S&P Global
Ratings

Research

Presale:

Ford Credit Auto Owner Trust 2023-C

November 13, 2023

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Preliminary ratings

Class	Preliminary rating	Type	Interest rate(i)	Preliminary amount (mil. $)(i)	Preliminary amount if upsized (mil. $)(i)	Expected legal final maturity date
A-1	A-1+ (sf)	Senior	Fixed	212.00	265.00	Dec. 15, 2024
A-2a/A-2b(ii)	AAA (sf)	Senior	Fixed/floating	369.00	461.25	Sept. 15, 2026
A-3	AAA (sf)	Senior	Fixed	369.00	461.25	Sept. 15, 2028
A-4	AAA (sf)	Senior	Fixed	50.00	62.50	May 15, 2029
B	AA+ (sf)	Subordinate	Fixed	31.58	39.48	Aug. 15, 2029
C	AA- (sf)	Subordinate	Fixed	21.05	26.30	May 15, 2031

Note: This presale report is based on information as of Nov. 13, 2023. The ratings shown are preliminary. This report does not constitute a recommendation to buy, hold, or sell securities. Subsequent information may result in the assignment of final ratings that differ from the preliminary ratings. (i)The trust will issue notes with an aggregate initial principal amount of $1.053 billion (or $1.316 billion, if upsized). The interest rates and actual sizes of these tranches will be determined on the pricing date. (ii)The allocation of the initial principal amount between the class A-2a and A-2b notes will be determined during pricing, although the class A-2b note size will not exceed $276.75 million if the aggregate issuance is $1.053 billion (or $345.93 million if the aggregate note issuance is $1.316 billion). The class A-2b notes will accrue interest at a floating rate indexed to a compounded SOFR (30-day average) plus a margin.

Profile

Expected closing date	Nov. 21, 2023.
Collateral	Prime auto loan receivables.
Originator, servicer, sponsor, and administrator	Ford Motor Credit Co. LLC (BBB-/Stable/A-3).
Issuing trust	Ford Credit Auto Owner Trust 2023-C.
Depositor	Ford Credit Auto Receivables Two LLC.
Indenture trustee	The Bank of New York Mellon (AA-/Stable/A-1+).
Owner trustee	U.S. Bank Trust N.A.
Bank account provider	The Bank of New York Mellon (AA-/Stable/A-1+).

Rationale

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

- The availability of approximately 7.8%, 5.8%, and 4.7% credit support for the class A (classes A-1, A-2a/A-2b, A-3, and A-4, collectively), B, and C notes, respectively (based on stressed break-even cash flow scenarios, including excess spread). These credit support levels provide coverage of at least 5.00x, 4.50x, and 3.67x our 1.20% expected cumulative net loss (ECNL) to the class A, B, and C notes, respectively (see the Credit Enhancement and Collateral and the Cash Flow Modeling Assumptions and Results sections below).
- The expectation that under a moderate ('BBB') stress scenario (2.0x our expected loss level), all else being equal, our preliminary 'AAA (sf)', 'AA+ (sf)', and 'AA- (sf)' ratings on the class A, B, and C notes, respectively, will be within the credit stability limits (see the Cash Flow Modeling Assumptions And Results section below).
- The timely payment of interest and principal by the designated legal final maturity dates under our stressed cash flow modeling scenarios, which we believe are appropriate for the assigned preliminary ratings.
- The collateral characteristics of the securitized pool of prime automobile loans, and our updated macroeconomic forecast and forward-looking view of the auto finance sector (see the Credit Enhancement And Collateral, and the Macroeconomic And Auto Finance Sector Outlook sections below).
- The series' bank accounts at The Bank of New York Mellon (AA-/Stable/A-1+), which do not constrain the preliminary ratings.
- Our operational risk assessment of Ford Motor Credit Co. LLC (Ford Credit) as servicer and our view of the company's underwriting.
- Our assessment of the transaction's potential exposure to environmental, social, and governance (ESG) credit factors, that are in line with our sector benchmark.
- Our view of the transaction's payment and legal structures.

Our ECNL for FCAOT 2023-C is 1.20%, down from 1.25% for FCAOT 2023-B. It reflects:

- Our view that the FCAOT 2023-C collateral characteristics are slightly stronger than that of FCAOT 2023-B;
- Ford Credit's outstanding series, which continue to perform in line with or better than our initial expectations; and
- Our forward-looking view of the economy and auto finance sector.

Environmental, Social, And Governance

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

In our view, the transaction's exposure to ESG credit factors is in line with our sector benchmark.

The environmental credit factors are generally viewed as above average, given that the collateral pool primarily comprises vehicles with internal combustion engines (ICEs), which create emissions of pollutants, including greenhouse gases. While the adoption of electric vehicles and future regulation could lower ICE vehicle values over time, we believe that our current approach to evaluating recovery and residual values adequately account for vehicle values over the relatively short expected life of the transaction. As a result, we have not separately identified this as a material ESG credit factor in our analysis.

Credit Enhancement And Collateral

Structural changes from FCAOT 2023-B

Notable structural changes from the FCAOT 2023-B transaction include:

- The yield supplement overcollateralization amount (YSOA) discount rate increased to 9.40% from 8.85%, and the initial YSOA as a percentage of the initial aggregate pool balance increased to 8.84% from 8.17%.
- The estimated annual excess spread (adjusted for YSOA) decreased to 2.51% from 2.74% for FCAOT 2023-B (post-pricing).

Table 1 shows the credit enhancement changes from recent transactions.

Table 1

Credit enhancement summary

	FCAOT					
	2023-C	**2023-C (upsized)**	**2023-B**	**2023-A**	**2022-D(i)**	**2022-C**
Subordination (% of the initial adjusted receivables balance)						
Class A	5.00	5.00	5.00	5.00	5.00	5.00
Class B	2.00	2.00	2.00	2.00	2.00	2.00
Class C	0.00	0.00	0.00	0.00	0.00	0.00
Reserve account (% of the initial adjusted receivables balance)						
Initial	0.25	0.25	0.25	0.25	0.30	0.30
Target	0.25	0.25	0.25	0.25	0.30	0.30
Floor	0.25	0.25	0.25	0.25	0.30	0.30
Overcollateralization						
Initial (% of the initial adjusted pool balance)	0.00	0.00	0.00	0.00	0.00	0.00
Target (including the reserve)(ii)	2.00/1.50	2.00/1.50	2.00/1.50	2.00/1.50	2.00/1.50	2.00/1.50
Total initial hard credit enhancement (% of the initial adjusted receivables balance)						
Class A	5.25	5.25	5.25	5.25	5.30	5.30
Class B	2.25	2.25	2.25	2.25	2.30	2.30

Table 1

Credit enhancement summary (cont.)

	FCAOT					
	2023-C	2023-C (upsized)	2023-B	2023-A	2022-D(i)	2022-C
Class C	0.25	0.25	0.25	0.25	0.30	0.30
Excess spread (%)						
YSOA discount rate	9.40	9.40	8.85	9.05	9.20	8.05
Estimated excess spread (including YSOA) per year(iii)	2.51	2.51	2.74	3.38	NA	2.74
Initial gross receivables balance ($)	1,154,710,582	1,443,380,079	1,719,380,848	1,732,167,318	1,471,280,949	1,745,303,061
Initial YSOA ($)	102,078,986	127,591,930	140,434,394	153,219,525	155,500,949	166,355,464
Initial adjusted receivables balance ($)	1,052,631,597	1,315,788,149	1,578,946,454	1,578,947,792	1,315,780,000	1,578,947,597
Total securities ($)	1,052,630,000	1,315,780,000	1,578,940,000	1,578,940,000	1,315,780,000	1,578,940,000
YSOA (% of the gross receivables balance)	8.84	8.84	8.17	8.85	10.57	9.53
YSOA (% of the adjusted receivables balance)	9.70	9.70	8.89	9.70	11.82	10.54

(i)Not rated by S&P Global Ratings. (ii)The targeted overcollateralization amount will adjust each month and generally will equal the sum of: the yield supplement overcollateralization amount for that month; plus 2.00% of the initial adjusted pool balance; plus the excess, if any, of 1.50% of the current pool balance over at least 0.25% of the initial adjusted pool balance. (iii)Estimated excess spread per year is before pricing for FCAOT 2023-C and after pricing for FCAOT 2022-C, 2022-D, 2023-A, and 2023-B. The time-weighted cost of debt that is used to estimate excess spread is calculated as a percentage of the initial adjusted pool balance. FCAOT--Ford Credit Auto Owner Trust. YSOA--Yield supplement overcollateralization amount. NA--Not available.

Collateral changes from FCAOT 2023-B

Notable changes in the collateral composition from the FCAOT 2023-B transaction include:

- The percentage of loans with an original term greater than 60 months decreased to 50.79% from 52.84%, while the 72-plus month term distribution decreased to 13.16% from 17.43% and the 75-plus month term distribution decreased to 11.03% from 12.78%.
- The weighted average FICO score increased to 753 from 748 for the overall pool and increased slightly to 725 from 722 for loans with an original term greater than 60 months. However, it decreased slightly to 726 from 728 for loans with an original term greater than 75 months.
- The percentage of used vehicles decreased to 8.79% from 10.20%.
- The weighted average loan-to-value (LTV) ratio decreased to 98.69% from 100.91%.
- The weighted average annual percentage rate (APR) increased to 4.92% from 4.79%.

The percentages stated for the FCAOT 2023-C pool reflect the characteristics of the base pool. The larger collateral pool, if upsized, exhibits very similar characteristics to the base pool.

In our view, the FCAOT 2023-C pool is slightly stronger than the FCAOT 2023-B pool due to the higher weighted average FICO score, the lower percentage of long-term receivables, and the lower used vehicle concentration (see table 2).

Based on FCAOT 2023-C's receivables selection criteria, no loans in the pool have been granted a payment extension as of the Oct. 31, 2023, cutoff date.

Table 2

Collateral comparison(i)

	FCAOT					
	2023-C	**2023-C (upsized)**	**2023-B**	**2023-A**	**2022-D(ii)**	**2022-C**
Pool size (bil. $)	1.15	1.44	1.72	1.73	1.47	1.75
No. of receivables	32,290	40,320	49,034	48,752	45,366	52,430
Avg. principal balance ($)	35,761	35,798	35,065	35,530	32,431	33,288
WA APR excluding the YSOA (%)	4.92	4.92	4.79	4.74	3.77	3.29
WA original term (months)	63.6	63.6	64.4	65.1	64.3	64.1
WA remaining term (months)	55.7	55.8	56.5	57.8	54.6	54.7
Seasoning (months)	7.9	7.8	7.9	7.3	9.7	9.4
Loans with an original term of 61-72 months (%)	37.63	37.33	35.41	36.04	41.72	41.48
Loans with an original term of 73-75 months (%)	2.13	2.19	4.65	6.16	2.82	3.30
Loans with an original term of 76-84 months (%)	11.03	11.20	12.78	12.35	6.99	6.55
New vehicles (%)	91.21	91.30	89.80	87.82	88.07	89.83
Used vehicles (%)	8.79	8.70	10.20	12.18	11.93	10.17
WA original FICO score(iii)	753	754	748	745	745	744
WA FICO score of pools with an original term greater than 60 months(iii)	725	725	722	721	720	719
WA FICO score of pools with an original term greater than 75 months(iii)(iv)	726	726	728	729	721	722
WA LTV ratio at origination (%)(v)	98.69	98.81	100.91	101.41	100.64	100.37
WA PTI ratio at origination (%)(vi)	9.74	9.76	9.71	9.46	9.24	9.12
Top five state concentrations (%)						
	TX=15.97	TX=16.09	TX=16.58	TX=17.27	TX=17.00	TX=18.48
	CA=9.64	CA=9.54	CA=9.88	CA=10.35	CA=11.10	CA=11.18
	FL=8.45	FL=8.39	FL=8.92	FL=8.93	FL=8.75	FL=8.26
	GA=4.08	GA=4.05	GA=4.12	GA=4.27	GA=3.87	GA=3.79

Table 2

Collateral comparison(i) (cont.)

	FCAOT					
	2023-C	2023-C (upsized)	2023-B	2023-A	2022-D(ii)	2022-C
	NC=3.54	NC=3.52	NC=3.57	NC=3.66	MI=3.40	MI=3.33

(i)All percentages are of the initial gross receivables balance. (ii)Not rated by S&P Global Ratings. (iii)Excludes receivables that have primary obligors who do not have FICO scores because they are not individuals or are individuals with minimal or no recent credit history. (iv)For FCAOT 2023-C, 2023-B, and 2023-A, the WA FICO score for receivables with original terms greater than 75 months; and for FCAOT 2022-D and 2022-C, the WA FICO score for receivables with original terms greater than 72 months. (v)The LTV ratio for a receivable is the original amount financed divided by the wholesale value of the vehicle. (vi)The PTI ratio for a receivable is the contract monthly payment amount divided by the monthly combined income of the obligor and any co-obligor. It excludes commercial-use receivables with a business entity as the primary obligor. It also excludes a limited number of receivables where income is not reported. FCAOT--Ford Credit Auto Owner Trust. APR--Annual percentage rate. WA--Weighted avg. YSOA--Yield supplement overcollateralization amount. LTV--Loan-to-value. PTI--Payment-to-income.

Macroeconomic And Auto Finance Sector Outlook

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. Historically, changes in the unemployment rate have been a key determinant of charge-offs in the auto finance industry.

U.S. economic data has been coming in stronger than expected, thus suggesting that an ever-elusive soft landing is still possible. Better-than-expected growth has led us to revise our U.S. GDP forecast for 2023 upward by 0.5 percentage points to 2.3%. However, we believe the current momentum is unsustainable as the 10-year Treasury yield and the 30-year mortgage rate have recently risen to levels not seen since before the Great Financial Crisis (GFC) of 2008, and COVID-19 pandemic-related excess savings have been largely depleted. With higher interest rates, increases in house prices, and higher prices for new and used automobiles, recent and new debt origination, coupled with the resumption of student loan payments, will put upward pressure on debt service ratios and negatively affect consumer spending. As such, we see growth slowing to 1.3% in 2024 and 1.4% in 2025, before converging to trend-like growth of 1.8% in 2026 (after multiple rate cuts in 2025 and 2026).

Given the usual lags between GDP growth and unemployment levels, we do not expect a significant deterioration in labor markets until 2024. With growth expected to slow below trend after 2023, we forecast the unemployment rate rising to an average of 4.1% in 2024 and 4.7% in 2025 (see "Economic Outlook U.S. Q4 2023: Slowdown Delayed, Not Averted," published Sept. 25, 2023).

Separately, inflation and the expected increase--albeit slow--in the broader consumer financial obligations' payment ratio as a percent of disposable income, with the resumption of student loan payments in October 2023, are potential headwinds. While the CPI has declined significantly since 2022, energy prices have jumped recently and have had a disproportionate impact on those with lower incomes. In addition, it is estimated that 24 million borrowers whose student loan payments were suspended at the onset of the pandemic will resume payments in October with an average monthly payment of approximately $300. According to TransUnion, approximately one-third of consumers with student loan debt took on new auto loan debt during the pandemic. The added student debt payment will be burdensome for consumers who are financially stressed, which could negatively impact auto loan ABS performance. However, we believe, based on past economic cycles, that consumers for whom the vehicle is essential for work will continue to prioritize their auto loan and lease payments before their other consumer and student loan payments.

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

Table 3

U.S. economic factors

	Actual	Forecast			
	2022	2023	2024	2025	2026
Real GDP (% year over year growth)	2.1	2.3	1.3	1.4	1.8
Unemployment rate (% annual average)	3.6	3.6	4.1	4.7	4.8
Consumer Price Index (% annual average)	8.0	4.1	2.4	1.9	2.3

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

S&P Global Ratings' Expected Loss: 1.20%

We determined our expected loss for FCAOT 2023-C by analyzing:

- The transaction's collateral characteristics relative to those of outstanding series (see table 2);
- The managed portfolio performance and origination static pool data and their relative performances (see tables 4 and 5); and
- The outstanding series' performance (see table 6 and charts 1-4).

Given Ford Credit's established performance track record as a consistent issuer, we placed more emphasis on the outstanding series' performance when determining the expected loss for this series, while also adjusting for potential incremental risk due to the inclusion of longer-term loans. We complemented this analysis with our forward-looking view of the economy and the auto finance sector (see the Macroeconomic And Auto Finance Sector Outlook section above). In deriving our CNL expectation, we also considered Ford Credit's underwriting and servicing operations, including steps to mitigate higher losses.

Based on our analysis of the FCAOT 2023-C pool's slightly better credit quality, the vintage static origination net loss data and our applied projected loss to the FCAOT 2023-C pool, our CNL and gross loss projections for Ford Credit's outstanding securitized pools, Ford Credit's managed portfolio performance, and our forward-looking view of the economy, we expect FCAOT 2023-C to experience lifetime CNLs of 1.20%, down from 1.25% for FCAOT 2023-B.

Managed portfolio

Ford Credit's managed retail portfolio as of the nine months ended Sept. 30, 2023, shows stable performance relative to pre-COVID-19 pandemic periods. Overall, delinquencies and losses remain comparable or better compared to the full year 2019 and earlier. As of Sept. 30, 2023, Ford Credit's retail portfolio comprised 1.87 million contracts with an outstanding principal balance of approximately $50.6 billion (see table 4).

Similar to many in the auto finance industry, Ford Credit's managed portfolio performance was influenced by the company's response to the COVID-19 pandemic and higher used vehicle auction values due to vehicle supply shortages, resulting in lower delinquencies, repossessions, and net credit losses. Ford Credit granted goodwill payment extensions to obligors during the COVID-19 pandemic and temporarily suspended involuntary repossessions of financed vehicles from delinquent obligors nationwide. This contributed to a decline in delinquencies, repossessions, and, ultimately, credit losses in 2020 and 2021 which, now in 2023, is showing some signs of normalizing but still better than pre-pandemic levels.

Ford Credit's 84-month contract performance is similar to that of the overall pool, showing stable performance relative to pre-COVID-19 pandemic periods. While overall losses remain relatively low, the average net loss on charged-off 84-month contracts is historically higher than that of the entire portfolio due to the slower amortization of such loans and relatively higher LTV ratio.

Table 4

Managed portfolio performance

	Nine months ended Sept. 30		Year ended Dec. 31				
	2023	**2022**	**2022**	**2021**	**2020**	**2019**	**2018**
Avg. portfolio outstanding during the period (mil. $)	50,596	47,292	47,297	49,264	49,869	46,650	46,704
Avg. 84-month portfolio outstanding during the period (mil. $)	4,232	2,990	3,112	3,081	2,725	2,033	1,340
Avg. no. of contracts outstanding	1,871,687	1,875,534	1,865,258	2,010,001	2,132,085	2,140,915	2,194,989
Delinquencies (%)(i)							
31-60 days	1.11	1.06	1.09	0.90	1.02	1.33	1.34
61-90 days	0.16	0.13	0.14	0.10	0.13	0.12	0.13
91-120 days	0.02	0.01	0.01	0.01	0.02	0.01	0.01
Over 120 days	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Total delinquencies	1.29	1.20	1.24	1.01	1.18	1.46	1.48
Delinquencies (%)(ii)							
31-60 days	1.03	0.95	1.13	0.99	1.06	1.45	1.45
61-90 days	0.16	0.13	0.17	0.12	0.13	0.16	0.15
91-120 days	0.02	0.01	0.02	0.01	0.01	0.01	0.01
Over 120 days	0.00	0.01	0.01	0.01	0.01	0.00	0.00
Total delinquencies	1.21	1.10	1.33	1.13	1.21	1.62	1.61
84-month contract delinquencies (%)(ii)							
31-60 days	0.78	0.64	0.77	0.65	0.55	0.53	0.35
61-90 days	0.12	0.08	0.10	0.07	0.07	0.03	0.02
91-120 days	0.02	0.01	0.01	0.01	0.00	0.01	0.01
Over 120 days	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Total delinquencies	0.92	0.73	0.88	0.73	0.63	0.57	0.38
Repossessions (% of the average no. of contracts outstanding)(iii)	0.83	0.74	0.74	0.75	0.95	1.24	1.28

Table 4

Managed portfolio performance (cont.)

	Nine months ended Sept. 30		Year ended Dec. 31				
	2023	2022	2022	2021	2020	2019	2018
Repossessions of 84-month contracts (% of the average no. of 84-month contracts outstanding)(iii)	0.57	0.46	0.47	0.49	0.55	0.60	0.53
Aggregate net losses (mil. $)	118	40	70	32	180	246	253
Net losses (% of gross liquidations)(iv)	0.71	0.23	0.30	0.13	0.78	1.08	1.07
Net losses (% of the average portfolio outstanding)(iii)	0.31	0.11	0.15	0.06	0.36	0.53	0.54
Net losses on 84-month contracts (% of the average 84-month portfolio outstanding)(iii)	0.19	0.12	0.13	0.08	0.21	0.25	0.21
Number of contracts charged-off (% of the average number of contracts outstanding)(iii)	1.37	1.18	1.21	1.16	1.46	1.88	1.89
Average net loss on charged-off contracts ($)	6,134	2,425	3,093	1,350	5,783	6,131	6,100
Average net loss on charged-off 84-month contracts ($)	10,022	7,408	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)Aggregate principal balance of delinquent contracts as a percentage of the portfolio outstanding. (iii)For non-annual periods, the percentages are annualized. (iv)Gross liquidations are cash payments and charge-offs that reduce a receivables' outstanding balance.

For the first nine months of 2023, Ford Credit's retail loan origination volume is up both at the contract level and at the aggregate principal level, showing an increase in the base number of originations, as well as an increase in average origination size compared to a year earlier (see table 5). The percentage of loans with an original term greater than 60 months increased slightly compared to the same period in 2022, but declined compared to longer term historical levels. The weighted average FICO score for loans with original terms of 84 months has stayed consistent as of Sept. 30, 2023, compared to the same period in 2022, but it has decreased compared to prior figures due to Ford Credit's expansion in October 2021 of its 84-month contract financing to applicants, who may have lower FICO scores and higher LTV ratios.

Table 5

Managed portfolio origination characteristics

	Nine months ended Sept. 30		Year ended Dec. 31				
	2023	2022	2022	2021	2020	2019	2018
No. of contracts	460,149	339,236	484,524	514,312	668,156	588,258	729,323
Total principal balance ($ mil)	22,018	15,217	22,139	21,508	27,506	22,332	25,293
WA original term (months)	63.1	63.7	64.3	64.4	68.6	66.2	66.3

Table 5

Managed portfolio origination characteristics (cont.)

	Nine months ended Sept. 30		Year ended Dec. 31				
	2023	2022	2022	2021	2020	2019	2018
Original term greater than 60 months (%)	51.0	50.2	52.2	53.5	71.8	61.0	59.9
Original term of 84 months (%)	9.3	8.0	8.9	5.3	10.2	4.2	5.7
WA FICO score	748	736	738	742	730	742	741
WA FICO score for original term greater than 60 months	720	706	711	719	717	723	722
WA FICO score for original term of 84 months	720	720	723	728	734	752	754
No FICO score consumer (%)	0.8	0.9	0.9	0.7	0.7	0.9	0.9
WA LTV ratio (%)	100	102	102	99	102	97	96
WA PTI ratio (%)	10.0	9.4	9.4	9.1	9.2	8.9	8.7
Subvened-APR contracts (%)	72	56	58	61	69	63	54
Commercial use (%)	22	26	25	24	17	19	18
New vehicles (%)	92	85	85	92	93	91	89

WA--Weighted avg. LTV--Loan-to-value. PTI--Payment-to-income. APR--Annual percentage rate.

Origination static pool analysis

To derive the transaction's base-case loss, we analyzed static pool origination net loss data on Ford Credit's U.S. managed portfolio going back to 2001. We received static pool data from Ford Credit segmented by credit score band, term (including 73- to 84-month term loans), new/used vehicle mix, vehicle type, and APR subvention, and we developed expected net loss projections for each combination of those segments. Then we weighted these projections based on the actual concentration of the various segments in the FCAOT 2023-C pool and recently securitized pools. Our goal was to estimate the relative percentage increase or decrease in the overall expected net loss due to the FCAOT 2023-C pool's credit composition compared with previous pools. When analyzing static pool performance and securitization performance, we placed less focus on performance from the past couple of years, given the impact of extensions on delinquencies and the robust vehicle recovery that we expect will stabilize in the near term.

Similarly to previous FCAOT pools, the FCAOT 2023-C pool includes commercial accounts, which represent receivables with primary obligors that are generally small businesses that use the financed vehicles for commercial purposes. Most of these accounts do not have FICO scores because the account obligors are businesses, not individuals. The commercial accounts' loss performance is included in the various origination static pool net loss data segmentations described above. In our view, the origination static pool data showed that these accounts' loss performance was generally better than that of consumer loans with FICO scores less than 676.

Securitization performance

We maintain ratings on 15 active retail FCAOT transactions that closed in 2018 through 2023. Of those, seven are SEC-registered with amortizing structures, and eight (FCAOT 2018-REV1, 2019-REV1, 2020-REV1, 2020-REV2, 2021-REV1, 2021-REV2, 2022-REV1, and 2023-REV1) are broadly distributed Rule 144A transactions with revolving structures.

On Oct. 10, 2023, we raised one rating and affirmed five ratings from FCAOT 2022-C. We also revised our lifetime loss expectations due to better- than-expected performance (see "One Rating Raised, Five Affirmed On Ford Credit Auto Owner Trust 2022-C").

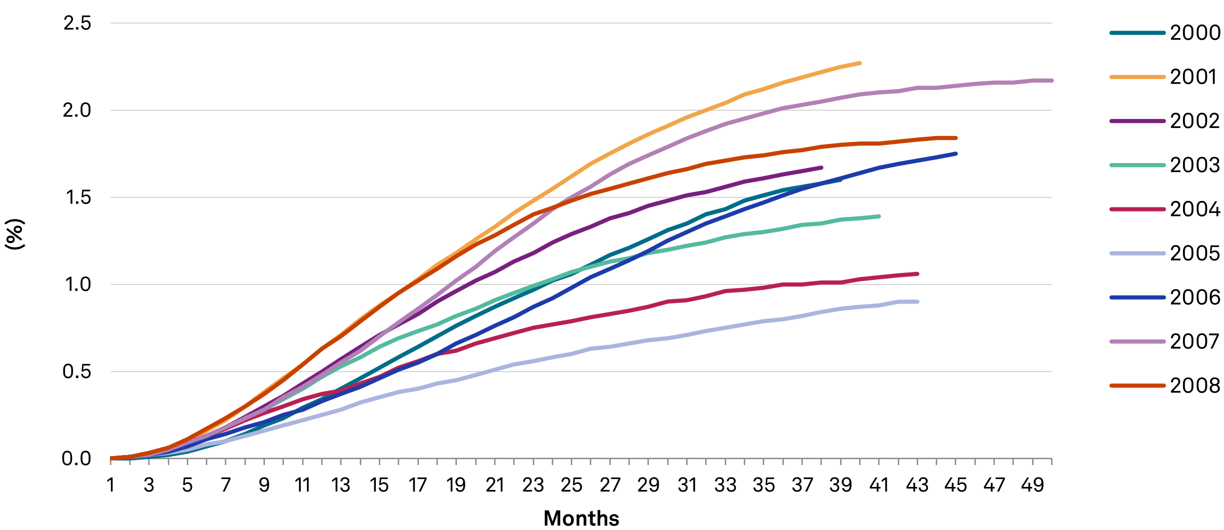
On March 10, 2023, we raised four ratings and affirmed 19 ratings from six FCAOT amortizing transactions. We also revised and lowered our lifetime loss expectations on the transactions due to better-than-expected performance (see "Ratings Raised On Four Classes And Affirmed On 19 Classes From Six Ford Credit Auto Owner Trust Transactions").

The outstanding classes have adequate credit enhancement at their current rating levels, in our view. We will continue to monitor all outstanding transactions to ensure that the credit enhancements remain sufficient to cover our revised CNL expectations under our stress scenarios for each of the rated classes.

Charts 1-4 show performance data for FCAOT's nonrevolving transactions.

Chart 1

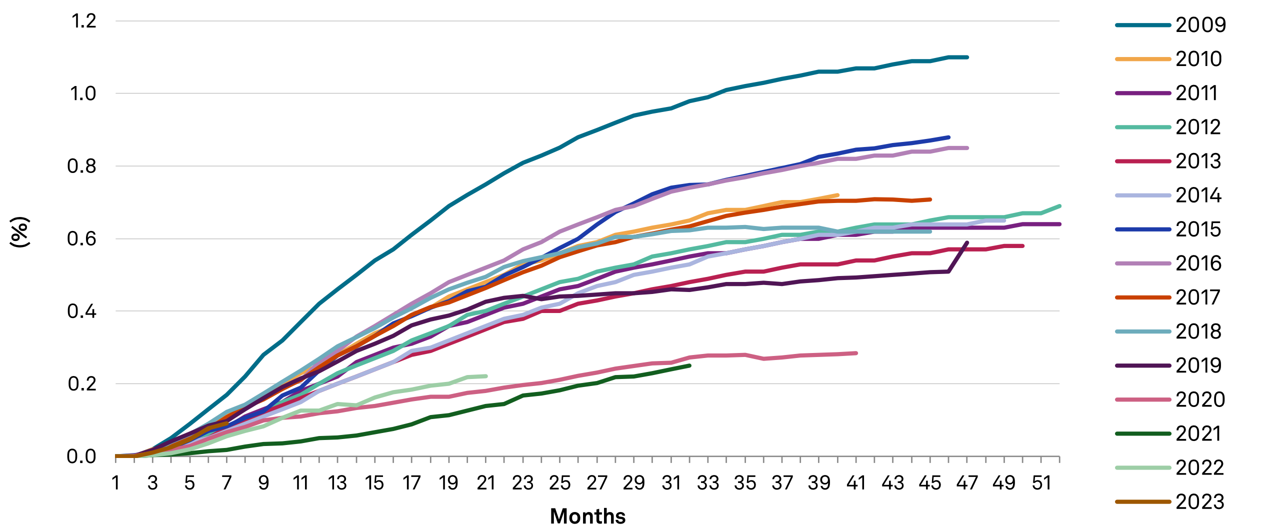
FCAOT cumulative net loss performance by vintage (2000-2008)



FCAOT--Ford Credit Auto Owner Trust.

Chart 2

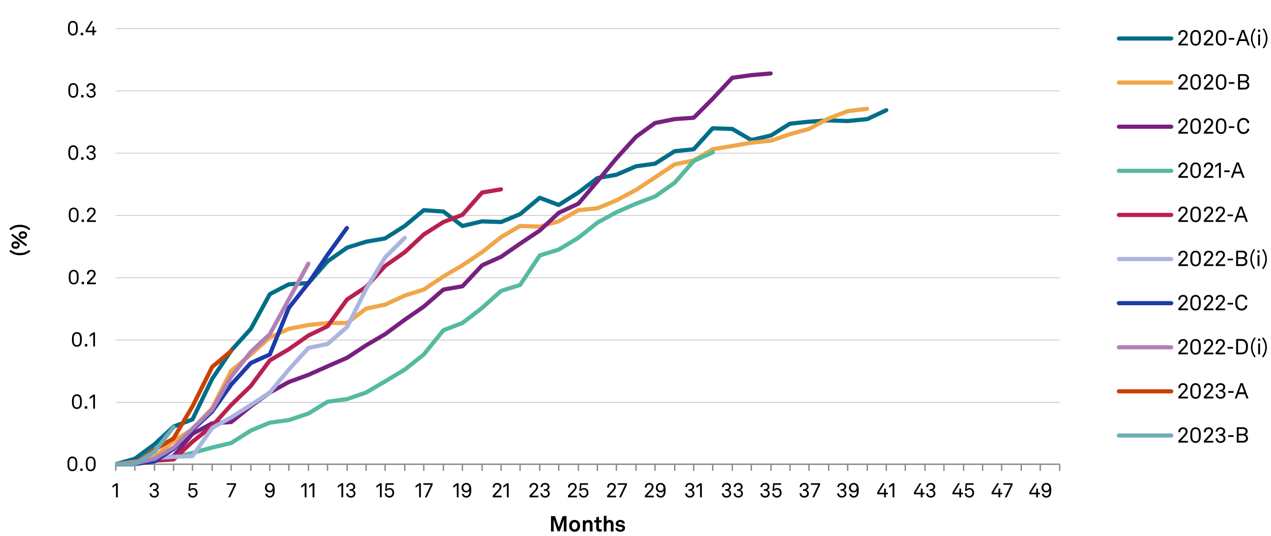
FCAOT cumulative net loss performance by vintage (2009-2023)



FCAOT--Ford Credit Auto Owner Trust.

Chart 3

Cumulative net loss performance of FCAOT outstanding securitizations



(i)Not rated by S&P Global Ratings. FCAOT--Ford Credit Auto Owner Trust.

FCAOT's average cumulative recovery rate from 2009 to 2013 is approximately 64.00%. Beginning in 2014, the cumulative recovery rates began to decrease. From 2014-2017, FCAOT average cumulative recovery rates were below 60.00%. The outstanding 2020 and 2021 transactions are generally experiencing higher cumulative recovery rates in the 60.00%-70.00% range, while the outstanding 2022 series are exhibiting lower cumulative recovery rates in the 50.00%-60.00% range (see chart 4).

Chart 4

Cumulative recovery rate by vintage

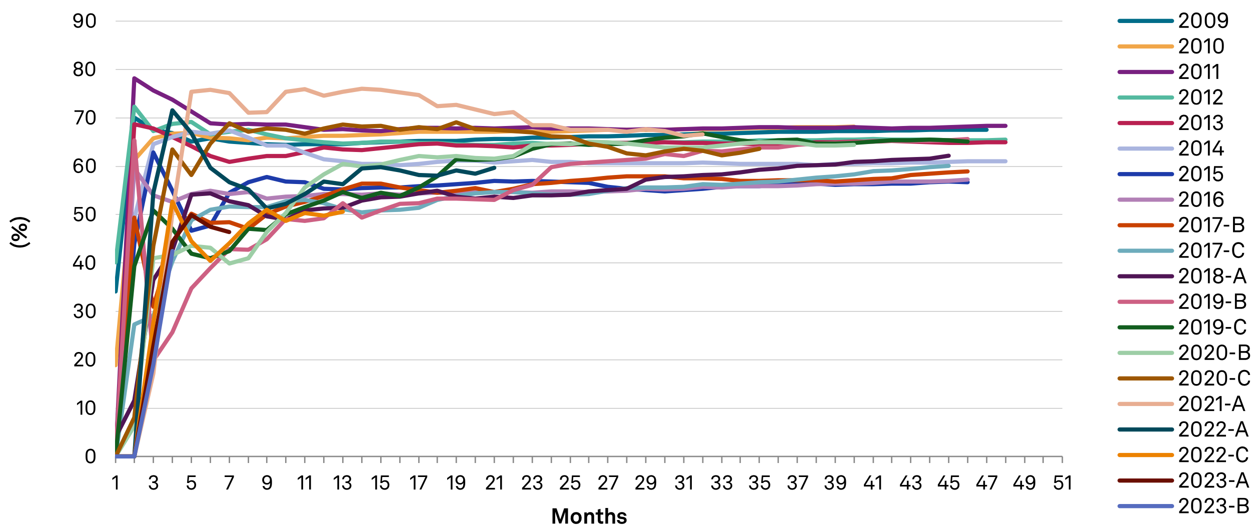


Table 6 shows performance data for FCAOT's outstanding nonrevolving transactions from 2020-2023 that are rated by S&P Global Ratings.

Table 6

Performance data for outstanding nonrevolving FCAOT transactions(i)

Series	Month	Pool factor (%)	60-plus-day delinquency (%)	CNL (%)	Initial expected lifetime CNL (%)	Revised expected lifetime CNL (%)(ii)
2020-B	40	14.34	0.40	0.29	1.30-1.50	0.40
2020-C	35	24.84	0.39	0.31	1.40-1.60	0.55
2021-A	32	27.94	0.30	0.25	1.25-1.45	0.60
2022-A	21	45.53	0.31	0.22	1.10-1.30	1.00
2022-C	13	62.54	0.22	0.19	1.20	1.00
2023-A	7	78.98	0.12	0.09	1.25	N/A
2023-B	4	87.55	0.10	0.03	1.25	N/A

(i)Performance as of the October 2023 distribution date. (ii)The lifetime expected CNL was revised in March 2023 for FCAOT 2019-B, 2019-C, 2020-B, 2020-C, 2021-A, and 2022-A and in October 2023 for series 2022-C. FCAOT--Ford Credit Auto Owner Trust. CNL--Cumulative net loss. N/A--Not applicable.

To derive the base case for the FCAOT 2023-C transaction, we examined the CNL performance of paid-off and outstanding FCAOT nonrevolving transactions that had collateral characteristics similar to the FCAOT 2023-C pool. We derived a loss timing curve from the paid-off pools to project losses on the outstanding securitizations. In addition, we selected some loss timing curves from paid-off pools that may have experienced greater back-end losses to project losses on the outstanding securitizations. This allowed us to determine how the outstanding securitizations may perform if losses were to become more back-ended compared to historical experience, given the increase in longer-term loans (greater than 60 months) included in recent FCAOT pools. We also projected remaining gross losses on the outstanding securitizations and assumed lower future recovery rates to account for expected declines in used vehicle values. The gross loss approach yielded slightly higher CNL projections.

Legal Overview And Transaction Structure

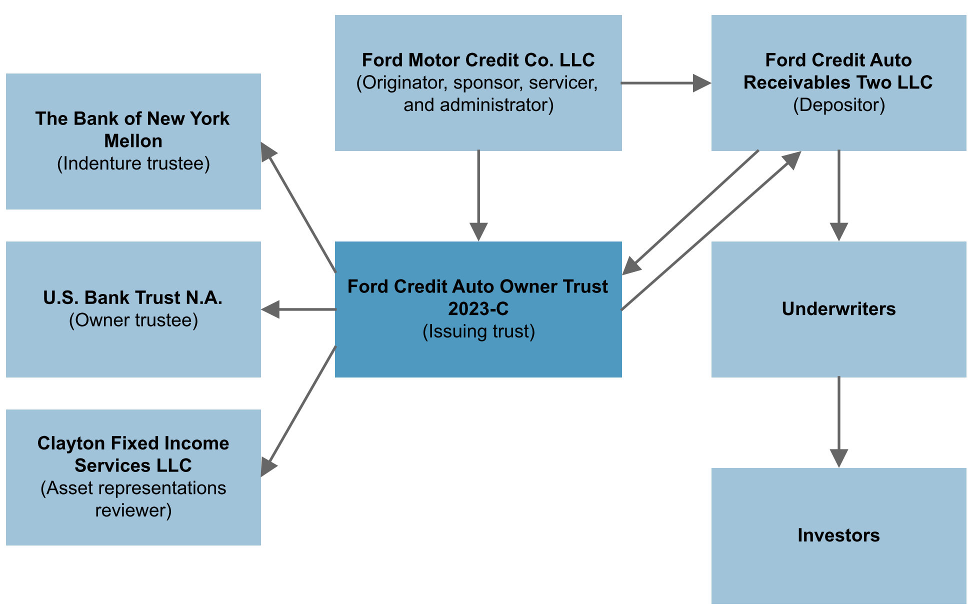
Legal overview

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

FCAOT 2023-C is structured as a true sale of the receivables from Ford Credit (the sponsor, servicer, and administrator) to Ford Credit Auto Receivables Two LLC (the depositor). The depositor will sell the acquired assets to FCAOT 2023-C (the issuing trust), a bankruptcy-remote special-purpose entity, which will then pledge its interest in the receivables to the indenture trustee on the noteholders' behalf (see chart 5).

Chart 5

Transaction structure



Transaction structure

FCAOT 2023-C incorporates the following structural features:

- A sequential-pay mechanism that results in increased credit enhancement for the senior notes as the pool amortizes;
- A YSOA that amortizes according to a schedule rather than being recalculated and reduced when the low-yielding assets prepay;
- A nonamortizing reserve account; and
- The use of excess spread, to the extent available after covering net losses, to pay principal on the outstanding notes to build credit enhancement to the target level.

The YSOA is sized so that the yield on the contracts with APRs below the YSOA discount rate is raised to the YSOA discount rate. The YSOA for each distribution date will be calculated at closing, assuming zero prepayment and zero default, and will amortize according to a schedule. On the closing date, we expect the YSOA to be $102.1 million ($127.6 million if upsized). The YSOA discount rate is 9.40%.

Ford Credit's transaction structure includes a targeted overcollateralization amount equal to the YSOA plus 2.00% of the initial adjusted pool balance plus the excess, if any, of 1.50% of the outstanding receivables balance over the required reserve account amount (at least 0.25% of the initial adjusted receivables balance).

Overcollateralization will begin at 0% of the initial adjusted pool balance and build while available excess spread pays principal to the senior notes. Once the class A-1 notes are fully repaid and the overcollateralization amount reaches its target amount, excess cash flow will be released to the residual interest holder. The depositor will be the initial residual interest holder.

FCAOT 2023-C will be the sixth transaction under the shelf to utilize the SOFR interest rate benchmark for the floating-rate class A-2b notes (FCAOT 2022-B was the first). The class A-2b coupons will initially be based on a compounded SOFR (a 30-day average SOFR determined by the calculation agent using the published rate on the Federal Reserve Bank of New York's website) to calculate the interest rate for the floating-rate notes. In addition, provisions have been incorporated into securitization documents that govern rate selection if SOFR becomes unavailable.

Payment Priority

Interest and principal on the notes are scheduled to be paid on each monthly distribution date beginning Dec. 15, 2023. FCAOT 2023-C's payment priority provides that the auto receivables collections will be used to make the distributions shown in table 7. In addition, the reserve account's funds will be available to cover interest shortfalls, make priority principal payments, and make principal payments that are due on the notes' final maturity date.

Table 7

Payment waterfall

Priority	Payment
1	Indenture trustee fees, owner trustee fees, asset representation reviewer and issuer expenses, capped at $375,000 per year.

Table 7

Payment waterfall (cont.)

Priority	Payment
2	The 1.00% servicing fee.
3	Class A note interest, pro rata, to the class A noteholders.
4	First-priority principal payment (if the class A notes' balance exceeds the adjusted pool balance).
5	Class B note interest.
6	Second-priority principal payment (if the class A and B notes' balance exceeds the adjusted pool balance after any first-priority principal payments are made).
7	Class C note interest.
8	Restore the reserve account to its required amount.
9	Regular principal payment(i).
10	Any unpaid trustee fees and expenses.
11	Any remainder to the residual interest holder.

(i)The regular principal payment amount is designed to pay the class A-1 notes in full and build the overcollateralization (on an adjusted pool basis) on the closing date to the target overcollateralization amount: the YSOA plus 2.00% of the initial adjusted pool balance plus the excess of 1.50% of the gross current pool balance over at least 0.25% of the initial adjusted pool balance (the required reserve amount). If the note balance exceeds the adjusted pool balance (before the target overcollateralization amount is reached), principal collections and excess spread will be used to pay down the notes until the note balance equals the adjusted pool balance (items 4 and 6 above) and the overcollateralization target (including the reserve amount) is reached (item 9 above). No excess spread will be released until the class A-1 notes are paid in full and the target overcollateralization amount has been reached. YSOA--Yield supplement overcollateralization amount. Class A--Classes A-1, A-2a/A-2b, A-3, and A-4, collectively.

Cash Flow Modeling Assumptions And Results

In our cash flow analysis, we assess the availability of asset cash flows to meet the transaction's promised obligations under a variety of stress assumptions, while considering the transaction structure and available credit support. We also use our cash flow analysis in other aspects of our ratings analysis, including the testing of credit stability (sensitivity analysis) and legal final analysis.

Break-even analysis

We modeled the FCAOT 2023-C transaction to withstand our 'AAA', 'AA+', and 'AA-' stress scenarios for the class A, B, and C notes, respectively. Historical performance data indicate that loans with lower APRs tend to prepay and default less frequently than loans with higher APRs. When this occurs within a pool of loans, the lower-APR loans remain outstanding longer. We stressed the excess spread in our cash flow modeling scenarios accordingly by using a bifurcated-pool method under which the higher-APR loans prepay faster and default at a disproportionately higher rate than the lower-APR loans. In our modeling scenarios, we bifurcated the pool using a cutoff APR of 5.00% (accounting for the cost of debt). Table 8 shows the cash flow assumptions applied and the related results using a fast loss timing curve, and table 9 shows the assumptions and results using a slower loss timing curve.

By running low prepayments on the subvened, lower-APR contracts, and applying a slower loss timing 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 faster 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 resulting from the yield on the assets being 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). Increasing the use of the YSOA for yield enhancement decreases the amount of the YSOA available to cover credit losses, thereby decreasing break-even levels.

The class A-2 notes may consist of fixed-rate class A-2a notes and floating-rate class A-2b notes, which will accrue interest at a floating rate indexed to compounded SOFR (a 30-day average SOFR calculated in advance by the calculation agent using the published rate on the Federal Reserve Bank of New York's website) plus a spread. For the floating-rate tranche, we applied our stressed interest rates for one-month SOFR, as described in our criteria "Methodology To Derive Stressed Interest Rates In Structured Finance," published Oct. 18, 2019, using a SOFR curve starting at 5.00%. We also modeled the maximum potential size of the class A-2b note balance ($276.8 million or $345.9 million if the note issuance is upsized)

The break-even cash flow results show that each rated class in the FCAOT 2023-C transaction has more than sufficient credit enhancement to withstand a stressed net loss level consistent with the assigned preliminary ratings.

Table 8

Cash flow assumptions and results (fast)

	Class A	Class B	Class C
Preliminary rating	A-1+ (sf)/AAA (sf)	AA+ (sf)	AA- (sf)
Subvened loans (% of pool)(i)	58	58	58
Nonsubvened loans (% of pool)	42	42	42
Cumulative net loss timing (% of losses per year)			
Total loans	33/41/19/6	33/41/19/6	33/41/19/6
Subvened loans	32/42/19/7	32/42/19/7	32/42/19/7
Nonsubvened loans	35/40/20/5	35/40/20/5	35/40/20/5
Loss allocation (% of total losses)			
Subvened loans	50	50	50
Nonsubvened loans	50	50	50
Voluntary ABS (%)			
Subvened loans	0.25	0.25	0.25
Nonsubvened loans	1.50	1.50	1.50
Recovery rate (%)	50	50	50
Recovery lag (mos.)	4	4	4
Approx. breakeven levels-base (%)(ii)	7.8	5.8	4.7
Approx. breakeven levels-upsize (%)(ii)	7.9	5.9	4.7

(i)For modeling purposes, we classified subvened loans as loans with APRs that are lower than or equal to 5.0% and nonsubvened loans as loans with APRs greater than 5.0%. (ii)The maximum cumulative net losses on the pool that the transaction can withstand without triggering a payment default on the class A or B notes. ABS--Absolute prepayment speed. APRs--Annual percentage rates. Class A--Classes A-1, A-2a/A-2b, A-3, and A-4, collectively.

Table 9

Cash flow assumptions and results (slow)

	Class A	Class B	Class C
Preliminary rating	A-1+ (sf)/AAA (sf)	AA+ (sf)	AA- (sf)
Subvened loans (% of pool)(i)	58	58	58
Nonsubvened loans (% of pool)	42	42	42
Cumulative net loss timing (% of losses per year)			
Total loans	31/42/20/6/1	31/42/20/6/1	31/42/20/6/1
Subvened loans	27/44/20/7/2	27/44/20/7/2	27/44/20/7/2
Nonsubvened loans	35/40/20/5	35/40/20/5	35/40/20/5
Loss allocation (% of total losses)			
Subvened loans	50	50	50
Nonsubvened loans	50	50	50
Voluntary ABS (%)			
Subvened loans	0.25	0.25	0.25
Nonsubvened loans	1.50	1.50	1.50
Recovery rate (%)	50	50	50
Recovery lag (mos.)	4	4	4
Approx. breakeven levels-base (%)(ii)	7.8	5.8	4.7
Approx. breakeven levels-upsize (%)(ii)	7.9	5.9	4.7

(i)For modeling purposes, we classified subvened loans as loans with APRs that are lower than or equal to 5.0% and nonsubvened loans as loans with APRs greater than 5.0%. (ii)The maximum cumulative net losses on the pool that the transaction can withstand without triggering a payment default on the notes. ABS--Absolute prepayment speed. APRs--Annual percentage rates. Class A--Classes A-1, A-2a/A-2b, A-3, and A-4, collectively.

Sensitivity analysis

In addition to running break-even cash flows, we undertook sensitivity analysis using the assumptions outlined in tables 8 and 9. We believe that under a moderate ('BBB') stress scenario (2.00x of 1.20% expected loss level) and with 100.00% credit to any excess spread, all else being equal, our preliminary ratings will be within the credit stability limits specified in section A.4 of the Appendix in "S&P Global Ratings Definitions," published June 9, 2023 (see table 10 and chart 6).

Table 10

Credit stability as a limiting factor on ratings

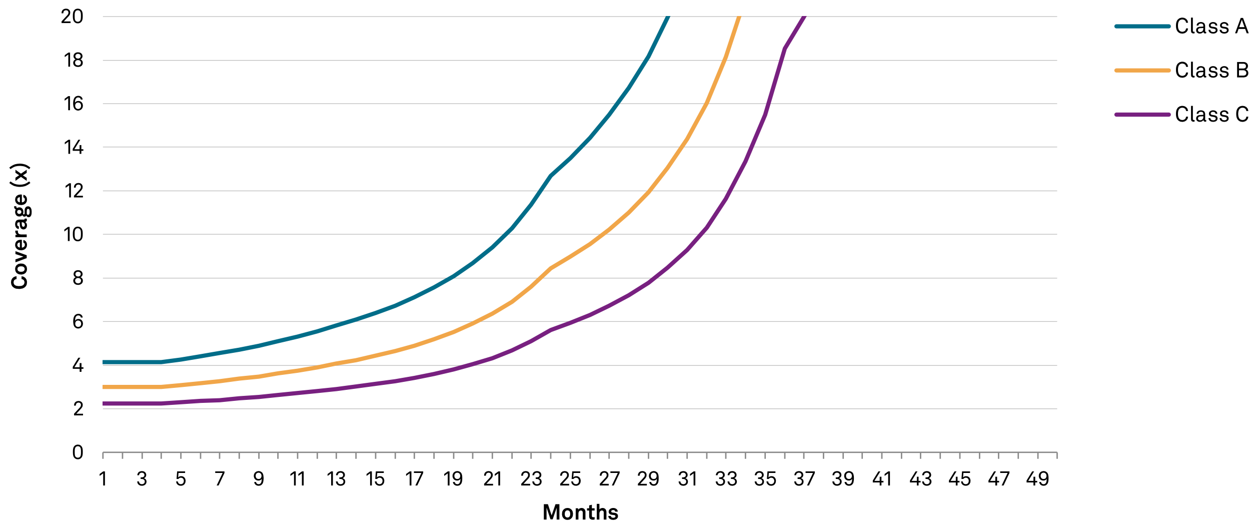
Maximum projected deterioration associated with rating levels for one- and three-year horizons under moderate stress conditions

Horizon	AAA	AA	A	BBB	BB	B
One year	AA	A	BB	B	CCC	D
Three years	BBB	BB	B	CCC	D	D

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

Chart 6

Sensitivity chart



Class A--Classes A-1, A-2a/A-2b, A-3, and A-4, collectively.

Money market tranche sizing

The proposed legal final date for the money market tranche (class A-1) is Dec. 15, 2024. To test whether the money market tranche can be repaid by the proposed legal final date, we ran cash flows using assumptions that delay the principal collections during the 13-month time period.

We assumed a voluntary absolute prepayment speed of 0.50% for nonsubvened loans and 0.00% for subvened loans. Based on our current modelling assumptions, approximately 10 months of principal collections would be sufficient to pay off the money market tranche.

Legal final maturity

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

Counterparty And Operational Risks

Bank account provider

On or before the closing date, the FCAOT 2023-C bank accounts will 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).

Servicer

As servicer, Ford Credit has an experienced management team that oversees origination, underwriting, servicing, collections, and general operational practices. Ford Credit is rated BBB-/Stable/A-3 by S&P Global Ratings and commingling risk is addressed by the requirement that all collections are deposited into the series collections account within two business days of collection. Our operational risk assessment of Ford Credit as servicer does not constrain the ratings (see "Global Framework For Assessing Operational Risk In Structured Finance Transactions," published Oct. 9, 2014).

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 approximately $50.6 billion as of Sept. 30, 2023. 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.

Origination, servicing, and collections

Ford Credit's retail automobile loan origination strategy involves the purchase of installment sale contracts entered into between retail customers and Ford Motor Co. franchised dealers for the sale and financing of new or used vehicles, underwritten according to Ford Credit's policy and guidelines. Ford Credit's underwriting and purchasing strategy includes internal scoring models that assess a potential obligor's creditworthiness and ability to pay. These scoring models consider the customer's characteristics, the retail installment sale contract's proposed terms, and a national credit bureau report. Ford Credit frequently reviews the predictability of its scoring models and makes updates in response to changing economic factors, market conditions, and loss/delinquency experiences. Ford Credit's origination scoring models were launched for consumer credit applicants in January 2018 and again in October 2023 for certain FICO score segments, for commercial credit applicants in January 2019, and for commercial line-of-credit applicants in April 2022.

Electronic decision-making models automatically evaluate the submitted applications and approve, reject, or make a conditional offer for a resulting retail installment sale contract. Many of the applications not approved in the electronic decision-making process are evaluated and approved by a credit analyst.

In March 2020 and again in October 2021, Ford Credit revised its purchase quality guidelines and began offering 84-month contracts to an expanded range of applicants who may have lower FICO scores and higher LTV ratios. According to Ford Credit, these contracts are offered to certain customers under stricter eligibility criteria and are assessed to have lower credit risk under Ford Credit's origination scoring models. In July 2022, Ford Credit further expanded its 84-month purchase quality guidelines for personal use vehicles to include applicants with lower proprietary risk scores while maintaining maximum advance limits. Most of the 84-month contracts finance the purchase of new vehicles for personal use.

In May 2022, Ford Credit increased the maximum term for commercial use contracts from 72 to 84 months on an exception basis.

Ford Credit has been servicing the receivables in each of its U.S. public retail securitizations since the program began in 1989. It uses internally developed behavior-scoring models to determine the default probability for each receivable and to reduce credit losses by focusing the collections effort on the higher-risk accounts. These behavior scoring models consider each account's origination characteristics, the customer's payment history, and periodically updated FICO scores, if applicable. To maintain an optimal collection strategy, Ford Credit updates its behavioral scoring models on a regular cycle plan and tests new servicing practices.

Related Criteria

- Criteria | Structured Finance | ABS: Global Auto ABS Methodology And Assumptions, March 31, 2022
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- Criteria | Structured Finance | General: Global Framework For Payment Structure And Cash Flow Analysis Of Structured Finance Securities, Dec. 22, 2020
- Criteria | Structured Finance | General: Methodology To Derive Stressed Interest Rates In Structured Finance, Oct. 18, 2019
- Criteria | Structured Finance | ABS: Global Equipment ABS Methodology And Assumptions, May 31, 2019
- Criteria | Structured Finance | Legal: U.S. Structured Finance Asset Isolation And Special-Purpose Entity Criteria, May 15, 2019
- Criteria | Structured Finance | General: Counterparty Risk Framework: Methodology And Assumptions, March 8, 2019
- Criteria | Structured Finance | General: Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions, Jan. 30, 2019
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria | Structured Finance | General: Global Framework For Assessing Operational Risk In Structured Finance Transactions, Oct. 9, 2014
- General Criteria: Global Investment Criteria For Temporary Investments In Transaction Accounts, May 31, 2012
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- Criteria | Structured Finance | General: Methodology For Servicer Risk Assessment, May 28,

2009

Related Research

- Research Update: Ford Motor Co. And Subsidiary Upgraded To 'BBB-' On Improving Margins And Financial Flexibility; Outlook Stable, Oct. 30, 2023
- U.S. Auto Loan ABS Tracker: August 2023 Performance, Oct. 12, 2023
- One Rating Raised, Five Affirmed On Ford Credit Auto Owner Trust 2022-C, Oct. 10, 2023
- Credit Conditions North America Q4 2023: Shift To Low Gear, Sept. 26, 2023
- Economic Outlook U.S. Q4 2023: Slowdown Delayed, Not Averted, Sept. 25, 2023
- Ratings Raised On Four Classes And Affirmed On 19 Classes From Six Ford Credit Auto Owner Trust Transactions, March 10, 2023