S&P Global
Ratings

Research

New Issue: TitriSocram 2024

Primary Credit Analyst:
Florent Stiel, Paris + 33 14 420 6690; florent.stiel@spglobal.com

Secondary Contact:
Leslie Selamme, Paris +33 1 40 75 25 07; leslie.selamme@spglobal.com

Table Of Contents

Table Of Contents (cont.)

New Issue: TitriSocram 2024

Ratings Detail

Ratings

Class*	Rating	Amount (mil. €)	Available credit support (%)§	Interest	Legal final maturity
A	AAA (sf)	440	9.6	One-month EURIBOR plus 0.58%, with a minimum interest rate of 0%	March 2039
B	NR	46.8	N/A	0.00%	March 2039

*Our rating addresses timely interest and ultimate principal payments on all rated notes. §Indicates available credit enhancement through class subordination. EURIBOR--Euro interbank offered rate. NR--Not rated. N/A--Not applicable.

Transaction Summary

- S&P Global Ratings Services has assigned its 'AAA (sf)' credit rating to TitriSocram 2024's class A notes. At closing, TitriSocram 2024 also issued unrated class B notes. The issuer is a newly set up "fonds commun de titrisation" (FCT).
- This is the tenth transaction backed by receivables originated and serviced by Socram Banque (BBB/Stable/A-2). The transaction securitizes a portfolio of vehicle loan receivables (cars, motorbikes, and recreational vehicles) originated from 2019 to private individuals domiciled in France and in French overseas departments.
- Socram Banque specializes in granting vehicle loans to the member clients of its seven French mutual insurer shareholders.
- The transaction includes a one-year revolving period, during which we expect the issuer to purchase additional receivables from Socram Banque on an ongoing basis.
- Floating to fixed rate swaps are in place to mitigate interest rate risk on the class A notes.
- Our rating is not constrained by our counterparty, operational risk, or structured finance sovereign risk criteria.
- As an FCT, we consider the issuer to be bankruptcy remote by law.

The credit story

Strengths	Concerns and mitigating factors
Socram Banque is a leading French auto loans provider since 1968, with tried and tested underwriting and servicing procedures, in our view. Furthermore, it benefits from the support of the France-based bank BPCE S.A. Socram Banque's clients are existing clients of a variety of French mutual insurers--one third of the borrowers have more than 10 years of history with the insurers. Socram Banque is a repeat issuer (10th securitization) with significant experience of securitization.	The transaction includes a one-year revolving period, during which the portfolio characteristics could change. The transaction documents include criteria during the revolving period to ensure that the proportion of new vehicles is at least 18%, and that the assets' weighted-average interest rate does not fall below 4.2%. Relevant performance triggers ending this replenishment period are also in place.
The loan portfolio comprises only plain "vanilla" loan products for the French market: fixed-rate, and amortizing with monthly equal installments (no balloon loans). Socram Banque's consumer credit portfolio has shown low levels of defaults, in our view. We believe this reflects the mutuals' good knowledge and longstanding relationships with their customers.	During the revolving period, the portfolio weighted-average coupon (WAC) will be actively maintained at a minimum of 4.2% under the transaction documents. When the revolving period ends, the portfolio WAC could converge toward the minimum loan interest rate of 3.2% enforced by the eligibility criteria, which would adversely affect excess spread. We have taken this risk into account in our cash flow model.

The credit story (cont.)	
Strengths	**Concerns and mitigating factors**
The pool eligibility criteria exclude assets that are delinquent, in litigation, or subject to a freeze on payments under France's consumer debt laws ("Loi Neiertz" and "Loi Borloo").	Adverse selection, with higher-yielding loans prepaying faster than the rest of the pool, could occur and reduce the asset pool yield. To account for this eventuality, we have assumed in our cash flow analysis that any prepayments apply in priority to the higher-yielding loans.
	There is no contracted backup servicer. However, under the transaction documents, a backup servicer would be appointed by the management company within 30 days if a servicer termination event occurs. In our cash flow model, we have modeled appropriate stresses for a potential servicer replacement, including a stressed servicer fee which is mitigated by the servicer fee reserve.

Environmental, Social, And Governance

Our rating analysis considers a transaction's potential exposure to environmental, social, and governance (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," March 31, 2021). In our view, the exposure to ESG credit factors in this transaction is in line with our sector benchmark.

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

This transaction has relatively higher exposure to governance credit factors than our sector benchmark due to the inclusion of a revolving period, as revolving collateral pools may be subject to deterioration in underwriting or adverse selection. We have considered this risk to be mitigated given the strict eligibility criteria and the concentration limits applicable during the revolving period which were used to derive our worst-case pool composition assumption.

Collateral Key Features

We have reviewed a final pool with a cut-off date of March 31, 2024. The main characteristics of this pool are summarized in table 1.

All loans in the pool are fixed-rate, amortizing, with monthly equal installments, and granted to private individual borrowers domiciled in France and French overseas territories ("Départements d'Outre-Mer", which amounted to 4.4% of the portfolio outstanding balance as of March 31, 2024).

Table 1

Collateral key features*		
Pool characteristics	**Titrisocram 2024**	**Titrisocram 2017**
Originator	Socram Banque	Socram Banque

Table 1

Collateral key features* (cont.)

Pool characteristics	Titrisocram 2024	Titrisocram 2017
Country	France	France
Portfolio type	Revolving: 12 months	Revolving: 12 months
Pool cut-off date	March 2024	September 2017
Principal outstanding of the pool (mil. €)	486.8	486.5
Average outstanding loan principal balance (€)	9,262	8,952
Weighted-average seasoning (months)	17.9	10
Weighted-average remaining term (months)	48.8	47.8
Current weighted-average yield (%)	4.37	3.2
Distribution by vehicle type (%)		
Cars	88.8	92.9
Motorcycles	3.7	2.8
Recreational vehicles	7.5	4.2
Distribution By New/Used Vehicles (%)		
Used	76.1	63
New	23.9	37
Loan type (%)		
Amortizing (%)	100	100
Top borrower exposure (%)		
Largest borrower	0.02	0.02
Top 20 borrowers	0.28	0.24

*Calculations are according to S&P Global Ratings' methodology and based on the outstanding principal balance. Based on the pool.

All of the loans were originated in 2019 or later.

Main eligibility criteria

On each purchase date, each auto loan must comply with the following criteria (among others):

- The loans must have been granted to private individuals, acting for non-business purposes, who are not employees of the seller and domiciled in France and French overseas departments.
- Any co-borrowers shall be jointly responsible for repayment of the loan.
- Each loan bears a fixed interest rate of at least 3.2%.
- Each loan has a remaining maturity of at least one month, but not exceeding 84 months for non-recreational vehicles and 120 for recreational vehicles, at the time of purchase.
- The loans must have been fully disbursed.
- Each receivable must be free and clear of any encumbrance.
- None of the loans at the time of inclusion in the securitized portfolio can be in arrears, expired, or subject to a freeze on creditors under France's consumer debt laws ("Loi Neiertz" and "Loi Borloo").
- No borrower can bring any setoff claim against the seller without a relevant contractual provision under a deposit account agreement.

- Each receivable must be paid by direct debit.
- Each receivable must have already given rise to the payment of at least one installment.

Any breach of these representations and warranties would be remedied by the seller, either by indemnification or substitution.

Revolving period

The transaction includes a one-year revolving period, during which the portfolio characteristics could change.

The revolving period ends if:

- The revolving period's scheduled end date occurs (April 26, 2025);
- The FCT is underinvested (with a cash bucket superior to 15%);
- There is a reserve shortfall;
- The cumulative amount of defaults reaches 1.2% of the outstanding loan balance;
- The 90-day delinquency rate reaches 1.5% of the outstanding loan balance; or
- The outstanding balance of the performing receivables (and the available principal cash) is less than the notes' outstanding amount.

During the revolving period, additional portfolio criteria are also enforced:

- The pool's weighted-average interest rate during the replenishment period must be maintained above 4.2%;
- The proportion of new cars in the pool must be maintained above 18%;
- The proportion of recreational vehicles in the pool must be maintained below 10%;
- The proportion of motorcycle vehicles in the pool must be maintained below 5%; and
- The aggregate outstanding principal balance of the purchased receivables owned by any borrower is less than €100,000.

Originator

Socram Banque is a credit institution specialized in granting vehicle loans to the customers of its seven domestic mutual insurer shareholders. All mutuals control a significant part of the French car insurance market. The mutual insurers primarily use Socram Banque's products as customer loyalty tools, offering competitive client rates. The ownership structure results in a very conservative business strategy. This is confirmed by the stability of the bank's revenue base (mostly interest income) and earnings' strong predictability.

Socram Banque has expanded its business lines toward classic retail-banking activities. A range of products, comprising cash accounts and saving accounts services, has been developed since 2008, when a banking partnership between Socram Banque, its main mutual stakeholders, and BPCE was initiated. Socram Banque's consumer credit portfolio has shown low levels of defaults, in our view. We believe this reflects the mutuals' good knowledge and longstanding relationships with their customers.

We recently conducted a review of Socram Banque's origination and underwriting processes, as well as its collection and default management procedures. This review is an integral part of the corporate overview we undertake during the rating process. We are satisfied that Socram Banque can perform its functions for the collection of receivables and management of arrears.

Credit Analysis

Data quality

We have reviewed monthly data for cohorts originated from January 2013 to December 2023. In line with the securitized pool, the scope of the performance data is limited to private individuals financing cars, motorbikes, and recreational vehicles.

The data have been provided for defaults and recovery rates, with a split differentiating between new and used vehicles.

Definition of defaults

The transaction's definition of default is consistent with the one used by the servicer, as follows:

- The servicing of the loan has been transferred to the servicer's legal department; and/or
- The loan has more than six unpaid installments; and/or
- The loan is classified as contentious by the servicer (restructured loans and consumer protection restructuring).

The data presented as defaulted also includes:

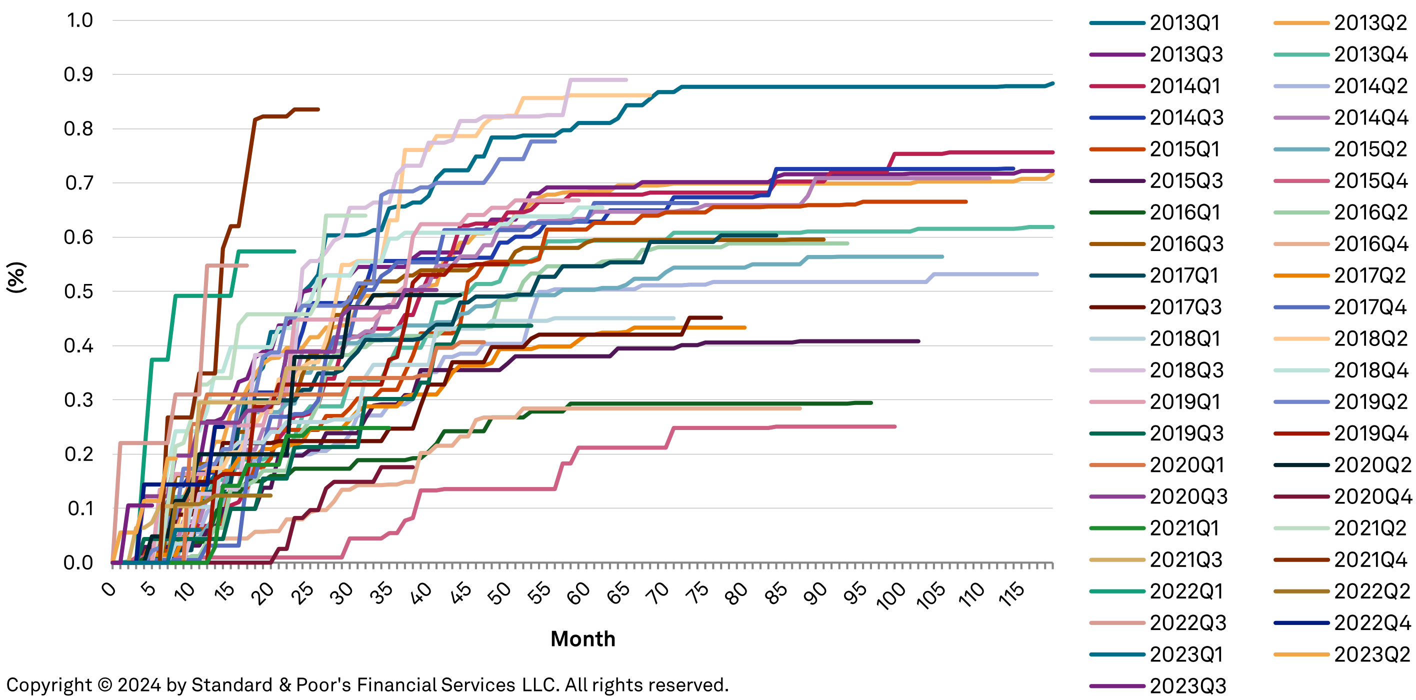
- Loans accelerated (déchus du terme) pursuant to Socram Banque's collection policy, and
- Loans that have been restructured following an overindebtedness procedure.

Cumulative default rates

We assumed a 1.2% cumulative default base case for new vehicles.

Chart 1

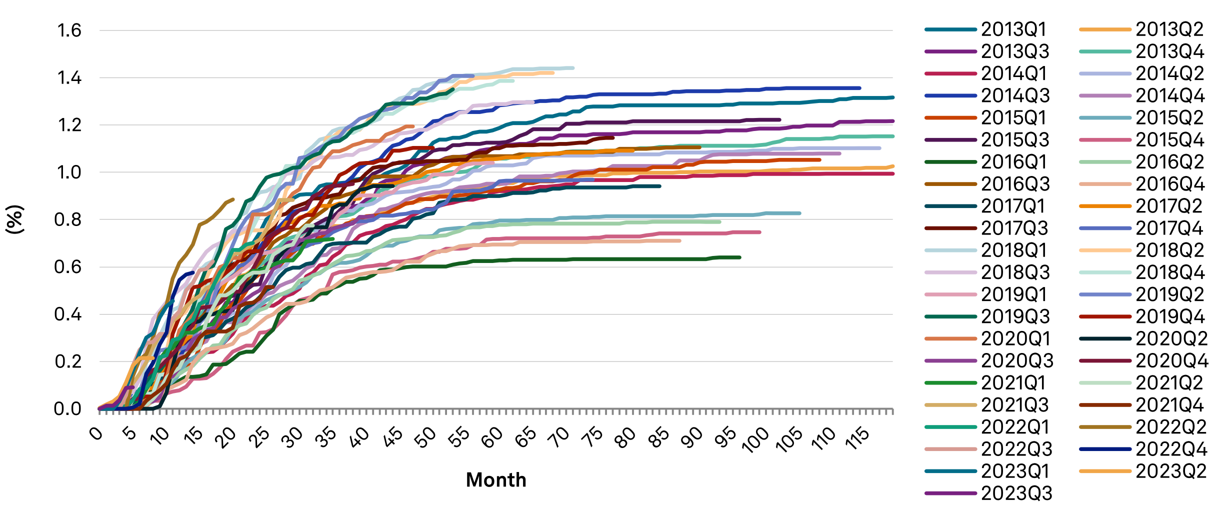
Cumulative monthly gross losses--new vehicles



For used vehicles, we assumed a base case of 1.6%.

Chart 2

Cumulative monthly gross losses--used vehicles



The default levels for both subpools are on the lower end of what we typically observe in the European market. The biggest differentiating factor is that the originator offers loans to the existing clients of mutual insurances companies (on average borrowers are clients from these mutual insurances for 20.5 years, and one third of the borrowers for more than 10 years).

Recovery rates

We assumed a recovery rate of 35% after 36 months. We assumed a recovery rate haircut of 40% at 'AAA', 30% at 'AA', and 25% at 'A'.

Table 2

Credit assumptions summary

Vehicle type	% of worst case pool	Cumulative defaults base case (%)	'AAA' multiple	'AAA' cumulative defaults assumption (%)	Stressed recovery rate (%)	Stressed cumulative net losses (%)
Used	82	1.6	4.5	7.2	21	5.70
New	18	1.2	4.5	5.4	21	4.30
Whole portfolio	100	1.53	4.5	6.89	21	5.40

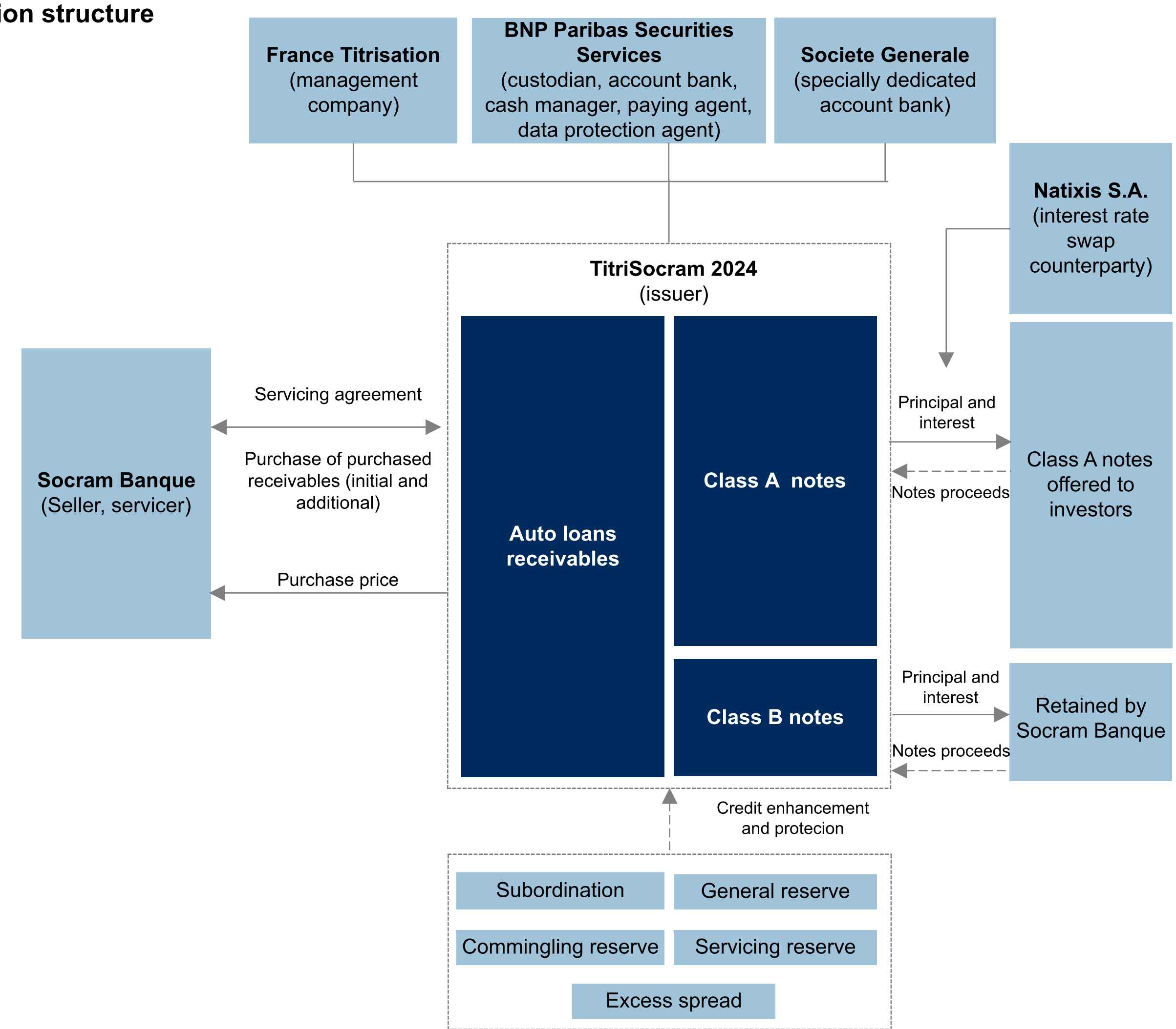
Transaction Structure

TitriSocram 2024 is a French FCT, which is considered bankruptcy remote by law under the French securitization framework.

TitriSocram 2024 is Socram Banque's tenth securitization since 2001. It has issued senior class A notes, subordinated class B notes, and residual units. The issuer has used the proceeds to purchase the initial portfolio of vehicle loans originated by Socram Banque. We expect subsequent monthly replenishments to occur during the one-year revolving period after closing.

Chart 3

Transaction structure



Cash Flow Mechanics

The class A notes are denominated in euros and pay interest at a floating rate plus a margin. If the interest rate is less than zero, it will be deemed to be zero. The legal final maturity date is in March 2039. The transaction will have a revolving period of 12 months and will use a combined waterfall for interest and principal collections.

A combination of excess spread and subordination provides credit enhancement.

Table 3

Payment priority during the normal redemption period	
1	Senior fees;
2	Net swap amount (deferrable and excluding termination costs if the FCT is not the defaulting party);

Table 3

Payment priority during the normal redemption period (cont.)	
3	Interest on the class A notes;
4	Top-up of the general reserve to the general reserve required amount;
5	Purchase price of any additional receivables (revolving period only, purchased at par);
6	Principal due on the class A notes (normal redemption period only);
7	Swap termination costs;
8	Class B notes' interest;
9	Principal due on the class B notes (normal redemption period only); and
10	Any leftover to the residual units.

Principal amounts can be diverted to pay senior items of the waterfall, thus providing liquidity to ensure timely interest payments on the most senior notes.

To hedge the interest rate mismatch between the pool paying a fixed rate and the class A notes paying a floating rate plus a margin, the issuer has entered into a balance-guaranteed interest rate swap with a swap counterparty.

The issuer will pay a fixed rate and, in turn, will receive one-month EURIBOR plus the class A notes' margin from a swap counterparty. The counterparty will make a payment based on the outstanding principal balance of the performing receivables swap notional amount.

The notional for this swap will be equal to the class A notes' outstanding balance backed by the performing collateral swap notional amount. We have implemented these swap features in our cash flow model.

The principal due on the class A notes is equal to the principal amount received on the pool plus any defaulted loans over the preceding month.

General Reserve

The structure benefits from a fully funded reserve fund representing 1.1% of the notes' initial principal amount.

During the normal redemption period, the general reserve fund will amortize to a floor level of 1.1% of the notes' outstanding principal amount.

While the class A notes are still outstanding, a part of the reserve fund amounting to 1.1% of the notes' outstanding amount will be dedicated to providing support to the most senior items in the waterfall, including interest on the class A notes. The excess of the reserve can be used to pay items (5) to (8) of the combined waterfall (see table 2).

This reserve aims to preserve a source of liquidity in the transaction at any time and is calibrated to permit the payment of senior expenses, the net swap amount, and the class A notes' interest for at least six consecutive months in case of severe cash flow disruption resulting, for instance, from servicer default.

Once the class A notes have been fully redeemed, and in any case at legal final maturity, this constraint is released.

Servicing fee reserve

Socram Banque will fund a servicing fee reserve in case the long-term issuer credit rating (ICR) on Socram Banque falls below 'BBB'. It will represent 0.8% of performing loans multiplied by the weighted average life of the portfolio (WAL) with a floor at €200,000.

Considering we assumed 1% of the outstanding balance to mitigate the risk of finding a new servicer should the existing servicer in the transaction become insolvent, we have modelled in our cash flow analysis, 0.2% for the performing loans fees (the difference between 1% and the amount covered by the reserve, 0.8%). As the reserve covers 0.8% of the performing loans balance, we have also modelled in our cash flow analysis 1% of the non-performing loans.

Commingling risk

On each instalment due date (the 1st, 5th, 10th, 15th, 20th, and 25th of each month), scheduled payments due on the loans are advanced by Socram Banque and then transferred into a specially dedicated account. This account will be opened at Société Générale in the servicer's name for the exclusive benefit of the issuer. French law provides that amounts credited on this account will not be available to creditors of the servicer, even upon servicer insolvency. The amounts effectively paid by each borrower on each instalment due date are collected from borrowers by direct debit into the specially dedicated account.

On the same day, the issuer's general account is credited with the credit balance of the specially dedicated account. Based on the commingling set up and more specifically the presence of the specially dedicated account, we don't assume commingling loss risk to arise on direct debit payments.

Setoff risk

Socram Banque has expanded its business lines toward classic retail-banking activities. A range of products, comprising cash accounts and saving accounts services, has been developed since 2008.

As a result, potential setoff risk may arise between amounts on the bank deposit and outstanding loans in the pool owed by the same borrower. Furthermore, at each purchase date, a seller's representation will ensure that no borrower has a deposit account with the seller. However, to cover potential setoff risk that could arise in the future, a non-setoff clause has been introduced in the deposit account contracts, explicitly waiving any setoff rights from the borrowers. We have received legal comfort assessing the relevancy of such a clause.

The risk is mitigated by the borrower eligibility criteria, which prevent any potential setoff risk: borrowers are not allowed a contractual right of setoff. Socram Banque also represent that it will not enter with any borrower any deposit/cash account without a contractual provision under such deposit agreement or cash accounts agreement, preventing any setoff risk in the future.

Cash Flow Assumptions

Table 4

Cash flow assumptions	
Cumulative base-case gross loss (%)	6.89

Table 4

Cash flow assumptions (cont.)	
Gross loss multiple	4.5 at 'AAA' / 3.5 at 'AA'/ 2.5 at 'A'
Recession start	End of the revolving period
Length of recession	WAL (26 months)
Cumulative gross loss curve	Evenly distributed and back-loaded over weighted-average life
Delinquency	Two-thirds of credit losses recovered six months later
Recoveries (%)	35
Recovery haircut (%)	40
Recovery lag (months)	One-third of recoveries every 12 months for 36 months
Servicing fees	0.2% of fees for the performing loans and 1% for the non performing loans
Fixed fees (€)	230,000 per year
CPR high (%)	24
CPR low (%)	0.5
Interest up	From current to 12.82%
Interest down	From current to 1.40%
Interest flat	At current level
Initial WAC (%)	4.2
Relative WAC compression (%)	1.60
Commingling stress	N/A
Setoff stress (%)	N/A

WAL--Weighted-average life. CPR--Conditional prepayment rate. WAC--Weighted-average coupon. N/A--Not applicable.

Our cash flow model incorporates the transaction's payment structure, including the notes' sequential amortization feature and the liquidity reserve's amortizing nature.

Our analysis indicates that the available credit enhancement is sufficient to withstand the credit and cash flow stresses that we apply at the 'AAA' rating level for the class A notes.

Forward-Looking View

We consider the transaction's resilience to additional stresses to some key variables, in particular defaults and recoveries, to determine our forward-looking view.

In our view, borrowers' ability to repay their auto loans will be highly correlated to macroeconomic conditions, particularly the unemployment rate and, to a lesser extent, consumer price inflation and higher interest rates. Given the loans are fixed-rate, we believe rising interest rates will have a lower effect on these borrowers in the near term, while longer term, they will likely further stretch household finances. Our unemployment rate forecasts for France are 7.5% in both 2024 and 2025. Our forecast for inflation in France is 2.7% in 2024 and 1.9% in 2025.

Furthermore, a decline in second-hand car values typically lowers realized recoveries. Although used car prices may decline moderately in France in 2024, we do not expect them to fall significantly.

Given our current macroeconomic forecast and forward-looking view of France's auto market, our sensitivity scenarios consider, all else being equal, the hypothetical effect on our credit rating of:

- An increased gross default base case of up to 30%; and
- A maximum haircut of 30% to the recovery rate base case.

We therefore ran eight scenarios with increased gross defaults and/or reduced expected recoveries, as shown in the table below.

Chart 4

Sensitivity analysis

Class	Base case	1	2	3	4	5	6	7	8
Default rate base-case increase (%)	-	10	30	-	-	10	30	10	30
Recovery rate base-case decrease (%)	-	-	-	10	30	10	10	30	30
Gross default rate (%)	1.53	1.68	1.99	1.53	1.53	1.68	1.99	1.68	1.99
Recovery rate (%)	35	35	35	31.5	24.5	31.5	31.5	24.5	24.5

Class of notes	Initial rating	1	2	3	4	5	6	7	8
AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA

No change
One-notch downgrade
Two-notch downgrade
Three-notch or more downgrade

Source: S&P Global Ratings.

The results of the above sensitivity analysis indicate a deterioration of no more than four notches on the notes, which is in line with the credit stability considerations in our rating definitions. Transaction features such as initial subordination from the class B notes and a liquidity reserve enhance the stability of the rating under each scenario.

Counterparty Risk

The transaction is exposed to counterparty risk through BNP Paribas as the issuer bank account, Société Générale as the specially dedicated account bank, and Natixis as the swap counterparty and servicer. Socram Banque will fund the servicing fees reserve deposit if our ICR on it falls below 'BBB'.

Supporting ratings					
Institution/role	**Current counterparty ratings**	**Replacement**	**Remedy period (calendar days)**	**Collateral posting trigger**	**Maximum supported rating**
BNP Paribas as issuer bank account provider	ICR: A+/Stable/A-1	'A/A-1' or 'A+'	60	N/A	AAA
Société Générale as specially dedicated account bank	ICR: A/Stable /A-1	'A/A-1' or 'A+'	60	N/A	AAA
Socram Banque as servicer	ICR: BBB	'BBB'	30	N/A	AAA
Natixis as swap counterparty	RCR: A+/--/A-1	A+*	90	A+*	AAA

*There is dynamic downgrade language in place in the swap documentation, which depends on the then outstanding rating on the notes. According to our counterparty criteria, if both replacement and collateral are applicable remedies, the collateral posting trigger should be no lower than the replacement trigger. N/A--Not applicable. RCR--Resolution counterparty rating. ICR--Issuer credit rating.

We believe the transaction's replacement mechanisms adequately mitigate counterparty risk at the assigned ratings in line with our current counterparty criteria.

Sovereign Risk

Under our structured finance sovereign risk criteria, the maximum differential between the rating on the security and the rating on the sovereign depends on the asset sensitivity to country risk and the sovereign rating. We view the asset sensitivity to the country risk as low, and our long-term unsolicited sovereign rating on France is 'AA'. Consequently, our sovereign risk criteria do not cap our rating on the notes.

Legal Risk

The issuer is an FCT, which is bankruptcy remote by law. We have reviewed legal opinions confirming that the sale of the assets would survive the seller's insolvency.

Monitoring And Surveillance

As part of ongoing surveillance of this transaction, we will regularly assess:

- The performance of the underlying portfolio, including defaults, delinquencies, and prepayments;
- The supporting ratings in the transaction; and
- The servicer's operations and its ability to maintain minimum servicing standards.

Appendix

Transaction participants	
Arranger	Société Générale
Management company	France Titrisation
Joint lead managers	BNP Paribas, Natixis S.A, and Société Générale

Transaction participants (cont.)	
Interest rate swap counterparty	Natixis S.A.
Seller and originator	Socram Banque
Paying agent, bank account provider, issuing agent, issuer registrar, listing agent and data protection agent	BNP Paribas
Specially dedicated bank account provider	Société Générale
Custodian	BNP Paribas

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 | 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
- Legal Criteria: Structured Finance: Asset Isolation And Special-Purpose Entity Methodology, March 29, 2017
- Criteria | Structured Finance | General: Global Framework For Assessing Operational Risk In Structured Finance Transactions, Oct. 9, 2014
- Criteria | Structured Finance | General: Global Derivative Agreement Criteria, June 24, 2013
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- Criteria | Structured Finance | General: Methodology For Servicer Risk Assessment, May 28, 2009

Related Research

- France 'AA/A-1+' Ratings Affirmed; Outlook Remains Negative, Dec. 1, 2023
- Economic Outlook Eurozone Q4 2023: Slower Growth, Faster Tightening, Sept. 25, 2023
- European Auto ABS Index Report Q4 2023, Feb. 7, 2024
- S&P Global Ratings Definitions, June 9, 2023
- ESG Industry Report Card: Auto Asset-Backed Securities, March 31, 2021
- How Much Is Enough? Information Quality Standards For The EMEA RMBS And ABS Rating Process, Jan. 8, 2019
- 2017 EMEA ABS Scenario And Sensitivity Analysis, July 6, 2017
- European Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic

Factors, Dec. 16, 2016

- Global Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, Dec. 16, 2016
- Scenario Analysis: Gross Default Rates And Excess Spread Hold The Answer To Future European Auto ABS Performance, May 12, 2009