S&P Global Ratings

Research

Presale:

Ford Credit Auto Owner Trust 2023-REV1

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Preliminary Ratings

Class	Preliminary rating	Type	Interest rate(i)	Amount (mil. $)(ii)	Legal final maturity date
A	AAA (sf)	Senior	Fixed	750.000	Aug. 15, 2035
B	AA (sf)	Subordinate	Fixed	30.906	Aug. 15, 2035
C	A (sf)	Subordinate	Fixed	30.906	Aug. 15, 2035
D	BBB (sf)	Subordinate	Fixed	16.483	Aug. 15, 2035

Note: This presale report is based on information as of Feb. 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 (i)The interest rate for each class will be determined on the pricing date. (ii)The actual size of these tranches will be determined on the pricing date. The notes' total principal amount may be increased, with any increase resulting in a proportionate increase in each class' initial principal amount but not greater than $1.50 billion for the class A notes.

Profile

Expected closing date	Feb. 16, 2023.
Expected final payment date	Feb. 15, 2028.
Legal final maturity date	Aug. 15, 2035.
Collateral	Prime auto loan receivables.
Originator, servicer, and sponsor	Ford Motor Credit Co. LLC (BB+/Positive/B).
Depositor	Ford Credit Auto Receivables Six LLC.
Indenture trustee and bank account	The Bank of New York Mellon (AA-/Stable/A-1+).
Owner trustee	U.S. Bank Trust N.A.

Rationale

The preliminary ratings assigned to Ford Credit Auto Owner Trust 2023-REV1's (FCAOT 2023-REV1) asset-backed notes reflect:

- The availability, when the receivables pool meets the floor credit enhancement composition tests, of approximately 15.4%, 12.0%, 8.8%, and 7.4% credit support to the class A, B, C, and D notes, respectively, based on stressed break-even cash flow scenarios. These credit support levels provide coverage of 4.75x, 4.00x, 3.00x, and 2.00x our expected net loss of 2.60% (assuming a worst-case pool mix) to the class A, B, C, and D notes, respectively. The floor credit enhancement composition tests are met when the receivables pool meets a higher credit quality threshold compared with the pool composition tests (see the S&P Global Ratings' Expected Loss section for more information). At closing, the collateral pool composition is within the floor credit enhancement parameters.

- The availability, when the receivables pool meets the pool composition tests, of approximately 16.7%, 13.3%, 10.2%, and 8.8% credit support to the class A, B, C, and D notes, respectively, based on stressed break-even cash flow scenarios. These credit support levels provide coverage of 4.75x, 4.00x, 3.00x, and 2.00x to the class A, B, C, and D notes, respectively, our expected net loss of 3.00%, assuming a worst-case pool mix (see the S&P Global Ratings' Expected Loss section for more information).
- The expectation that under a moderate ('BBB') stress scenario (2.0x our expected net loss level), all else being equal, our preliminary ratings will be within the credit stability limits (see the Cash Flow Modeling Assumptions and Results section).
- The timely payment of interest and full principal by the designated legal final maturity dates under our stressed cash flow modeling scenarios that we believe are appropriate for the assigned preliminary ratings.
- The transaction's initial revolving phase (up to five years), during which loan collections may be used to purchase additional receivables. The structure includes pool composition requirements, a credit enhancement test, and amortization triggers intended to limit deterioration in pool quality and credit enhancement during this period (see the Revolving Period section for more information).
- The credit enhancement in the form of subordination, a reserve account, the yield supplement overcollateralization amount (YSOA), and excess spread (see table 1 below for more information).
- The net loss test, which increases the required credit enhancement in the form of the YSOA as long as three months' annualized net losses exceed 2.50% during the revolving period.
- The collateral characteristics of the initial revolving pool being securitized.
- The transaction's pool composition tests, credit enhancement test, amortization triggers, and turbo payment structure when in any amortization period.
- The consistency of the collateral composition and performance of prior REV pools.
- Our assessment of the series' bank accounts at The Bank of New York Mellon, which do not constrain the preliminary ratings.
- Our operational risk assessment of Ford Motor Credit Co. LLC as servicer, along with our review of the company's underwriting.
- Ford Motor Credit Co. LLC's (Ford Credit) extensive securitization performance history dating back to 1989.
- 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.

The preliminary ratings assigned to FCAOT 2023-REV1's asset-backed notes do not address whether the cash flows generated by the pool of receivables will be sufficient to pay the step-up amounts or make-whole payments, which may become payable to the noteholders if certain events occur (see the Legal Overview and Transaction Overview sections below for a description of the step-up amounts and make-whole payments).

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, social credit factors as average, and governance credit factors as below average (see "ESG Industry Report Card: Auto Asset-Backed Securities," published March 31, 2021).

In our view, the transaction's environmental and social credit factors are in line with our sector benchmark. Environmental credit factors are generally considered as above average given that the collateral pool primarily comprises vehicles with internal combustion engines (ICEs), 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 life of the transaction. As a result, we have not separately identified this as a material ESG credit factor in our analysis.

In our view, the transaction has relatively higher exposure to governance credit factors than our sector benchmark given the revolving collateral pool and the originator's more active role over the transaction's life, exposing investors to the risk of loosening underwriting standards or potential adverse selection. To account for this risk, we assumed that the pool's composition will migrate to the lowest credit quality allowable under the transaction's pool composition tests, resulting in a higher expected loss than that of a typical amortizing pool (see S&P Global Ratings' Expected Loss section for more information).

Credit Enhancement And Collateral

Changes from FCAOT 2022-REV1

Structure

- The initial overcollateralization amount increased by 50 basis points to -0.50% of the initial adjusted pool balance from -1.00% (see table 1).
- The minimum yield supplement discount rate will be set on the pricing date for the notes at a minimum rate necessary to produce annual excess spread of at least 3.55%. Previously, the minimum annual excess spread target was 3.85%. Consistent with prior Ford REV transactions, if the pool of receivables does not meet all the floor credit enhancement composition tests, but meets the net losses test, the yield supplement discount rate will be equal to the minimum rate plus 0.70%. Also consistent with prior Ford REV transactions, if the pool of receivables does not meet the net losses test, the yield supplement discount rate will be equal to the minimum rate plus 3.70%. For purposes of the preliminary structure, the minimum rate is assumed to be 9.45%.
- Initial YSOA as a percentage of the initial adjusted pool balance decreased to 11.67% from 14.38%.

Table 1

Credit Enhancement Summary

	2023-REV1	2022-REV1	2021-REV2	2021-REV1	2020-REV2
Subordination (% of the initial adjusted receivables balance)					
Class A	9.50	10.00	10.00	10.00	7.50
Class B	5.75	6.25	6.25	6.25	3.75
Class C	2.00	2.50	2.50	2.50	0.00
Class D	0.00	0.00	0.00	0.00	--
Reserve account (% of the initial adjusted receivables balance)					
Initial, target, and floor (during the revolving period)(i)	0.50	0.50	0.50	0.50	1.00
Initial, target, and floor (during the amortization period)(i)	0.25	0.25	0.25	0.25	0.50
Overcollateralization (excluding the YSOA)(ii)					
Initial (% of the initial adjusted pool balance)	(0.50)	(1.00)	(1.00)	(1.00)	1.50
Target (% of the initial adjusted pool balance)	Revolving period: (0.50); amortization period: full turbo(iii)	Revolving period: (1.00); amortization period: full turbo(iii)	Revolving period: (1.00); amortization period: full turbo(iii)	Revolving period: (1.00); amortization period: full turbo(iii)	Revolving period: 1.50; amortization period: full turbo(iii)
Total initial hard credit enhancement (% of the initial adjusted receivables balance)					
During revolving period					
Class A	9.50	9.50	9.50	9.50	10.00
Class B	5.75	5.75	5.75	5.75	6.25
Class C	2.00	2.00	2.00	2.00	2.50
Class D	0.00	(0.50)	(0.50)	(0.50)	--
During amortization: full turbo(iii)					
Class A	9.25	9.25	9.25	9.25	9.50
Class B	5.50	5.50	5.50	5.50	5.75
Class C	1.75	1.75	1.75	1.75	2.00
Class D	(0.25)	(0.75)	(0.75)	(0.75)	--

Table 1

Credit Enhancement Summary (cont.)

	2023-REV1	2022-REV1	2021-REV2	2021-REV1	2020-REV2
Minimum YSOA discount rate (%)(iv)	When pool composition tests are met: 10.15; when floor credit enhancement composition tests are met: 9.45(v)	When pool composition tests are met: 9.55; when floor credit enhancement composition tests are met: 8.85	When pool composition tests are met: 7.70; when floor credit enhancement composition tests are met: 7.00	When pool composition tests are met: 7.00; when floor credit enhancement composition tests are met: 6.30	When pool composition tests are met: 6.80; when floor credit enhancement composition tests are met: 6.10
Estimated minimum excess spread (including YSOA) per year (%)(vi)	When pool composition tests are met: 4.26; when floor credit enhancement composition tests are met: 3.56	When pool composition tests are met: 4.55; when floor credit enhancement composition tests are met: 3.85	When pool composition tests are met: 5.11; when floor credit enhancement composition tests are met: 4.41	When pool composition tests are met: 4.56; when floor credit enhancement composition tests are met: 3.86	When pool composition tests are met: 4.43; when floor credit enhancement composition tests are met: 3.73
Aggregate gross pool balance ($)	920,365,527	1,256,868,821	1,203,796,727	1,202,916,159	1,704,015,944
Initial YSOA ($)	96,190,527	157,968,856	104,896,727	104,015,060	165,554,405
Aggregate adjusted pool balance ($)	824,175,000	1,098,899,965	1,098,900,000	1,098,901,099	1,538,461,538
Total securities issued ($)	828,295,000	1,109,888,000	1,109,888,000	1,109,888,000	1,515,384,000
Initial YSOA as a % of the initial adjusted receivables balance	11.67	14.38	9.55	9.47	10.76

(i)For series 2023-REV1, at amortization, the reserve account will step down to at least 0.25% of the initial adjusted pool balance from at least 0.50%, similarly to the FCAOT 2021-REV1 through FCAOT 2022-REV1 transactions. For all series shown, on the first payment date during amortization, the reserve account step-down amounts will be deemed as available collections and used to pay amounts according to the amortization payment waterfall, for the noteholders' benefit. (ii)Overcollateralization is the amount by which the adjusted pool balance plus the amount in the accumulation account exceeds the notes' principal. (iii)Full turbo: during the amortization period, after paying senior fees, note interest, priority principal payments, and any reserve deposit amount, all remaining available funds will be paid as principal to the noteholders, resulting in increasing overcollateralization. (iv)If the net losses test is not met, the minimum YSOA discount rate will be equal to the minimum rate plus 3.70% (for series 2023-REV1, the statistical discount rate is 9.45%). (v)The minimum rate set on the pricing date may be higher or lower to produce excess spread at an annual rate of at least 3.55%. (vi)Estimated minimum excess spread is before note pricing for series 2023-REV1. FCAOT--Ford Credit Auto Owner Trust. YSOA--Yield supplement overcollateralization amount.

Collateral

The notable collateral changes for the FCAOT 2023-REV1 statistical pool as of the statistical calculation date compared with series FCAOT 2022-REV1 pool as of the related closing date include:

- The concentration of commercial contracts (no FICO) increased to 23.5% from 19.0%.
- The weighted average FICO score slightly increased to 747 from 746.
- The weighted average seasoning decreased to 7.6 months from 10.7 months.
- The pool's weighted average annual percentage rate (APR) increased to 4.3% from 2.6%.
- The weighted average loan-to-value (LTV) ratio at origination increased slightly to 100.6% from 99.8%.

- The percentage of new vehicles decreased to 89.0% from 92.8%.
- The percentage of long-term contracts (those with an original term greater than 60 months but less than or equal to 84 months) decreased to 50.0% from 53.5%. Note that the weighted average FICO score of these contracts is 723, similar to 2022-REV1.
- While the percentage of 84-month original term loans increased to 6.3% (from 4.8%), the percentage of contracts with an original term greater than 72 months but less than or equal to 84 months remained constant at 8.0%. Additionally, the weighted average FICO score of these contracts decreased slightly to 725 (from 726).

Table 2 shows the statistical FCAOT 2023-REV1 pool characteristics, which are similar to Ford Credit's previous initial FordREV pools as well as to recent nonrevolving pools from Ford Credit's U.S. retail installment sale contract securitization program.

Table 2

Collateral Comparison(i)

	2023-REV1	2022-REV1	2021-REV2	2022-C	2022-B (iii)
Pool size (bil. $)	2.25	1.26	1.20	1.75	1.17
No. of receivables	63,243	40,215	40,944	52,430	36,914
Avg. principal balance ($)	35,577	31,209	29,363	33,288	31,788
Weighted avg. APR excluding the YSOA (%)	4.3	2.6	2.9	3.3	2.9
Weighted avg. original term (mos.)	64.0	64.7	65.5	64.1	64.8
Weighted avg. remaining (mos.)	56.4	53.9	54.3	54.7	54.4
Seasoning (mos.)	7.6	10.7	11.2	9.4	10.4
Total % of loans with an original term of 61-72 months	42.0	45.7	51.9	41.5	43.7
Total % of loans with an original term of 73-84 months	8.0	7.8	7.9	9.8	9.8
New vehicle (%)	89.0	92.8	91.4	89.8	91.9
Used vehicle (%)	11.0	7.2	8.6	10.2	8.1
Weighted avg. original FICO score(ii)	747	746	742	744	746
Weighted avg. FICO score of pools with an original term greater than 60 months(ii)	723	723	722	719	724
Weighted avg. FICO score of pools with an original term greater than 72 months(ii)	725	727	728	722	726
Weighted avg. LTV ratio at origination (%)	100.6	99.8	99.2	100.4	100.3
Weighted avg. PTI ratio at origination (%)	9.3	9.1	9.1	9.1	9.0
FICO score distribution (%)					
Less than 600	3.4	3.4	4.3	3.7	3.2
600-649	7.1	7.6	9.1	8.1	7.4
650-699	11.7	13.1	13.6	13.3	13.0
700-749	14.0	15.3	14.9	15.3	15.0
750-plus	39.7	41.0	40.5	41.0	40.0

Table 2

Collateral Comparison(i) (cont.)

	2023-REV1	2022-REV1	2021-REV2	2022-C	2022-B (iii)
Consumer (no FICO score)	0.7	0.6	0.7	0.1	0.7
Commercial (no FICO score)	23.5	19.0	17.0	18.6	20.8
Top five state concentrations (%)					
	TX=16.8	TX=17.0	TX=16.6	TX=18.5	TX=17.1
	CA=11.1	CA=10.5	CA=10.4	CA=11.2	CA=10.6
	FL=8.5	FL=7.8	FL=7.8	FL=8.3	FL=8.3
	GA=4.1	GA=3.7	MI=3.9	GA=3.8	MI=3.4
	NC=3.4	MI=3.4	OH=3.5	MI=3.3	GA=3.3

(i)All percentages are of the initial gross receivables balance. (ii)Excludes receivables that represent commercial accounts or obligors with little credit history. (iii)Not rated by S&P Global Ratings. APR--Annual percentage rate. YSOA--Yield supplement overcollateralization amount. PTI--Payment-to-income. 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 3 and their baseline effect on collateral credit quality in determining our base-case expected loss level.

As the Federal Reserve's aggressive tightening of interest rates increases borrowing costs, we expect the economy decline 0.1% this year, as the economy falls into a shallow recession in the first half of 2023 (see "Economic Outlook U.S. Q1 2023: Tipping Toward Recession," published Nov. 28, 2022). With economic pressures worsening as the Fed raises interest rates, we now expect the unemployment rate to peak at 5.6% in fourth-quarter 2023, then slowly descend to 4.7% by fourth-quarter 2025.

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

Table 3

U.S. Economic Factors (%)

	Actual	Forecast				
	2021	2022	2023	2024	2025	2026
Real GDP (% year-over-year growth)	5.9	1.8	(0.1)	1.4	1.8	1.9
Unemployment rate (annual average, %)	5.4	3.7	4.9	5.3	4.8	4.6
Consumer Price Index (annual average, %)	4.7	8.1	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: 3.00% (Pool Composition Tests) And 2.60% (Floor Credit Enhancement Composition Tests)

In typical amortizing transactions, we determine whether credit enhancement is sufficient to cover a multiple of base-case losses that is commensurate with the preliminary ratings. We used a similar approach for this transaction, but because the auto loan pool could revolve for up to five years before amortizing, we assumed the pool's composition will migrate to the lowest credit quality allowable by the pool composition tests. We believe the potential length of the revolving period warrants this approach. As a result, our analysis examined if there is sufficient credit enhancement to cover a multiple of losses that is commensurate with the preliminary ratings, assuming a worst-case pool mix.

To determine an expected loss assuming a worst-case mix for the auto loan receivables pool, we first analyzed historical origination net loss data Ford Credit provided, segmented by FICO score band, consumer obligor loans with no FICO scores, commercial obligor loans with no FICO scores, new/used vehicles, and original term for 54 individual segments. Our cumulative net loss assessments factored in Ford Credit's performance on its originations from 2007-2021 for each of the 54 individual segments. We assigned more weight to the performance of the 2007-2009 vintages for each cohort, which may have been more severely affected by the economic recession. In addition, we used an actuarial approach in our analysis to assess the individual segments' expected loss performance, including the commercial obligor loans. In our view, the origination static pool data showed that loss performance on the commercial obligor loans was generally better than that of consumer loans with FICO scores less than 676. In our analysis, we also examined the performance of the cohorts for loans with original terms over 72 months, which had limited data before 2014. In our base-case expected loss analysis, we also considered FCAOT's historical securitization performance, Ford Credit's managed portfolio performance, the use of FICO scores in the pool composition tests, and the transaction's relatively long exposure period to macroeconomic cycles.

Once we determined a base-case expected loss for each segment, we then determined a hypothetical pool mix that would maximize the overall loss on the pool while still satisfying the pool composition limits. The pool composition tests specify limits to various combinations of these segments during the revolving period (for details on the pool concentration limits, see the Revolving Period section below). In addition, the transaction's collateral eligibility criteria exclude any receivable for a used vehicle with an original term greater than 60 months and with a consumer or commercial obligor that did not have a FICO score at origination. The criteria also exclude any receivable for a used vehicle with an original term greater than 72 months.

We aimed to simulate the worst possible deterioration of the pool's credit quality, in our view, given the pool composition tests and our expected loss for the individual segments. Three of the 36 segments accounted for approximately 66% of the hypothetical worst-case pool under the pool composition tests and 73% of the hypothetical worst-case pool under the floor credit enhancement composition test:

- New, original term of 61-72 months, and FICO score of 751 or greater;
- New, original term of less than or equal to 60 months, and FICO score of 751 or greater; and
- New, original term of 61-72 months, and FICO score less than or equal to 624.

Based on our expected losses for each of the 54 segments and assuming the worst possible pool quality under the pool composition tests, we believe the pool could experience cumulative net losses of approximately 3.00%. We have a lower expected loss assuming a worst-case pool mix of 2.60% when the floor credit enhancement composition tests apply because they have stricter limits on higher-risk segments and a higher minimum weighted average FICO score.

Revolving Period

Pool composition tests

Because the underlying asset pool could be in a revolving period for up to five years, several pool composition tests must be met after any purchase or sale of receivables to maintain a minimum overall pool quality. The pool composition tests include:

- A weighted average FICO score at origination of at least 700 (excluding receivables that have obligors who did not have FICO scores),
- Receivables with individual obligors that did not have FICO scores are limited to 2.0% of the pool,
- Receivables with commercial obligors that did not have FICO scores are limited to 27.5% of the pool,
- Receivables with an original term of more than 60 months are limited to 80.0% of the pool,
- Receivables with an original term of more than 72 months are limited to 12.0% of the pool,
- Receivables from used vehicles are limited to 20.0% of the pool,
- Receivables from used vehicles and with an original term of more than 60 months are limited to 11.0% of the pool,
- Receivables from new vehicles with an original term of more than 60 months and with obligors that did not have FICO scores are limited to 7.0% of the pool, and
- Receivables from used vehicles with obligors that have FICO scores less than 625 are limited to 4.0% of the pool.

In addition, Ford Credit will not include in the pool receivables from used vehicles with an original term of more than 60 months and with no FICO score, according to its selection criteria. The transaction's selection criteria also include, as of the applicable cut-off date, requirements that each receivable:

- Has an original term no greater than 84 months for new vehicles,
- Has an original term no greater than 72 months for used vehicles,
- Is currently not more than 30 days delinquent,
- Has not been granted a payment extension or been rewritten, and
- Is not with an obligor involved in a bankruptcy proceeding.

In addition, Ford Credit's selection criteria also includes a requirement that the percentage of the aggregate principal balance of the receivables with an original term of more than 72 months is no more than 8% of the pool balance. This requirement applies as of the closing date and each subsequent purchase date.

The transaction also has a second layer of quality thresholds known as the "floor credit enhancement composition tests." These tests generally have stricter limits on higher-risk segments and require a higher weighted average FICO score compared with the pool composition tests. They also include the following:

- A weighted average FICO score at origination of at least 715 (excluding receivables that have obligors who did not have FICO scores),
- Receivables with an original term of more than 60 months are limited to 75.0% of the pool,
- Receivables with an original term of more than 72 months are limited to 10.0% of the pool,
- Receivables from used vehicles are limited to 15% of the pool,
- Receivables from used vehicles and with an original term of more than 60 months are limited to 10.0% of the pool,
- Receivables from new vehicles with an original term of more than 60 months and with obligors that did not have FICO scores are limited to 6.0% of the pool, and
- Receivables from used vehicles with obligors that have FICO scores less than 625 are limited to 2.5% of the pool.

The minimum yield supplement discount rate will be set at pricing in an amount necessary to produce excess spread at an annual rate of at least 3.55%. If the receivables pool meets the pool composition tests, the minimum YSOA discount rate will be the minimum rate plus 0.70%. S&P Global Ratings has a lower expected loss assuming a worst-case pool mix for the floor credit enhancement composition tests versus the pool composition tests to reflect the resulting hypothetical pool's higher credit quality. The transaction also includes a net losses test that steps up credit enhancement during the revolving period by causing the minimum YSOA discount rate to increase to the minimum rate plus 3.70% upon the trust's next receivables purchase as long as three-month annualized net losses exceed 2.50%.

On each purchase and sale date, the servicer will determine whether the pool, including receivables purchased by the trust on a purchase date and excluding receivables sold by the trust on a sale date, satisfies the pool composition tests. If they are not satisfied, the servicer will identify certain receivables (ineligible receivables) to exclude from the pool so that the remaining receivables meet the pool composition tests. Ineligible receivables will stay in the pool, and the cash flows that they generate will be counted as collections available to the transaction.

Credit enhancement test

On each purchase or sale date, the servicer will also determine if the credit enhancement test is satisfied. To satisfy this test, the adjusted pool balance (excluding any ineligible receivables) plus the amount in the accumulation account plus 0.50% of the initial adjusted pool balance, must be at least equal to the notes' balance.

Amortization events

The transaction also includes several amortization events intended to address the risks of collateral performance deterioration, negative carry, and servicer termination during the revolving period. If any of the following events occur, the revolving period ends, and the pool and notes amortize:

- Monthly interest due is not paid on the notes within five days of the payment date.

- The issuer fails to deposit the reserve deposit amount, accumulation deposit amount (see the accumulation account discussion below), or the negative carry deposit amount on any payment date.
- The maximum five-year revolving period expires while the notes are outstanding.
- The three-month annualized net loss rate exceeds 3.50%.
- The rolling three-month average rate of delinquencies 61 days or more past due exceeds 1.50%.
- The adjusted pool balance is less than 50% of the principal amount of the notes.
- A servicer termination event occurs and is continuing.
- An event of default occurs and is continuing.

An accumulation account will hold collections in between purchases of additional receivables as well as a portion of the proceeds equal to the adjusted pool balance of any receivables sold by the trust. Based on the transaction's payment priority, the issuer must pay the accumulation deposit amount, equal to the difference of the note balance over the adjusted pool balance (excluding any ineligible receivables) plus 0.50% of the initial adjusted pool balance, into the accumulation account each month from available collections. Failure to do so will result in amortization, which serves a similar purpose as the credit enhancement test but is performed every month.

Unlike receivables, amounts on deposit in the accumulation account may not bear sufficient interest, or reinvestment earnings, if any, may not be available to pay interest on the notes or certain other expenses of the trust, resulting in negative carry. A negative carry account will be funded with excess spread to support the payment of interest on the notes when amounts are held in the accumulation account. As noted above, the trust's failure to make the negative carry deposit in full when required will result in early amortization.

If an amortization event occurs, it will cause all funds in the accumulation and negative carry accounts to be deposited into the collection account, and the transaction will enter amortization. In addition, on the first payment date in amortization, amounts in the reserve account exceeding at least 0.25% of the adjusted pool balance as of the closing date will be deposited into the collection account. The noteholders will then receive monthly interest and principal until they are paid in full, and the amounts in the collection account will be applied per the transaction's payment priority.

Managed Portfolio

Ford Credit's managed portfolio shows stable performance, with some variations beginning in 2020 due to the company's response to the COVID-19 pandemic (see table 4). From March to May 2020, Ford Credit temporarily suspended involuntary repossessions of financed vehicles from delinquent obligors nationwide. This led to repossessions as a percentage of average number of contracts outstanding declining to 0.95% as of year-end 2020, compared with 1.24% as of year-end 2019, and net losses as a percentage of the average portfolio outstanding declining to 0.36% from 0.53%.

Ford Credit also granted goodwill extensions to obligors during the pandemic. This contributed to the average principal balance of 30-60 days delinquent contracts as a percentage of the outstanding portfolio declining to 1.06% as of year-end 2020 from 1.45% as of year-end 2019. After a payment extension, the account generally is no longer considered delinquent.

As of year-end Dec. 31, 2022, total delinquencies were 1.33%, an increase from 1.14% for the same period the year prior, but below pre-pandemic periods (total delinquencies were 1.62% as of year-end 2019). Similarly, net losses as a percentage of the average portfolio outstanding were 0.15% as of year-end 2022, an increase from 0.06% as of year-end 2021, but below pre-pandemic periods (net losses as a percentage of the average portfolio were 0.57% as of year-end 2019), suggesting that these metrics are beginning to normalize back to pre-COVID-19 levels.

Also as of year-end 2022, the annual average principal balance of delinquent 84-month contracts as a percentage of the 84-month portfolio outstanding was 0.88%, compared with 0.73% for the total portfolio. Repossessions of 84-month contracts as a percentage of the average number of 84-month contracts outstanding were 0.47%, compared with 0.74% for the total portfolio. However, the average net loss on charged-off 84-month contracts was $7,885, which is greater than the total portfolio's average of $3,093 due to the higher loss severity associated with longer-term loans.

Table 4

Managed Portfolio

	Year ended Dec. 31				
	2022	**2021**	**2020**	**2019**	**2018**
Avg. portfolio outstanding during the period (mil. $)	47,297	49,264	49,869	46,650	46,704
Avg. 84-month portfolio outstanding during the period (mil. $)	3,112	3,081	2,725	2,033	1,340
Avg. number of contracts outstanding	1,865,258	2,010,001	2,132,085	2,140,915	2,194,989
Delinquencies (%)(i)					
31-60 days	1.09	0.90	1.02	1.33	1.34
61-90 days	0.14	0.10	0.13	0.12	0.13
91-120 days	0.01	0.01	0.02	0.01	0.01
Over 120 days	0.00	0.00	0.01	0.00	0.00
Total delinquencies	1.24	1.01	1.18	1.46	1.48
Delinquencies (%)(ii)					
31-60 days	1.13	0.99	1.06	1.45	1.45
61-90 days	0.17	0.12	0.13	0.16	0.15
91-120 days	0.02	0.01	0.01	0.01	0.01
Over 120 days	0.01	0.01	0.01	0.00	0.00
Total delinquencies	1.33	1.13	1.21	1.62	1.61
84-month contract delinquencies (%)(ii)					
31-60 days	0.77	0.65	0.55	0.53	0.35
61-90 days	0.10	0.07	0.07	0.03	0.02
91-120 days	0.01	0.01	0.00	0.01	0.01
Over 120 days	0.00	0.00	0.01	0.00	0.00
Total delinquencies	0.88	0.73	0.63	0.57	0.38
Repossessions as a % of the average no. of contracts outstanding	0.74	0.75	0.95	1.24	1.28
Repossessions of 84-month contracts as a % of the average no. of 84-month contracts outstanding	0.47	0.49	0.55	0.60	0.53

Table 4

Managed Portfolio (cont.)

	Year ended Dec. 31				
	2022	2021	2020	2019	2018
Aggregate net losses (mil. $)	70	32	180	246	253
Net losses as a % of gross liquidations(iii)	0.30	0.13	0.78	1.08	1.07
Net losses as a % of the average portfolio outstanding	0.15	0.06	0.36	0.53	0.54
Net losses on 84-month contracts as a % of the average 84 month portfolio outstanding	0.13	0.08	0.21	0.25	0.21
No. of contracts charged off as a % of the average number of contracts outstanding	1.21	1.16	1.46	1.88	1.89
Average net loss on charged-off contracts ($)	3,093	1,350	5,783	6,131	6,100
Average net loss on charged-off 84-month contracts ($)	7,885	5,118	11,886	13,464	13,665

(i)Average number of delinquencies as a percentage of the average number of contracts outstanding. (ii)Average principal balance of delinquent contracts as a percentage of the portfolio outstanding. (iii)Gross liquidations are cash payments and charge-offs that reduce a receivables' outstanding balance.

FCAOT Transaction Performance

We maintain ratings on 14 active public retail FCAOT transactions that closed between 2018 and 2022: seven have amortizing structures and seven are revolving (2018-REV1, 2019-REV1, 2020-REV1, 2020-REV2, 2021-REV1, 2021-REV2, and 2022-REV1). Each outstanding transaction is adequately enhanced to support the current ratings. We will continue to monitor the performance of the outstanding transactions to ensure that the credit enhancement levels remain sufficient, in our view, to cover our cumulative net loss expectations under our stress scenarios for each of the rated classes.

FCAOT revolving transactions

Currently, seven of Ford Credit's retail term revolving transactions are in their scheduled revolving periods (see table 5). On Oct. 8, 2021, we affirmed our ratings on 19 classes from six revolving FCAOT transactions (see "Ford Credit Auto Owner Trust Ratings Affirmed On 19 Classes From Six Revolving Pool Transactions"). Regarding Ford's paid-off revolving transactions (series 2014-REV1 through 2017-REV2), all were redeemed when their respective revolving periods ended.

Table 5 shows the current losses and delinquencies of the six outstanding FordREV transactions we have rated. Chart 1 shows the loss performance since closing of the 13 FordREV transactions we have rated. The loss performance in chart 1 is shown as a percentage of the total funded receivables balance (initial aggregate pool balance at closing plus initial aggregate pool balance of each subsequent pool additions). The 60-plus day delinquencies shown in table 5 are as a percentage of the current pool balance. To date, all interest payments have been made, and principal collections have been used to purchase additional receivables each month. In addition, credit enhancement remains at its respective target levels.

Table 5

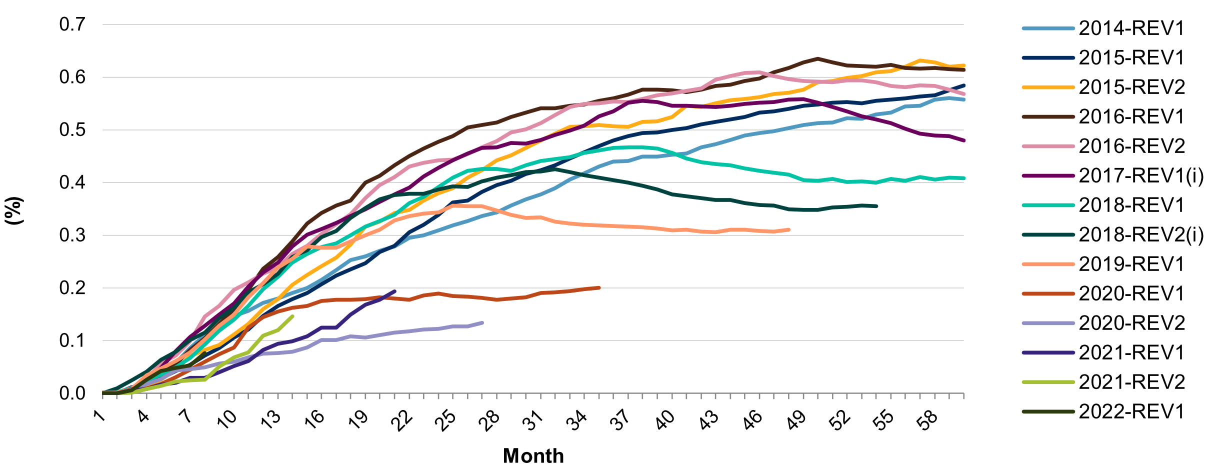
Performance Data For Outstanding Ford Credit Auto Owner Trust REV Transactions Rated By S&P Global Ratings(i)

Transaction/series	Month	CNL (% of total funded receivables balance)	60+ day delinq. (% of current pool balance)
2018-REV1	60	0.41	0.25
2019-REV1	48	0.31	0.20
2020-REV1	35	0.20	0.21
2020-REV2	27	0.13	0.22
2021-REV1	21	0.19	0.19
2021-REV2	14	0.15	0.15
2022-REV1	8	0.08	0.11

(i)As of the January 2023 distribution date. CNL--Cumulative net loss.

Chart 1

FordREV Cumulative Net Loss Performance (% of total funded receivables balance)



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

Table 6 compares each outstanding S&P Global Ratings-rated transaction's initial pool at closing to the current pool composition as of the January 2023 distribution date. The collateral composition has remained relatively similar to the initial pool each month aside from the greater amount of seasoning as the pools amortize.

The series 2018-REV1 and 2019-REV1 pools do not meet the floor credit enhancement composition tests; however, they do meet the collateral quality thresholds specified under the pool composition tests. As a result, per the transactions' structures, the applicable higher yield supplement discount rate has been applied to these outstanding series, resulting in greater yield supplement overcollateralization. The series 2020-REV1, 2020-REV2, 2021-REV1, 2021-REV2, and 2022-REV1 pools continue to meet the collateral quality thresholds specified under the floor credit enhancement composition tests.

Table 6

Collateral Comparison

Series	2018-REV1 (initial pool)	2018-REV1 (current pool)	2019-REV1 (initial pool)	2019-REV1 (current pool)	2020-REV1 (initial pool)	2020-REV1 (current pool)
Aggregate principal balance (mil $)	2,449.90	2,417.80	1,483.75	1,463.32	1,837.35	1,718.80
No. of receivables	90,622	119,491	51,344	72,951	66,019	82,513
Avg. principal balance ($)	27,034	20,234	28,898	20,059	27,831	21,706
Weighted avg. APR excluding the YSOA (%)	3.2	2.8	3.4	2.8	3.0	2.7
Weighted avg. original term (mos.)	65.6	65.2	65.4	65.2	65.5	65.3
Weighted avg. remaining (mos.)	57.6	41.8	57.7	41.2	55.9	41.3
Seasoning (mos.)	8.0	23.4	7.7	24.0	9.6	24.0
Total % of loans with an original term of 61-72 months	60.3	58.9	57.3	58.4	59.2	58.2
Total % of loans with an original term of 73-84 months	--	--	--	--	--	--
New vehicle (%)	90.4	90.9	87.9	90.6	89.2	90.5
Used vehicle (%)	9.6	9.1	12.1	9.4	10.8	9.5
Weighted avg. FICO score(i)	740	741	739	741	743	743

Table 6

Collateral Comparison (cont.)

Weighted avg. FICO score of pools with an original term of 61-72 months	724	721	719	721	724	723
Weighted avg. FICO score of pools with an original term of 73-84 months	--	--	--	--	--	--
Top five state concentrations (%)						
	TX=15.91	TX=16.12	TX=17.63	TX=15.92	TX=17.95	TX=16.65
	CA=10.39	CA=10.92	CA=8.05	CA=10.86	CA=9.98	CA=10.64
	FL=8.06	FL=7.89	FL=7.83	FL=7.97	FL=7.49	FL=7.83
	GA=3.69	MI=3.79	IL=3.83	MI=3.78	MI=4.03	MI=3.97
	IL=3.58	GA=3.55	GA=3.75	GA=3.65	GA=3.50	GA=3.42

	2020-REV2 (initial pool)	2020-REV2 (current pool)	2021-REV1 (initial pool)	2021-REV1 (current pool)	2021-REV2 (initial pool)	2021-REV2 (current pool)	2022-REV1 (initial pool)	2022-REV1 (current pool)
Aggregate principal balance (mil $)	1,703.56	1,644.99	1,202.37	1,174.95	1,202.24	1,185.99	1,255.08	1,236.23
No. of receivables	54,533	67,988	39,243	46,508	40,944	45,336	40,215	43,154
Avg. principal balance ($)	31,228	24,195	30,639	25,263	29,363	26,160	31,209	28,647
Weighted avg. APR excluding the YSOA (%)	2.2	2.5	2.6	2.7	2.9	2.9	2.6	2.7
Weighted avg. original term (mos.)	67.3	66.8	66.6	66.4	65.5	65.6	64.7	64.8
Weighted avg. remaining (mos.)	59.4	43.8	57.1	44.7	54.3	46.3	53.9	49.0
Seasoning (mos.)	7.9	23.0	9.5	21.7	11.2	19.3	10.7	15.8

Table 6

Collateral Comparison (cont.)

Total % of loans with an original term greater than 60 months	69.6	64.6	64.8	61.6	59.9	58.5	53.5	53.7
Total % of loans with an original term of 73-84 months	8.0	8.5	8.0	8.4	7.9	8.2	7.8	8.0
New vehicle (%)	91.8	91.9	92.4	92.3	91.4	91.6	92.8	92.3
Used vehicle (%)	8.3	8.1	7.6	7.7	8.6	8.4	7.2	7.7
Weighted avg. FICO score(i)	740	741	736	740	742	743	746	746
Weighted avg. FICO score of pools with an original term of 61-72 months	727	725	721	722	722	724	723	723
Weighted avg. FICO score of pools with an original term of 73-84 months	734	731	728	728	728	728	727	727
Top five state concentrations (%)								
	TX=16.43	TX=16.01	TX=15.35	TX=15.46	TX=16.62	TX=16.38	TX=16.94	TX=16.91
	CA=9.03	CA=10.34	CA=10.90	CA=10.97	CA=10.40	CA=10.81	CA=10.48	CA=10.73
	FL=7.75	FL=7.63	FL=7.83	FL=7.95	FL=7.80	FL=7.76	FL=7.80	FL=7.86
	OH=3.98	OH=3.66	OH=3.62	MI=3.56	MI=3.91	MI=3.77	GA=3.73	GA=3.84
	GA=3.71	MI=3.57	GA=3.47	OH=3.44	OH=3.50	GA=3.54	MI=3.41	MI=3.38

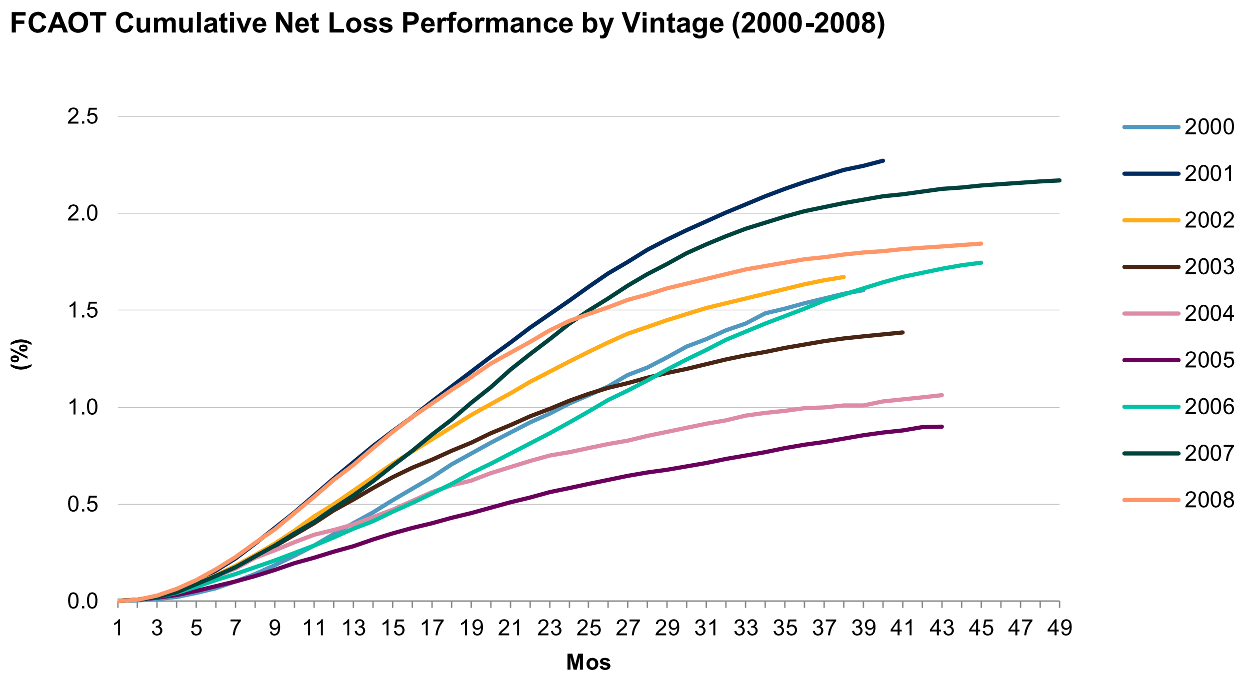
(i)Excludes receivables that represent commercial accounts or obligors with little credit history. APR--Annual percentage rate. YSOA--Yield supplement overcollateralization amount.

FCAOT nonrevolving transactions

The FCAOT 2000-2008 securitizations by vintage experienced cumulative net losses of 0.90%-2.27% (see chart 2). The 2007 and 2008 vintages incurred relatively high losses (2.17% and 1.84%, respectively), but these levels were below the peak loss level of 2.27% experienced in the

2001 vintage.

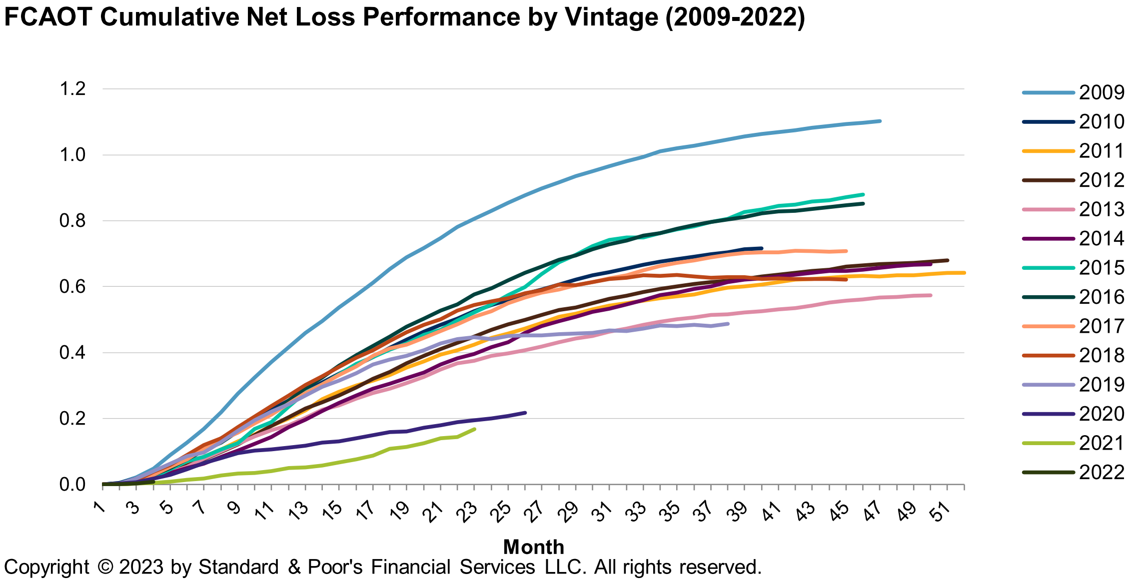
Chart 2



Ford Credit's public securitization performance began to improve in 2009. The 2009-2017 paid-off vintages experienced cumulative net losses in the range of 0.57%-1.10% (see chart 3).

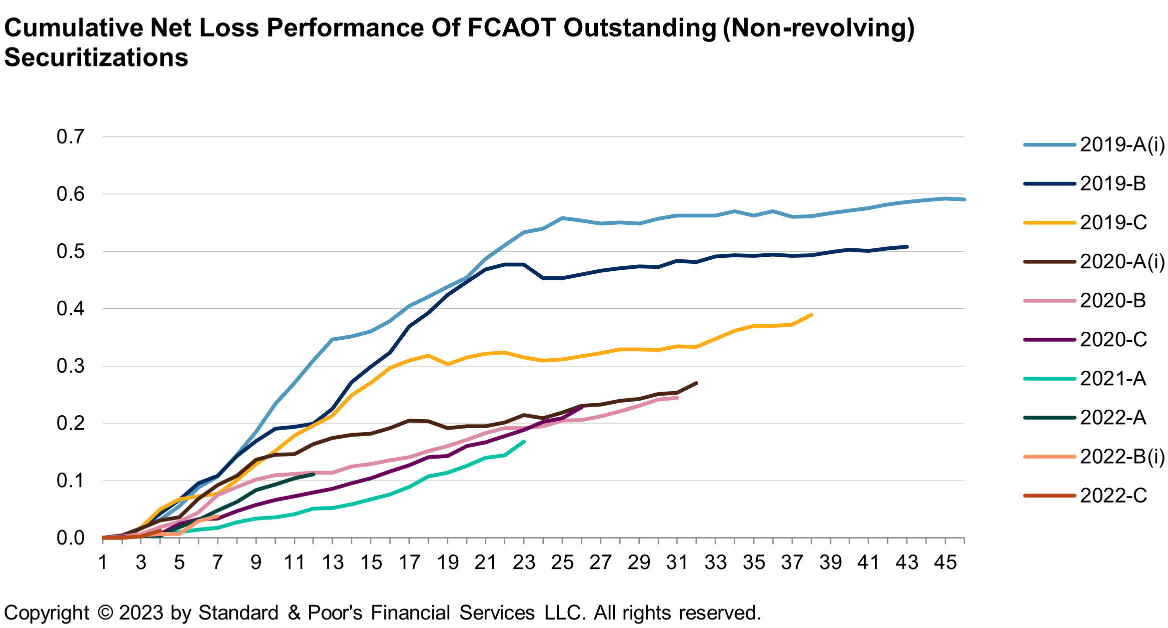
On Jan. 13, 2022, we raised our ratings on three classes and affirmed our ratings on 22 classes from six FCAOT transactions (see "Ford Credit Auto Owner Trust Ratings Raised On Three Classes, Affirmed On 22 From Six Transactions").

Chart 3



In our view, the FordREV pools are performing in line with the outstanding FCAOT nonrevolving transactions. However, due to FordREV's long revolving period and the possibility that the existing pool could migrate to a lower credit quality, based on the transactions' receivables eligibility criteria, our expected loss assumptions for the FordREV pools are higher compared to our initial expected lifetime net loss of 1.10%-1.50% on the outstanding FCAOT nonrevolving pools (see chart 4).

Chart 4

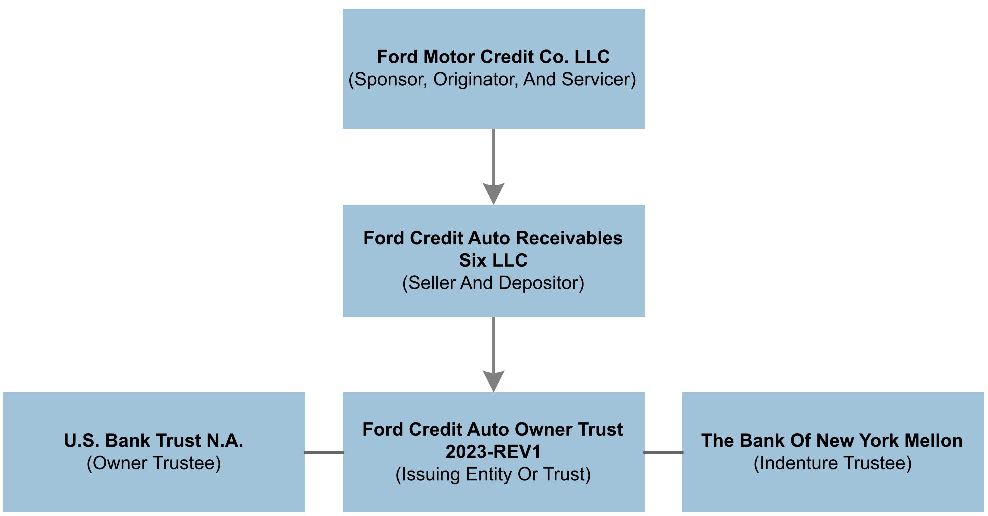


Legal Overview And Transaction Overview

In rating this transaction, S&P Global Ratings will review the legal matters it believes are relevant to its analysis, as outlined in its criteria. The transaction is structured as a true sale of the receivables from Ford Motor Credit Co. LLC to Ford Credit Auto Receivables Six LLC, the depositor. The depositor will then transfer the receivables to FCAOT 2023-REV1, a newly formed special-purpose Delaware statutory trust. The issuing entity will issue the notes and use the proceeds to purchase the initial receivables from Ford Credit Auto Receivables Six LLC, the depositor (see chart 5). The issuer will pledge its interest in the receivables and its security interests in the vehicles to the indenture trustee for the noteholders' benefit.

Chart 5

Transaction Structure



During the revolving period, the trust must fund an accumulation account with collections from the receivables, and it may use funds on deposit in the accumulation account to purchase additional receivables. To limit deterioration in pool quality and credit enhancement while the pool revolves, the transaction includes pool composition tests, a credit enhancement test, early amortization triggers, and a net losses test. In addition, a negative carry account must be maintained and funded with excess spread to protect against negative carry as long as funds remain in the accumulation account. Although no principal payments are due on the notes during the revolving period, interest is due monthly.

The trust may also sell receivables to the depositor, another Ford Credit SPE, or a third-party purchaser on any payment date during the revolving period. The receivables pool must still meet the pool composition and credit enhancement tests after the sales, and there is a 10% cumulative limit on receivables sold from the trust to the depositor or another Ford Credit SPE that are subsequently sold back to Ford Credit.

The revolving period will continue until an amortization event (including when the maximum five-year revolving period expires) occurs, resulting in the pool and notes' amortization (see the Amortization events section above for these events). If an amortization event occurs, additional asset purchases cease, and the trust must pay interest and principal to the notes monthly with the cash flows received from the underlying pool of auto loan receivables. However, the issuer may sell the entire pool of receivables to the depositor, another Ford Credit SPE, or a third-party purchaser on any payment date occurring one year after the closing date (including during the amortization period) if the purchase price is sufficient to pay the outstanding note balance, all accrued interest, and certain other amounts that may be due to the noteholders as well as all fees and expenses of the trust.

The other amounts that may become payable on the notes include step-up amounts and make-whole payments. If the amortization period begins because the transaction has been in the revolving period for the full five years, step-up amounts accrue on the notes. In addition, if the amortization period begins before the note redemption period (the six months preceding the expected final payment date) because the negative carry account is not funded to the required amount or because the adjusted pool balance declines to 50% of the notes' initial balance, make-whole payments will be payable to the noteholders. An optional redemption of the notes before the note redemption period will also cause make-whole payments to accrue. Make-whole payments aim to compensate noteholders for the early return of principal. Step-up amounts and make-whole payments are subordinate to interest and principal payments to the notes, and nonpayment of these amounts before the legal final maturity date will not be an event of default. S&P Global Ratings' preliminary ratings do not address the likelihood that step-up amounts or make-whole payments will be paid.

FCAOT 2023-REV1 incorporates the following structural features:

- A five-year revolving period, subject to certain amortization events.
- Negative Initial and target overcollateralization (when excluding the YSOA), resulting in undercollateralization of 0.50% as a percent of the initial adjusted pool balance during the revolving period.
- During any amortization period, a sequential-pay waterfall that is expected to result in increased credit enhancement for the senior notes.
- A YSOA that amortizes according to a predetermined schedule. The minimum YSOA discount rate will be set on the pricing date at a rate necessary to produce excess spread at an annual rate of at least 3.55%. If the receivables pool meets the pool composition tests, the minimum YSOA discount rate will be the minimum rate plus 0.70%. If the pool of receivables does not meet the net losses test, the yield supplement discount rate will be equal to the minimum rate plus 3.70%.
- A nonamortizing reserve account equal to at least 0.50% of the adjusted pool balance as of the closing date during the revolving period. At amortization, the reserve account target amount will decrease to at least 0.25% of the adjusted pool balance as of the closing date, and any excess amounts above at least 0.25% will be released and deposited into the collection accounts on the first payment date following amortization and will be used to make payments per the transaction's payment waterfall. During the amortization period, the reserve account will equal at least 0.25% of the adjusted pool balance as of the closing date and is nonamortizing.
- The use of excess spread, to the extent available after covering net losses, to maintain parity between the adjusted pool balance (plus amounts in the accumulation account) and the notes during the revolving period; and, during any amortization period, to pay principal to the outstanding notes.

- The pool composition tests, credit enhancement test, net losses test, and amortization events that are designed to maintain a minimum pool quality and credit enhancement level during the revolving period.
- Minimum excess spread of approximately 3.56% per year (pre-pricing).

The YSOA is sized to elevate the yield on the contracts with APRs below the YSOA discount rate to the YSOA discount rate. The YSOA for each month will be calculated at closing and on each purchase and sale date, assuming zero prepayments and zero defaults, and amortize according to a schedule. During an amortization period, the YSOA will not be recalculated. Initial YSOA is $96,190,527 or 11.67% of the initial adjusted pool balance.

Payment Priority

The payment priority that Ford Credit presented to us provides that the auto receivables collections will be used to make the distributions shown in table 7. In addition, the funds in the reserve account will be available to cover senior fees and interest shortfalls during the revolving period and to make priority principal payments during any amortization period. The reserve account is also available to make principal payments that are due on the notes' legal final maturity date. During the revolving period, funds in the negative carry account will be available to cover senior fees, interest shortfalls, reserve replenishment, and the accumulation deposit amount.

Table 7

Payment Waterfall

Priority	Payment
1	Indenture trustee fees, owner trustee fees, and issuer expenses, capped at $150,000 per year.
2	The 1.00% servicing fee.
3	Class A note interest.
4	During the amortization period, first-priority principal payment (if the class A notes' balance is greater than the adjusted pool balance).
5	Class B note interest.
6	During the amortization period, second-priority principal payment (if the class A and B notes' balance is greater than the adjusted pool balance after any first-priority principal payments are made).
7	Class C note interest.
8	During the amortization period, third-priority principal payment (if the class A, B, and C notes' balance is greater than the adjusted pool balance after any first and second-priority principal payments are made).
9	Class D note interest.
10	Restore the reserve account to its required amount(i).
11	During the revolving period, the accumulation deposit amount to the accumulation account(ii). During the amortization period, all remaining amounts to pay principal to the noteholders, sequentially by class.
12	During the revolving period, the required negative carry amount to the negative carry account.
13	Any make-whole payments due on the notes; and, after Feb. 15, 2028, any step-up amounts due on the notes(iii).
14	Any unpaid trustee fees and expenses.

Table 7

Payment Waterfall (cont.)

Priority	Payment
15	Any remainder to the residual interest holder.

(i)The reserve account required amount is at least 0.50% during the revolving period and at least 0.25% during the amortization period, both as a percentage of the adjusted pool balance as of the closing date. (ii)For any payment date during the revolving period, the accumulation deposit amount is an amount equal to the note balance over the adjusted pool balance plus 0.50% of the initial adjusted pool balance. (iii)S&P Global Ratings' preliminary ratings do not address make-whole payments or step-up amounts.

During the revolving period, interest is scheduled to be paid monthly on the notes, no principal is due, and an amount equal to the accumulation deposit amount must be paid to the accumulation deposit account. Amounts in the accumulation account may be used to purchase additional receivables at a later date. In addition, an amount equal to the negative carry deposit amount must be paid to the negative carry account if there are amounts in the accumulation account.

If the notes are still outstanding when the transaction reaches the expected final payment date on Feb. 15, 2028, step-up amounts will accrue on the notes. Make-whole payments are due if certain amortization events (failure to fund the negative carry account or the adjusted pool balance falls below 50% of the note balance) occur or an optional redemption occurs before the note redemption period. Our preliminary ratings do not address whether step-up amounts or make-whole payments will be made.

Cash Flow Modeling Assumptions And Results

We modeled the series 2023-REV1 transaction to simulate 'AAA', 'AA', 'A', and 'BBB' rating stress scenarios (see tables 8 and 9). We modeled the transaction at the beginning of the amortization period with excess spread levels that declined from initial to minimum levels. Because Ford Credit pools typically include a significant portion of contracts with APRs less than the interest rate on the notes plus fees, we used a bifurcated pool method in which the subvened contracts (for cash flow purposes, subvened means loans with APRs of 5.00% or less) prepay at much slower rates than nonsubvened contracts. Performance data also indicate that lower-APR contracts tend to prepay less than higher-APR contracts. In addition, our stress cash flow scenarios include an APR cap based on the YSOA discount rate, as applicable, at 10.15% under the pool composition tests and 9.45% under the floor credit enhancement composition tests. These discount rates were assumed for purposes of the statistical information but are subject to change at pricing and may be higher or lower in order to target an annual excess spread amount of at least 3.55%. We assumed both front and back-loaded loss curves for the subvened and nonsubvened loans given the longer-term loans in the pool.

Table 8

Cash Flow Assumptions And Results: Pool Composition Tests (3.00% ECNL)

	Class			
	A	B	C	D
Scenario (preliminary rating)	AAA (sf)	AA (sf)	A (sf)	BBB (sf)
Front-loaded loss curve				
ABS voluntary prepayments (%)				

 2944795

Table 8

Cash Flow Assumptions And Results: Pool Composition Tests (3.00% ECNL) (cont.)

	Class			
	A	B	C	D
Subvened(i)	0.25	0.25	0.25	0.25
Nonsubvened(i)	1.50	1.50	1.50	1.50
Recoveries (%)	50	50	50	50
Recovery lag (mos.)	4	4	4	4
Disproportionate loss allocation (%)				
Subvened	41	40	40	40
Nonsubvened	59	60	60	60
Loss timing (%)				
Subvened net loss curve	22/60/84/100	22/60/84/100	22/60/84/100	22/60/84/100
Nonsubvened net loss curve	36/73/88/100	36/72/87/100	36/72/87/100	36/71/86/100
Aggregate net loss curve	30/67/86/100	30/67/86/100	30/67/86/100	30/67/86/100
Approx. break-even levels (%)(ii)	16.7	13.3	10.2	8.8
Back-loaded loss curve				
ABS voluntary prepayments (%)				
Subvened(i)	0.25	0.25	0.25	0.25
Nonsubvened(i)	1.50	1.50	1.50	1.50
Recoveries (%)	50	50	50	50
Recovery lag (mos.)	4	4	4	4
Disproportionate loss allocation (%)				
Subvened	41	40	40	40
Nonsubvened	59	60	60	60
Loss timing (%)				
Subvened net loss curve	17/57/83/96/100	17/57/83/96/100	17/57/83/96/100	17/57/83/96/100
Nonsubvened net loss curve	27/65/91/99/100	26/63/88/97/100	26/62/87/96/100	26/62/87/96/100
Aggregate net loss curve	23/62/88/98/100	23/61/87/97/100	22/60/86/96/100	22/60/86/96/100
Approx. break-even levels (%)(ii)	16.7	13.4	10.3	8.9

(i)The subvened/nonsubvened cut-off annual percentage rate is 5.0%. (ii)The maximum cumulative net losses on the pool that the transaction can withstand without triggering a payment default on the relevant class of notes. ECNL--Expected cumulative net loss. ABS--Absolute prepayment speed.

Table 9

Cash Flow Assumptions And Results: Floor Credit Enhancement Composition Tests (2.60% ECNL)

	Class			
	A	B	C	D
Scenario (preliminary rating)	AAA (sf)	AA (sf)	A (sf)	BBB (sf)
Front-loaded loss curve				
ABS voluntary prepayments (%)				
Subvened(i)	0.25	0.25	0.25	0.25
Nonsubvened(i)	1.50	1.50	1.50	1.50
Recoveries (%)	50	50	50	50
Recovery lag (mos.)	4	4	4	4
Disproportionate loss allocation (%)				
Subvened	40	40	40	40
Nonsubvened	60	60	60	60
Loss timing (%)				
Subvened net loss curve	22/60/84/100	22/60/84/100	22/60/84/100	22/60/84/100
Nonsubvened net loss curve	36/72/87/100	36/72/87/100	36/71/86/100	36/71/86/100
Aggregate net loss curve	30/67/86/100	30/67/86/100	30/67/86/100	30/66/85/100
Approx. break-even levels (%)(ii)	15.4	12.0	8.8	7.4
Back-loaded loss curve				
ABS voluntary prepayments (%)				
Subvened(i)	0.25	0.25	0.25	0.25
Nonsubvened(i)	1.50	1.50	1.50	1.50
Recoveries (%)	50	50	50	50
Recovery lag (mos.)	4	4	4	4
Disproportionate loss allocation (%)				
Subvened	41	40	40	40
Nonsubvened	59	60	60	60
Loss timing (%)				
Subvened net loss curve	17/57/83/96/100	17/57/83/96/100	17/57/83/96/100	17/57/83/96/100
Nonsubvened net loss curve	27/64/89/98/100	26/62/88/97/100	26/62/87/96/100	26/62/87/96/100

Table 9

Cash Flow Assumptions And Results: Floor Credit Enhancement Composition Tests (2.60% ECNL) (cont.)

	Class			
	A	B	C	D
Aggregate net loss curve	23/61/87/97/100	22/60/86/96/100	22/60/86/96/100	22/60/86/97/100
Approx. break-even levels (%)(ii)	15.4	12.0	8.9	7.4

(i)The subvened/nonsubvened cut-off annual percentage rate is 5.0%. (ii)The maximum cumulative net losses on the pool that the transaction can withstand without triggering a payment default on the relevant class of notes. ECNL--Expected cumulative net loss. ABS--Absolute prepayment speed.

By running low prepayments on the lower-APR contracts and applying a slower loss curve to these contracts than to the higher-APR contracts, the cash flows stressed the weighted average APR on the collateral, causing it to decrease over time. This increases the likelihood that the YSOA will be used for yield enhancement rather than credit enhancement. In a stressed scenario, liquidity risk could arise due to interest shortfalls if the yield on the assets is lower than the yield on the bonds (especially because the bonds pay sequentially, leading to higher-coupon debt outstanding at the tail-end of the transaction). Using the YSOA for liquidity decreases its ability to cover credit losses, thereby decreasing break-even levels.

To minimize excess spread, we also assumed from the outset of our cash flow runs that initial excess spread levels in the deal had migrated to the minimum level the YSOA affords (which recalculates after each additional receivables purchase or sale during the revolving period). The APR of the receivables is capped at the relevant YSOA discount rate, i.e. for cash flow modeling purposes assumed to be 10.15% when the pool composition tests are met and 9.45% when the floor credit enhancement composition tests are met, with no credit given to the excess APRs or interest collections above the discount rate.

Because the pool's credit quality could deteriorate during the revolving period due to the receivables mix, we used our expected cumulative net losses assuming a worst-case pool mix to evaluate the break-even runs. After applying the above stresses in our internal cash flow runs, the break-even results showed that the notes are enhanced to the degree necessary to withstand a stressed net loss level that is consistent with the assigned preliminary ratings (see tables 8 and 9).

In addition to scenarios that assume deal amortization from day one, we also tested break-even scenarios where the transaction starts out in the revolving period, but the receivables are amortizing, and the trust does not subsequently purchase or sell receivables. As a result, the existing collateral pool will be in a runoff mode, where the pool balance will decrease without any decrease in the note balance. Excess spread may be released to the extent not used to cover transaction fees and expenses, note interest, and collateral pool losses. Under this scenario, we observed how and when the amortization event trigger will be breached and whether the transaction has sufficient credit enhancement to cover stressed losses. The break-even results in this simulation were also consistent with the assigned preliminary ratings.

Sensitivity Analysis

In addition to analyzing break-even cash flows, we conducted a sensitivity analysis to see how high losses would need to rise, all else being equal, before the preliminary ratings on the notes would become vulnerable to a downgrade (see table 10). As with the break-even analysis, we ran the sensitivity cash flows at the beginning of the amortization period at a minimum level of excess spread.

Table 10

Sensitivity Analysis Summary: Moderate Loss Scenario

	Pool composition tests	Floor credit enhancement composition tests
Loss level (multiple)	2.0x worst-case expected	2.0x worst-case expected
Cumulative net loss level (%)	6.00	5.20
Front-loaded loss timing by months outstanding (12/24/36/48) (%)		
Subvened	22/60/84/100	22/60/84/100
Nonsubvened	36/71/86/100	36/71/86/100
Aggregate	30/66/85/100	30/66/85/100
Back-loaded loss timing by months outstanding (12/24/36/48/60) (%)		
Subvened	17/57/83/96/100	17/57/83/96/100
Nonsubvened	26/62/87/96/100	26/62/87/96/100
Aggregate	22/60/86/97/100	22/60/86/97/100
Disproportionate loss allocation (%)		
Subvened	40	40
Nonsubvened	60	60
Voluntary ABS (%)(i)		
Subvened	0.25	0.25
Nonsubvened	1.50	1.50
Servicing fee (%)	1.00	1.00
Recovery rate (%)	50	50
Recovery lag (mos.)	4	4

(i)The subvened/nonsubvened cutoff annual percentage rate is 5.0%. ABS--Absolute prepayment speed.

Moderate loss scenario: 6.00% (pool composition tests) and 5.20% (floor credit enhancement composition tests)

Under the moderate stress loss scenario, we assumed cumulative net losses of approximately 2.0x our cumulative expected net loss level assuming a worst-case pool mix. For the subvened and nonsubvened loans, loss curves were applied as shown in table 10. In addition, we assumed a 50% recovery rate. To stress excess spread, we assumed a voluntary prepayment speed of 1.50% for contracts with APRs greater than 5.0% and 0.25% for contracts with APRs less than 5.0%.

In the 2.0x cumulative expected net loss scenario with the pool composition tests, the class A, B, C, and D notes are paid in full in months 43, 47, 52, and 55, respectively, from the beginning of the amortization period. In the comparable run with the floor credit enhancement composition tests, the class A, B, C, and D notes are paid in full in months 44, 48, 53, and 57, respectively, from the beginning of the amortization period. Charts 6 and 7 show the sensitivity coverage multiples.

Chart 6

Pool Composition Tests

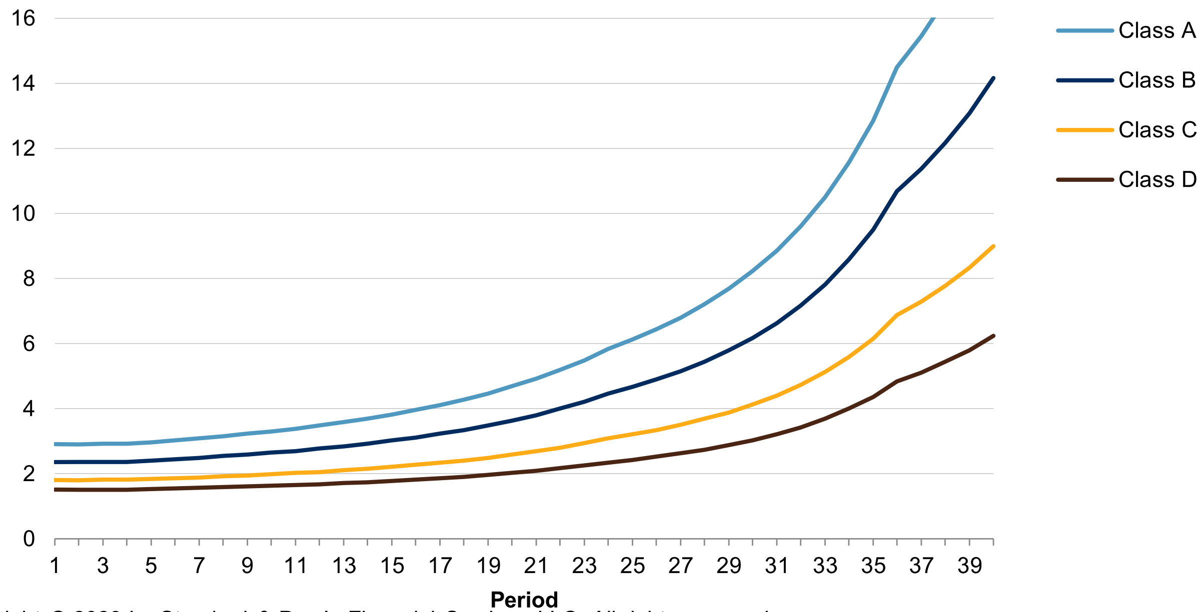
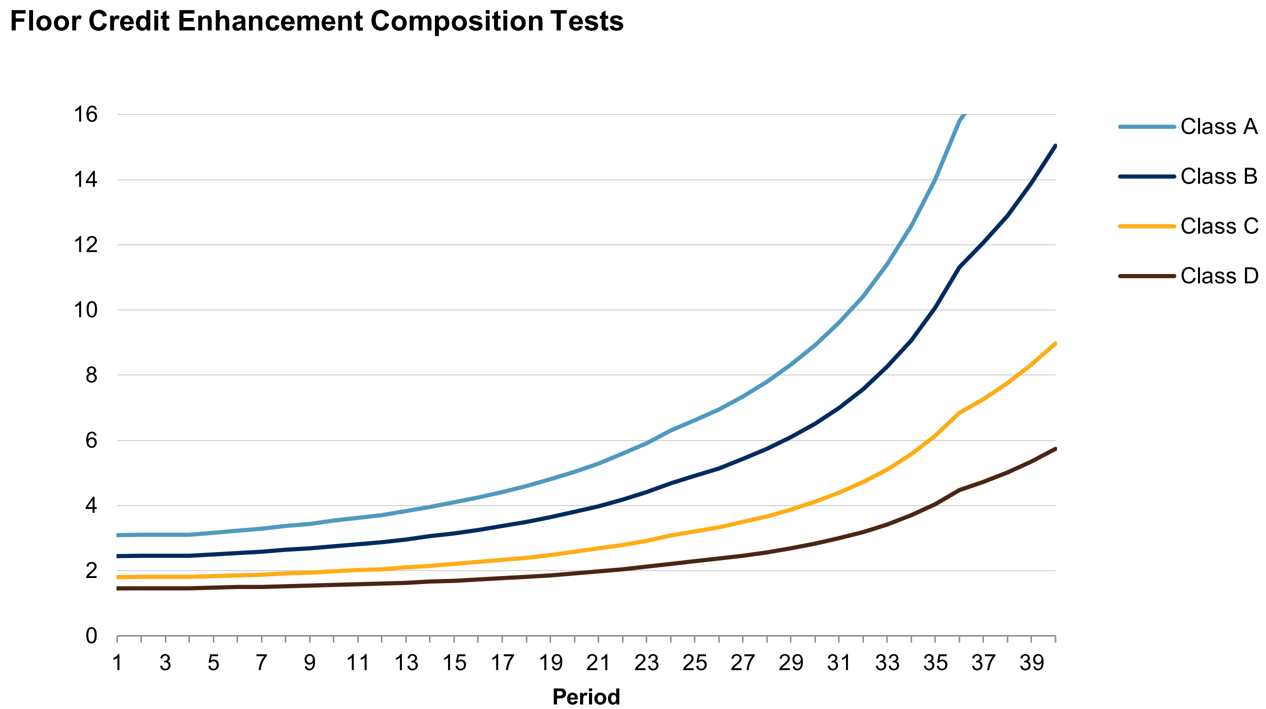


Chart 7



In our view, under the 2.0x stress scenario, all else being equal, the assigned preliminary ratings on the class A through D notes are consistent with the credit stability limits specified in section A.4 of the Appendix contained in S&P Global Rating Definitions (see "S&P Global Ratings Definitions," published Nov. 10, 2021).

In addition to scenarios that assume deal amortization from day one, we tested sensitivity scenarios where the transaction starts out in the revolving period, but the receivables are amortizing and the trust does not subsequently purchase or sell receivables. In these runs, we observed the amortization triggers sending the transaction into amortization in months 16-20 relating to breaching of the net losses test. The sensitivity coverage multiples for all classes in these scenarios were also consistent with the assigned preliminary ratings from a credit stability perspective.

Legal Final Maturity Date

All classes have a legal final maturity date of Aug. 15, 2035. To test the legal final maturity date from the five-year revolving period, we added 84 months to account for the maximum allowable term of auto loan receivables (assuming the receivables are originated at the end of the revolving period) plus six months to accommodate extensions on the receivables.

Counterparty and Operational Risks

On or before the closing date, the FCAOT 2023-REV1 bank accounts will be established in the name of the indenture trustee, The Bank of New York Mellon, as segregated trust accounts that will initially be established with the bank account provider, The Bank of New York Mellon. 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). Ford Motor Credit Co. is a rated servicer (BB+/Positive/B) with a long and established history in the prime auto finance business. As servicer, Ford Motor Credit Co. has a tenured and experienced management team that oversees origination, underwriting, servicing, collections, and general operational practices. As mentioned, Ford Motor Credit Co. is rated by S&P Global Ratings, and commingling risk is addressed by the requirement that Ford Motor Credit Co. deposit into the collection account all collections on the receivables within two business days of receiving those funds. The key transaction parties are subject to various regulatory investigation and or legal proceedings that may arise in their ordinary course of business. These could include, without limitation, judgments, settlements, fines, penalties, or other actions, which could be substantial and negatively affect the way servicing is conducted, and thus adversely affect the noteholders. We will assess these events and their outcomes when available to determine any impact on our counterparty and operational risk assessments.

Ford Credit

Ford Credit, headquartered in Dearborn, Mich., is a wholly owned captive finance subsidiary of Ford Motor Co. Ford Credit is one of the largest auto finance companies in the U.S., with an average retail contracts portfolio of $47.3 billion as of year ended Dec. 31, 2022. Ford Credit offers consumer retail contracts, consumer leases, business loans, and lines of credit to dealerships that sell Ford Motor Co. products. Ford Credit purchases retail contracts for the sale of new and used vehicles from Ford and Lincoln dealerships.

Related Criteria

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- U.S. Auto Loan ABS Tracker: November 2022 Performance, Jan. 11, 2023
- Credit Conditions North America Q1 2023: Worse Before It Gets Better, Dec. 1, 2022
- Economic Outlook U.S. Q1 2023: Tipping Toward Recession, Nov. 28, 2022
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- Ford Credit Auto Owner Trust Ratings Raised On Three Classes, Affirmed On 22 From Six Transactions, Jan. 13, 2022
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