dealership) concentration limit of 5%;
- A largest dealer concentration limit of 4%, second-largest dealer concentration limit of 3.5%, third- and fourth-largest dealer concentration limits of 3% each, and any other dealer concentration limits of 2.5% each; and
- Receivables from dealers in GM Financial's Tier III or IV risk rating categories (see table 4) have a concentration limit of 0%.

Geographic distribution

Table 2 shows the geographic distribution of the vehicle inventories for the receivables in the trust portfolio.

Table 2

Geographic distribution of trust receivables(i)

State	Receivables outstanding (%)(ii)
Texas	11.2
Michigan	10.4
California	8.2
New York	7.2
Ohio	5.1
Florida	5.1
Other(iii)	52.9

(i)As of March 31, 2023. (ii)As a percentage of the total principal balance. (iii)No other state represented more than 5% of the principal balance.

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Vehicle distribution

Table 3 shows the trust pool's vehicle distribution by largest-make concentrations. Chevrolet and GMC vehicles have historically accounted for approximately 70%-75% of the pool.

Table 3

Vehicle distribution(i)

Make	Receivables outstanding (%)
Chevrolet	49.06
GMC	25.70
Cadillac	6.45
Buick	8.71

(i)As of March 31, 2023.

Dealer financial strength and risk ratings

Key factors we considered in determining the financial strength of the dealer base include overall profitability, net worth through business cycles, and the service absorption rate (the parts and service profits expressed as a percentage of a dealer's fixed costs).

GM Financial uses a proprietary scoring model to assign each dealer a risk rating upon initial underwriting. These assigned risk ratings are reassessed periodically after a floorplan credit line is opened. The model utilizes various factors, including capitalization, leverage, liquidity, profitability, and subjective performance factors. The model also identifies key factors about a dealer that GM Financial considers significant in predicting a dealer's ability to meet its financial obligations.

GM Financial regularly reviews its scoring model and will update the model to improve its statistical predictability. Effective Jan. 1, 2020, GM Financial updated its commercial scoring model and risk rating categories. Under the current scoring model, dealers are classified into one of four risk tiers (see table 4).

Table 4

GM Financial dealer risk rating categories

Tier I	Performing accounts with strong to acceptable financial metrics with at least satisfactory capacity to meet financial commitments.
Tier II	Performing accounts experiencing potential weakness in financial metrics and repayment prospects resulting in increased monitoring.
Tier III	Nonperforming accounts with inadequate paying capacity for current obligations and that have the distinct possibility of creating a loss if deficiencies are not corrected.
Tier IV	Nonperforming accounts with inadequate paying capacity for current obligations and inherent weaknesses that make collection or liquidation in full highly questionable or improbable.

Prior to January 2020, GM Financial assigned each dealer a risk rating of "A," "B," "C," or "D," which corresponds to strong, acceptable, marginal, or poor financial and operating performance, respectively. GM Financial also assigned an "SM" risk rating, which represents a dealer that warrants special mention due to elevated risk.

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We analyzed GM Financial's floorplan portfolio dealer risk ratings distribution over time (see table 5) and the trust's distribution (see table 6). Dealers in the risk categories below SM are usually not included in the trust portfolio, and GM Financial will remove or redesignate these dealers' receivables from the trust. Under the updated scoring model, dealers categorized in risk tiers III and IV will not be included in the trust portfolio. In the event dealers are recategorized into the lower risk tiers through regular active monitoring, the receivables from these dealers will be redesignated from the trust or credit enhancement will be increased to cover the overconcentration limit.

The updated dealer risk scoring model resulted in several dealers being recategorized into the nonperforming tiers (tiers III and IV). These dealers were categorized as performing prior to January 2020 under the former dealer risk scoring model. The model update also resulted in a number of dealer accounts and related receivables being redesignated from the trust.

Table 5

GM Financial floorplan portfolio dealer risk ratings (%)(i)

	As of March 31		Year ended Dec 31		
Dealer risk rating group(ii)	**2023**	**2022**	**2022**	**2021**	**2020**
Tier I	98.9	96.8	98.7	96.0	93.5
Tier II	0.6	2.4	0.6	2.7	4.4
Tier III	0.5	0.9	0.7	1.3	2.1
Tier IV	0.0	0.0	0.0	0.0	0.0
	Year ended Dec 31				
Dealer risk rating group	**2019**	**2018**			
A	21.8	21.7			
B	42.7	39.9			
C	30.8	31.6			
D	2.9	4.8			
SM(iii)	1.5	1.9			
Substandard	0.2	0.0			
Doubtful	0.0	0.0			
Loss	0.1	0.1			

(i)These dealer categories reflect GM Financial's proprietary dealer risk rating system. (ii)Effective Jan. 1, 2020, GM Financial updated its commercial scoring model and risk rating categories. (iii)GM Financial began using the SM rating as an exclusive risk rating designation in December 2016. Prior to this date, SM was an additional qualifying designation that could be applied to dealers with risk ratings in the other rating groups. SM--Special mention.

Table 6

Dealer credit ratings of the trust portfolio (%)(i)

	As of March 31		Year ended Dec. 31		
Dealer risk rating group(ii)	**2023**	**2022**	**2022**	**2021**	**2020**
Tier I	99.4	97.4	99.4	97.1	95.2
Tier II	0.6	2.4	0.6	2.9	4.7
Tier III	0.0	0.1	0.0	0.0	0.1
Tier IV	0.0	0.0	0.0	0.0	0.0

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Table 6

Dealer credit ratings of the trust portfolio (%)(i) (cont.)

	Year ended Dec. 31	
Dealer risk rating group	2019	2018
A	22.8	22.4
B	43.0	40.1
C	29.8	30.5
D	3.1	5.0
SM(iii)	1.3	2.0
Substandard	0.0	0.0

(i)These dealer categories reflect GM Financial's proprietary dealer risk rating system. (ii)Effective Jan. 1, 2020, GM Financial updated its commercial scoring model and risk rating categories. (iii)GM Financial began using the SM rating as an exclusive risk rating designation in December 2016. Prior to this date, SM was an additional qualifying designation that could be applied to dealers with risk ratings in the other rating groups. SM--Special mention.

Age distribution

Age distribution is the number of days that each receivable has been financed by GM Financial, and it is expressed as a percentage of the total principal balance of the receivables (see table 7). In our view, having older inventory, specifically inventory over 270 days old, indicates less turnover and potentially lower payment rates because older inventory can precipitate discounting or production cutbacks. As of the statistical calculation date, approximately 1.6% of the pool balance was inventory older than 270 days as of March 2023.

In 2021 and 2022, a constraint in the supply of new vehicles--due to chip shortages that impacted the auto industry as a whole--lead to shorter average days outstanding, but this has gradually been normalizing in 2023.

Table 7

Age distribution of the trust portfolio (%)

	As of March 31		Year ended Dec. 31				
Days outstanding	2023	2022	2022	2021	2020	2019	2018
0-120	86.8	90.2	89.9	91.8	87.5	78.5	80.3
121-180	7.7	5.4	6.3	4.5	6.9	12.9	11.3
181-270	3.9	2.8	2.3	2.6	2.3	4.7	4.9
Over 270	1.6	1.6	1.5	1.1	3.3	4.0	3.5

Collateral Historical Performance

Payment rates

Payment rates denote inventory turnover and, as a result, often indicate whether inventory discounting or production cutbacks may be forthcoming. In light of supply chain constraints in

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2021 and 2022 leading to shortages of new vehicles, payment rates greatly increased, especially in the past couple of years, and are now expected to gradually normalize.

Table 8

Monthly payment rates of the trust portfolio

	As of March 31		Year ended Dec. 31				
	2023	2022	2022	2021	2020	2019	2018
Highest month (%)	89.3	109.6	118.8	149.1	77.5	52.3	54.2
Lowest month (%)	72.1	85.6	76.5	66.4	25.6	38.1	39.0
Avg. of the months in the period (%)	79.0	94.3	94.1	110.8	59.3	43.8	45.8

Net losses

The GFORT trust has not experienced any net losses since its inception in 2013 (see table 9 for loss and average receivables data). The trust's historical loss performance is influenced by the significant assistance the manufacturer offers to its dealer base. This assistance helps mitigate losses, especially during times of financial stress for the dealers. However, in our stress scenarios, we consider manufacturer financial stress, which we believe would limit GM's ability to provide support to its dealer base. In addition, GM Financial has historically removed or redesignated nonperforming dealer accounts from the trust, resulting in no losses to the trust.

Table 9

Loss experience for the trust portfolio

	As of March 31		Year ended Dec. 31				
	2023	2022	2022	2021	2020	2019	2018
Avg. principal balance (mil. $)	7,194	4,174	5,117	3,745	6,638	8,885	7,149
Net losses (mil. $)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net losses/avg. principal balance (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cash Flow Modeling Assumptions

We view the ICR on the primary manufacturer as a differentiating factor affecting this pool's credit quality, consistent with our criteria for non-diversified ADFP loans. GM is currently rated 'BBB' with a stable outlook. Table 10 shows our typical ranges for stressed default-to-liquidation (DTL) and loss-given-default (LGD) ratios for a manufacturer in the 'BBB' rating category.

Table 10

DTL, LGD, and LTL cash flow modeling assumptions for 'AAA' rated ABS

Manufacturer issuer credit rating/month	(A)Base DTL range (%)	(B)Midpoint of base DTL range (%)	(C)Modeled DTL (%)	(D)Base LGD range (%)	(E)Midpoint of base LGD range (%)	(F)Modeled LGD (%)	(G)LTL (%)
'BBB' (month 1)	44.0-56.0	50.0	51.0	28.0-32.0	30.0	30.0	15.3

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Table 10

DTL, LGD, and LTL cash flow modeling assumptions for 'AAA' rated ABS (cont.)

Manufacturer issuer credit rating/month	(A)Base DTL range (%)	(B)Midpoint of base DTL range (%)	(C)Modeled DTL (%)	(D)Base LGD range (%)	(E)Midpoint of base LGD range (%)	(F)Modeled LGD (%)	(G)LTL (%)
'BBB' (month 6)	66.0-84.0	75.0	76.0	37.5-42.5	40.0	40.0	30.4

DTL--Default to liquidation rate. LGD--Loss given default. LTL--Loss-to-liquidation rate. ABS--Asset-backed securities.

Loss assumptions

To determine our cash flow stresses for this pool's DTL and LGD, we started with base stress assumptions for DTL and LGD that equal the approximate midpoint of the base ranges for a manufacturer in the 'BBB' rating category (see columns B and E in table 10 in "Global Non-Diversified Auto Dealer Floorplan," published Feb. 5, 2015). However, because we believe that the manufacturer ICR may not necessarily capture all of the credit risks associated with a non-diversified ADFP pool, our criteria provide for the adjustment of the DTL and LGD assumptions within the ranges shown in table 10 to recognize certain manufacturer- and dealer base-specific characteristics that we view as most applicable to the related floorplan loans' credit quality. These characteristics include:

- The dealer base's overall financial strength and the level of dealer concentrations;
- The manufacturer's domestic and global market share and position;
- The manufacturer's inventory and dealer management practices; and
- The overall quality of the vehicles being produced and the overall product mix of the vehicles securing the floorplan loans.

For this transaction, our stressed DTL and LGD assumptions for 'AAA' rated securities are shown in columns C and F in table 10. Starting with the midpoint of the DTL range, we adjusted our assumption slightly higher to account for our view that the trust's dealership base--its service absorption rates, average dealer net worth, and average dealer profits, in particular--may be slightly weaker relative to its peers'. We adjusted the DTL assumptions upward while keeping the LGD assumption at the approximate midpoint of our base range because we believe the risks posed by this slightly weaker dealership base would primarily be manifested in higher default levels rather than weaker recoveries during a period of stress. Column G shows the resulting loss-to-liquidation (LTL) rate based on the modeled DTL and LGD assumptions from columns C and F (LTL is the product of DTL and LGD).

The diagram below from our non-diversified ADFP criteria illustrates how the monthly liquidation rate interacts with our DTL and LGD assumptions to arrive at our cumulative net loss assumptions. In our liquidation analysis, we assume the transaction enters amortization with the liquidation rate equal to one of the transaction's monthly payment rate triggers. We further assume that that liquidation rate continues to decline over a six-month time period and all remaining collateral is liquidated in month seven. Monthly principal collections and net losses affect each successive month's beginning pool balance, against which our stepped-up DTL and LGD assumptions are applied. At the end of the seven-month liquidation scenario, we add the monthly net loss levels to arrive at our cumulative net loss for a given rating scenario.

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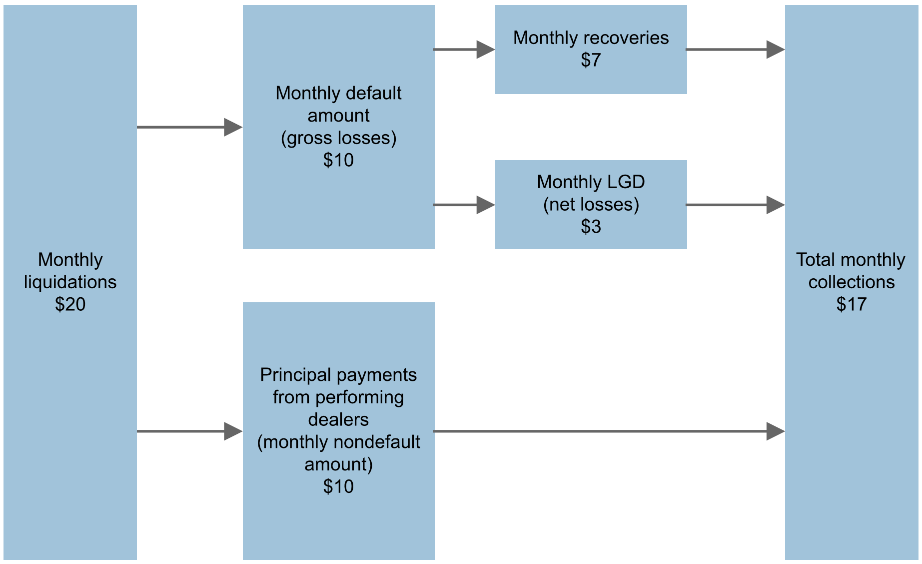
Chart 1

How DTL, LGD, and liquidation rates determine principal collections/net losses



Notes:
-- Monthly liquidation = monthly decline in pool balance = beginning of collateral balance x monthly liquidation rate = $100 x 20% = $20
-- Monthly default amount = monthly liquidations x DTL rate = $20 x 50% = $10
-- Principal payments from performing dealers = monthly liquidations – monthly default amount = $20 - $10 = $10
-- Monthly recoveries = monthly default amount x (1 – LGD rate) = $10 x (1 –
-- Monthly LGD = monthly default amount x LGD rate = $10 x 30% = $3 or monthly liquidations x LTL rate
-- Total monthly collections = principal collections from performing dealers + monthly recovery = $10 + $7 = $17
DTL--Default to liquidation. LGD--Loss given default. LTL--Loss to liquidation.
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For GFORT, based on the modeled DTL, LGD, and LTL assumptions (columns C, F, and G in table 10) and assuming a 25% payment rate trigger, the resulting cumulative gross defaults are approximately 63% for a 'AAA' stress scenario. The weighted average LGD is approximately 35%. Therefore, the overall 'AAA' stressed cumulative net loss is approximately 22% (63% multiplied by 35%). See table 11 for our assumed monthly losses during the 'AAA' stress scenario, beginning with a 25% initial payment rate. Table 11 assumes a hypothetical beginning pool balance of $100.

Table 11

'AAA' stress scenario

25% initial payment rate

Month	Liquidation rate (%)	Beginning balance ($)	Liquidations ($)	DTL (%)	Gross loss ($)	LGD (%)	Recoveries ($)(i)	Total collection ($)	Net loss ($)	LTL (%)
1	25.00	100.00	25.00	51.00	12.75	30.00	8.93	21.18	3.83	15.30
2	23.50	75.00	17.63	56.00	9.87	32.00	6.71	14.47	3.16	17.92

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Table 11

'AAA' stress scenario (cont.)

25% initial payment rate

Month	Liquidation rate (%)	Beginning balance ($)	Liquidations ($)	DTL (%)	Gross loss ($)	LGD (%)	Recoveries ($)(i)	Total collection ($)	Net loss ($)	LTL (%)
3	22.00	57.38	12.62	61.00	7.70	34.00	5.08	10.00	2.62	20.74
4	20.50	44.75	9.17	66.00	6.06	36.00	3.88	6.99	2.18	23.76
5	19.00	35.58	6.76	71.00	4.80	38.00	2.98	4.94	1.82	26.98
6	17.50	28.82	5.04	76.00	3.83	40.00	2.30	3.51	1.53	30.40
7	100.00	23.78	23.78	76.00	18.07	40.00	10.84	16.55	7.23	30.40
Total	--	--	--	--	63.08	35.46	--	--	22.37	--

(i)Recoveries computed on dollar basis as (1-LGD) gross loss. DTL--Default to liquidation. LGD--Loss given default. LTL--Loss to liquidation.

Loss assumption adjustments for lower rating categories

Our non-diversified ADFP criteria generally conceive loss assumptions for lower rating categories in relation to the loss assumptions for a 'AAA' rating category. We generally consider cumulative net losses commensurate with 'AA', 'A', and 'BBB' rating categories to be approximately 80%, 65%, and 50% of the 'AAA' cumulative net loss level, respectively. Therefore, in our cash flow runs assuming a 25% payment rate trigger, we assumed cumulative net losses of approximately 18%, 14%, and 11% for the 'AA', 'A', and 'BBB' rating categories, respectively.

Liquidation rate assumption

We consider the payment rate an important performance variable in dealer floorplan transactions. All else being equal, an increase in the payment rate will decrease the amount of receivables that are exposed to losses in any given month.

The series 2023-1 transaction incorporates four payment rate triggers (see the Credit Enhancement Step-Up Period Overview section above for more information).

In our view, the dealers' ability to sell vehicles in their inventory may be severely hampered if the manufacturer files for bankruptcy protection, which may cause payment rates to drop sharply because retail customers may be more hesitant to purchase the manufacturer's vehicles.

In our stressed cash flow scenarios, we assume that the pool's liquidation rate starts at 100.00% of the transaction's payment rate triggers (25.00%, 22.50%, 20.00%, or 17.50%), as applicable, in the first month of the early amortization period and then declines straight-line to 70.00% of the payment rate trigger (17.50%, 15.75%, 14.00%, or 12.25%, respectively) by month six. We assume the remaining collateral is liquidated fully following month six. The monthly liquidation rate equals the monthly decline in the pool balance (i.e., the sum of the monthly principal collections from performing dealers, recoveries, and net losses, divided by the pool balance as of the beginning of the month).

Additionally, because the transaction's reserve account can be fully drawn without triggering an

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early amortization event, we assume that the available reserve account amount is zero at the time the amortization period begins in our stressed rating scenarios.

Yield stress

All of the notes will have fixed interest rates--except for the A-2 notes, which will be based on 30-day SOFR--while the receivables bear interest at a variable rate based primarily on the prime rate. We therefore applied stressed yield assumptions to test the interest rate risks inherent in this transaction. We derived our stressed yield assumption by applying our stressed prime and 30-day SOFR interest rate vectors based on our interest rate criteria (see "Methodology To Derive Stressed Interest Rates In Structured Finance," published Oct. 18, 2019) and the historical yield on the trust assets. We applied our stressed yield assumption to our cash flow runs and tested the transaction's ability to withstand losses while still paying timely interest and ultimate principal. In general, our stressed yield assumption led the transaction to have negative carry (i.e., the yield on the assets was insufficient to cover bond interest payment and transaction fees). Despite this additional stress, our cash flow results indicated that the transaction can sustain stressed loss levels commensurate with the assigned preliminary ratings.

Top dealer concentrations

Our criteria address the risk of one or more large dealer defaults by setting a credit enhancement floor for investment-grade-rated ('BBB-' or higher) non-diversified ADFP ABS that could withstand the default of a percentage of the largest dealers (based on the concentration limits in the transaction documents), with an assumption that the trust has limited or no access to the underlying collateral. The dealer concentration limits specified in the documents are shown in table 12.

Table 12

GFORT dealer concentration limits

Dealer (by principal receivables)	Concentration limit (%)
Largest dealer	4.0
Second largest dealer	3.5
Third and fourth largest dealers, individually	3.0
All other dealers, individually	2.5

GFORT--GMF Floorplan Owner Revolving Trust.

The dealer concentration base credit enhancement floor for 'AAA' rated ABS equals the greater of:

- 100% of the top dealer's concentration (4.00% in this transaction [100.0% multiplied by 4.0%]);
- 33% of the top five dealers (5.28% in this transaction [33.0% multiplied by 16.0%]); and
- 25% of the top 10 dealers (7.125% in this transaction [25.000% multiplied by 28.500%]).

In our view, the credit enhancement available to all classes of notes in this transaction exceeds the dealer concentration floor for the respective rating scenarios.

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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 (see the credit stability section of "S&P Global Ratings Definitions," published June 9, 2023). For example, based on our ratings stability definition, assigning a 'AAA' rating to a new class of dealer floorplan receivables-backed notes signifies that we do not expect the rating on the notes to fall more than one rating category within 12 months under moderate stress conditions.

To test the vulnerability of the assigned preliminary ratings to a moderate stress scenario, we analyzed the impact that a potential change to the ICR on GM would have on the trust's performance. We test this because we view the ICR as one of the two main factors in determining the base cumulative loss levels. The second major factor, the payment rate trigger, is defined in the transaction documents.

In our sensitivity analysis, we considered the possibility of a two-rating category downgrade of GM and adjusted our DTL, LGD, and LTL modeling assumptions to within the 'AAA' base-level ranges for a 'B' rated manufacturer. We also made qualitative adjustments to the base loss levels--consistent with our criteria and similar to the adjustments we made in our base cash flow assumptions related to the trust's dealership base strength--to determine our DTL, LGD, and LTL assumptions within the base-level range. We then applied adjustment factors to the 'AAA' assumptions to arrive at our 'AA', 'A', 'BB', and 'B' assumptions. Our cash flows showed that, based on these assumptions and taking into account the 25.0%, 22.50%, 20.0%, and 17.50% payment rate trigger levels, the ratings on the class A and B notes would likely remain within one rating category, and the ratings on the class C and D notes would likely remain within two rating categories of the respective preliminary ratings over 12 months under a moderate stress scenario. All of these potential rating movements are consistent with our credit stability criteria.

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 | 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
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- Criteria | Structured Finance | ABS: Global Non-Diversified Auto Dealer Floorplan Rating Methodology And Assumptions , Feb. 5, 2015
- Criteria | Structured Finance | General: Global Framework For Assessing Operational Risk In Structured Finance Transactions , Oct. 9, 2014

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- 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

- S&P Global Ratings Definitions, June 9, 2023
- U.S. Auto Loan ABS Tracker: March 2023 Performance, May 18, 2023
- Credit Conditions North America Q2 2023: Coalescing Stresses, March 28, 2023
- General Motors Co. Outlook Revised To Stable From Negative On Steady Profits And Improved Cash Flow Prospects, Nov. 18, 2021
- What Differentiates S&P Global Ratings' Approach To Rating Diversified Versus Non-Diversified Floorplan ABS?, June 20, 2016

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