

CREDIT OPINION

17 November 2023

New Issue



Closing date

15 November 2023

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CAIXABANK PYMES 13, FONDO DE TITULIZACIÓN

New Issue Report

Capital structure

Exhibit 1

Capital structure

Notes	Definitive rating	Amount (€ million)	% of total notes	Legal final maturity	Notes coupon	Subordination (% of total assets)*	Reserve fund (CE only) *	Total credit enhancement**
Class A	Aa3(sf)	2,610.00	87.00%	Apr-47	2.50%	13.00%	5.00%	18.00%
Class B	Caa1(sf)	390.00	13.00%	Apr-47	2.75%	0.00%	5.00%	5.00%
Total		3,000.00	100.00%					

*As a percentage of the initial pool of assets.

**As a percentage of the initial pool of assets. No benefit attributed to excess spread for this calculation.

Source: Moody's Investors Service

Summary

The subject transaction is a static cash securitisation of a EUR 3 billion pool comprising unsecured loans granted by [CaixaBank, S.A.](#) (CaixaBank, LT Bank Deposits A3/ST Bank Deposits P-2, LT Counterparty Risk Assessment A3(cr)/ST Counterparty Risk Assessment P-2(cr)) to small and medium-sized enterprises (SMEs) and self-employed individuals in Spain. The previous ABS SME transaction originated by CaixaBank, closed in 2020, comprised secured and unsecured loans extended to corporates, SMEs and self-employed individuals.

Our quantitative, structural and legal analysis of this transaction supports the ratings assigned to the notes.

In general, we consider Environmental, Social and Governance (ESG) credit risks for this transaction to be low. Environmental credit risk is low based on the granularity and diversification of the portfolio. Social credit risk is low based on the industry diversification within the portfolio assets. Governance credit risk is low largely mitigated by various features of the transaction. For further details, please see "ESG Considerations" below.

Credit strengths

- » **Very granular portfolio and low obligor concentration:** The effective number of obligors is more than 2,000 and the top 10 obligor groups represent only 3.57% of the pool balance. (See "Asset description")
- » **Absence of refinanced and restructured assets:** *Refinanced and restructured loans/credit lines (as defined by the Bank of Spain) have been excluded from the pool. (See "Appendix 2")*
- » **Simple structure:** The transaction structure includes a single waterfall and a relatively simple reserve fund mechanism, among other features. (See "Securitisation structure description - Detailed description of the structure")
- » **Performance of the originator's previous transactions:** The performance of CaixaBank-originated transactions has been better than the Spanish market average. (See "Asset analysis - Primary asset analysis")
- » **Reserve Fund:** the transaction benefits from a cash reserve fully funded at closing, which is equivalent to 5% of the principal outstanding amount of the rated Notes and can be used to cover potential shortfalls on interest or principal payments on the Notes. (See "Securitisation structure description - Detailed description of the structure")

Credit challenges

- » **Interest rate risk:** Of the pool balance, 55.1% consists of floating rate loans and 44.9% consists of fixed rate loans, whereas the notes are fixed rate liabilities. The transaction is exposed to interest-rate risk as there is no hedging mechanism. This feature has been taken into account in our analysis. (See "Securitisation structure analysis - Additional structural analysis")
- » **Region concentrations:** 24.6% of the pool is concentrated in Catalonia. (See "Asset analysis - Primary asset analysis")
- » **High degree of links to the originator:** *Besides acting as the servicer, the originator holds the accounts receiving the pool collections and the account holding the reserve fund (commingling risk). This feature has been taken into account in our analysis (See "Securitisation structure analysis - Additional structural analysis")*

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

Key characteristics

Exhibit 2

Asset characteristics (provisional pool as of 25 September 2023, from which the securitized portfolio will be extracted at closing)

Asset characteristics	
Receivables	Loans extended to small and medium-sized enterprises (SMEs) and self-employed individuals located in Spain
Total amount (EUR)	3,504,188,377
Number of borrowers	37,988
Number of borrower groups	37,713
Number of assets	41,979
Effective number	2,265
WA remaining term (in years)	6.22
WA seasoning (in years)	1.19
WAL of the portfolio (in years)	3.3
Interest basis	44.93% fixed rate loans, 55.07% floating rate loans
WA interest rate (total pool)	4.10%
% collateralised by first-lien mortgage	0.00%
WALTV first-lien mortgage subpool	0.00%
Delinquency status	0.18% of pool balance relates to contracts that are delinquent for more than 30 days. (any loan more than 90 days in arrears will be excluded from the definitive portfolio at closing)
Historical portfolio performance data	
Default rate	Based on extrapolated historical vintage analysis, 3.67% over a time horizon of 3.3 years (90+ definition of defaults)
Coefficient of variation	Based on extrapolated historical vintage analysis, 35.99% over a time horizon of 3.3 years (90+ definition of defaults)
Recovery rate	Based on extrapolated historical vintage analysis, 46.85% over a time horizon of 10 years (90+ definition of defaults)
Transaction parties	
Seller/Originator	CaixaBank, S.A. (Long Term Senior Unsecured Rating: Baa1 /Short Term Deposit Rating: P-2; Long Term Counterparty Risk Assessment: A3(cr) /Short Term Counterparty Risk Assessment: P-2(cr))
Servicer	CaixaBank, S.A. (Long Term Senior Unsecured Rating: Baa1 /Short Term Deposit Rating: P-2; Long Term Counterparty Risk Assessment: A3(cr) /Short Term Counterparty Risk Assessment: P-2(cr))
Back-up servicer @ closing	N/A
Back-up servicer facilitator	CaixaBank Titulización, S.G.F.T., S.A.U. (Not rated) plays this role (as well as other roles) as part of its functions as management company

Source: Moody's Investors Service and CaixaBank, S.A.

Exhibit 3

Securitisation structure characteristics

Structural characteristics	
Excess spread at closing	The transaction has no hedging mechanism. At closing the difference between WA spread on the pool and WA fixed interest on the notes is around 1.5%
Credit enhancement/reserves	Subordination of the notes and excess spread Reserve fund: 5.00% (as percentage of the initial pool of assets)
Form of liquidity	Reserve fund, principal to pay interest and excess spread
Number of interest payments covered by liquidity	As per the amount funded at closing, the reserve fund would cover approximately 1.6 years of quarterly payments of interest and senior fees (considering 0.5% of stressed senior fees)
Interest payments	Quarterly in arrears on each payment date
Principal payments	Pass-through on each payment date
Payment dates	Quarterly, starting from 18 April 2024
Hedging arrangements	None
Transaction parties	
Issuer	Caixabank Pymes 13, FONDO DE TITULIZACION
Computational agent	Caixabank Titulización S.G.F.T., S.A.U.
Back-up calculation/Computational agent	N/A
Swap counterparty	N/A
Issuer account bank	Caixabank S.A.
Collection account bank	Caixabank S.A.
Paying agent	Caixabank S.A.
Corporate service provider	N/A
Representative of the noteholders	Caixabank Titulización S.G.F.T., S.A.U.
Arranger/Lead manager	Caixabank Titulización S.G.F.T., S.A.U./ Caixabank S.A
Cash manager	Caixabank Titulización S.G.F.T., S.A.U.
Back-up cash manager	N/A

Source: Moody's Investors Service and CaixaBank, S.A.

Asset description

As of 25 September 2023, the provisional portfolio was composed of 41,979 contracts amounting to EUR 3.50 billion. The top industry sector in the pool, in terms of Moody's industry classification, is the Beverage, Food & Tobacco sector (27.15%). The top debtor group represents 0.66% of the portfolio and the effective number of obligors is 2,265. The assets were originated mainly between 2020 and 2023 and have a weighted average seasoning of 1.19 years and a weighted average remaining term of 6.22 years. The interest rate is floating for 55.07% of the pool while the remaining part of the pool bears a fixed interest rate. The weighted average interest rate of the pool is 4.10%. Geographically, the pool is concentrated mostly in the regions of Catalonia (24.59%) and Andalusia (13.97%). At closing, assets in arrears between 30 and 90 days will be limited to up to 1% of the pool balance and assets in arrears for more than 90 days will be excluded from the final pool. None of the loans are secured by mortgages over real estate properties.

Pool characteristics

The following exhibit shows some basic characteristics of the pool of assets.

Exhibit 4

Pool details

Pool details	
Type of assets	Loan contracts
Total amount (EUR)	3,504,188,377
Average loan balance (EUR)	83,474.8
Number of assets	41,979
Minimum maturity	Jan-24
Maximum maturity	Sep-43
WA spread (floating-rate subpool)	1.3%
WA interest rate (fixed-rate subpool)	3.1%
Contract amortisation type	100% amortizing contracts
% Bullet loans	0.00%
% Large corporates	0.00%
% Real estate developers*	5.38%
WA internal rating	Ba2

*Real estate developers include NACE codes 41.10, 68.10 and 68.20.

Source: Moody's Investors Service and CaixaBank, S.A.

The following exhibits show portfolio concentration by obligor group size, industry and region.

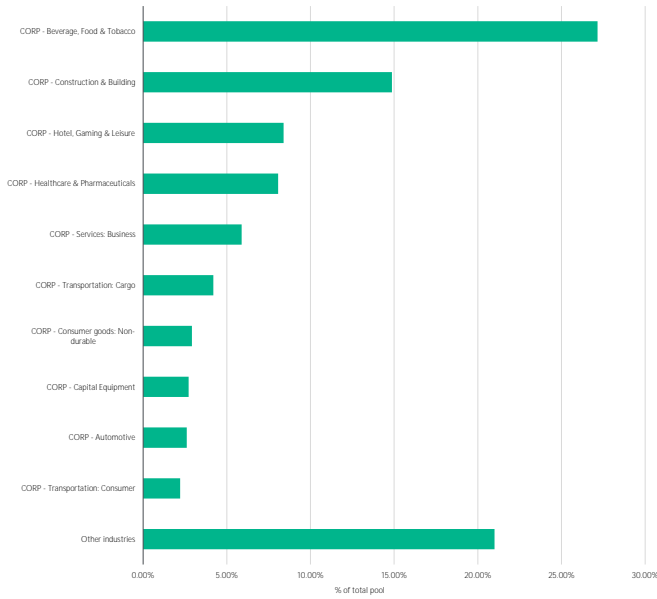
Exhibit 5

Top pool concentration levels

Pool details	
Top debtor group concentration	0.66%
Top 5 debtor groups	2.33%
Top 10 debtor groups	3.57%
Top 20 debtor groups	5.42%
Effective number	2,265
Largest industry (as a % of total portfolio)	Beverage, Food & Tobacco (27.15%)
Largest region (as a % of total portfolio)	Catalonia (24.59%)

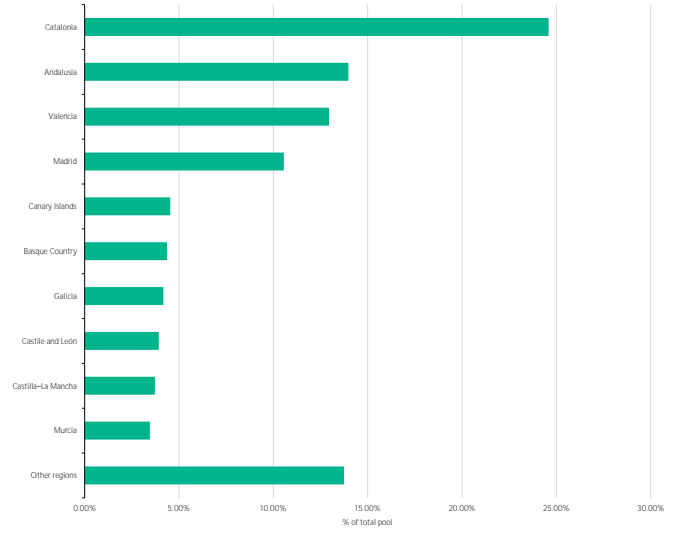
Source: Moody's Investors Service and CaixaBank, S.A.

Exhibit 6
Industry concentrations



Source: Moody's Investors Service and CaixaBank, S.A.

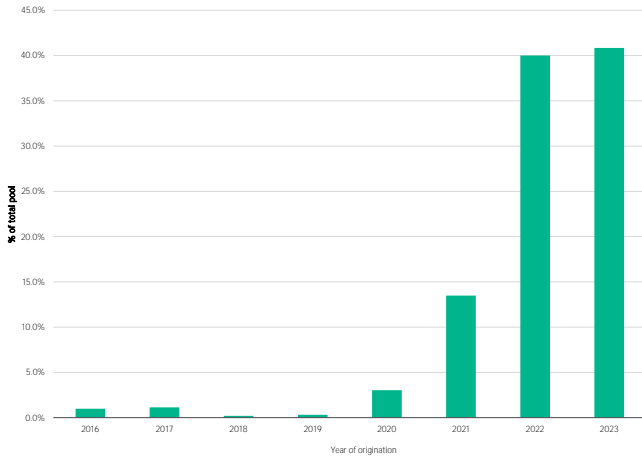
Exhibit 7
Region concentrations



Source: Moody's Investors Service and CaixaBank, S.A.

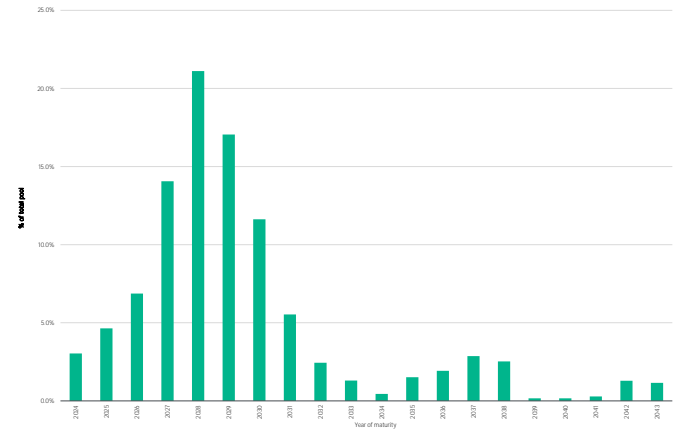
The charts below show the portfolio concentrations by year of origination and maturity date.

Exhibit 8
Year of origination



Source: Moody's Investors Service and CaixaBank, S.A.

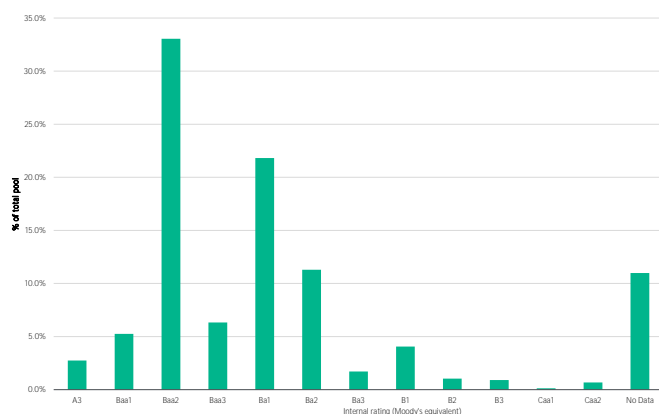
Exhibit 9
Year of maturity



Source: Moody's Investors Service and CaixaBank, S.A.

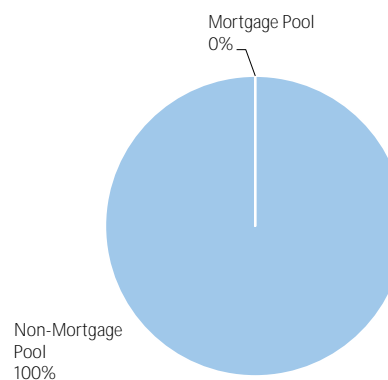
The charts below show portfolio concentration by rating and collateral type.

Exhibit 10

Borrower credit quality by Moody's-equivalent rating*

*Moody's-equivalent ratings are based on internal PDs provided by the originator.
Source: Moody's Investors Service and CaixaBank, S.A.

Exhibit 11

Type of contract and collateral

Source: Moody's Investors Service and CaixaBank, S.A.

Originator and servicer

CaixaBank is the transaction's originator and servicer.

Exhibit 12

Originator background

Originator background		CaixaBank, S.A.
Rating	CaixaBank, S.A. (Long Term Senior Unsecured Rating: Baa1 /Short Term Deposit Rating: P-2; Long Term Counterparty Risk Assessment: A3(cr) /Short Term Counterparty Risk Assessment: P-2(cr))	
Financial institution group outlook for sector	Stable	
Ownership structure	Publicly Listed: 50.1% Free float, 32.2% "la Caixa" Foundation, 17.3% FROB, 0.4% Treasury and Board of Directors	
Asset size	EUR 626 billion (2023 YTD - 30 June 2023)	
% of Total book securitised	4.25%	
Transaction as a % of total book	0.48%	
% of Transaction retained	100.00%	

Source: Moody's Investors Service and CaixaBank, S.A.

Exhibit 13

Servicer background

Servicer background		CaixaBank, S.A.
Rating	CaixaBank, S.A. (Long Term Senior Unsecured Rating: Baa1 /Short Term Deposit Rating: P-2; Long Term Counterparty Risk Assessment: A3(cr) /Short Term Counterparty Risk Assessment: P-2(cr))	
Regulated by	Bank of Spain	
Total number of receivables serviced	Not disclosed	
Number of staff	Not disclosed	

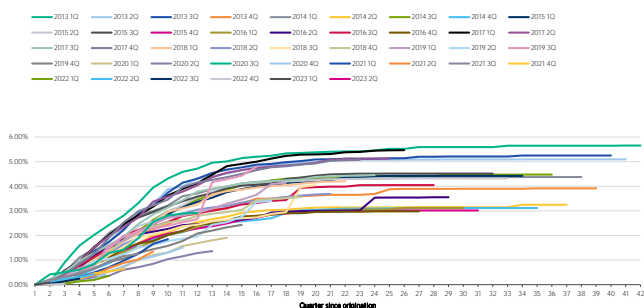
Source: Moody's Investors Service and CaixaBank, S.A.

For more information on the originator and servicer, please refer to "Appendix 1".

The exhibits below show the historical performance data of CaixaBank originations.

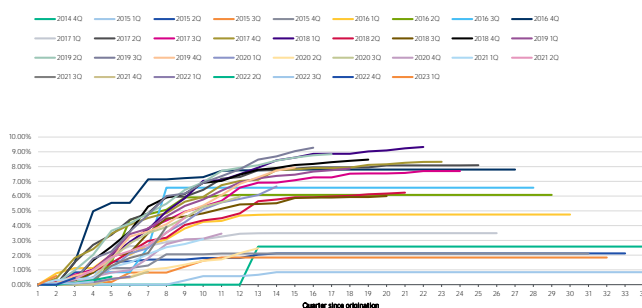
- » We received static default (more than 90 days in arrears) and recovery data on a pool similar to the pool securitised in this transaction, broken down between those loans that are pre-approved or those that are not. Pre-approved loans (which represent around 3% of the portfolio) are granted to individuals and legal entities in the micro and small business segment, based on multiple risk criteria, as a result of a risk analysis previously carried out centrally.
- » The information provided covers the last 10 years.

Exhibit 14
Cumulative default rate (90+) - Excluding pre-approved loans subpool



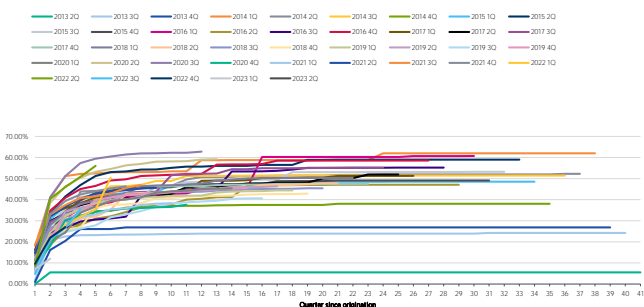
Source: Moody's Investors Service and CaixaBank, S.A.

Exhibit 15
Cumulative default rate (90+) - Only pre-approved loans subpool



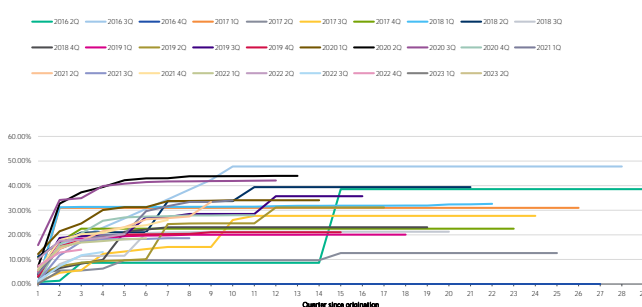
Source: Moody's Investors Service and CaixaBank, S.A.

Exhibit 16
Cumulative recoveries - Excluding pre-approved loans subpool



Source: Moody's Investors Service and CaixaBank, S.A.

Exhibit 17
Cumulative recoveries - Only pre-approved loans subpool



Source: Moody's Investors Service and CaixaBank, S.A.

Eligibility criteria

While the transaction does not establish any eligibility criteria per se, the originator's representations and warranties regarding the assets define which asset the special-purpose vehicle (SPV) can purchase. See "Appendix 2" for a list of the transaction's key eligibility criteria.

Asset acquisition after closing date

Absence of revolving period

The securitisation does not include a revolving period during which the SPV could purchase additional loans. This limits the volatility in portfolio performance caused by additional loan purchases.

Asset analysis

Primary asset analysis

We based our analysis of the transaction assets on factors including historical performance data, originator and servicer quality, and pool characteristics.

Probability of default

We use the originator's historical performance data to determine the mean probability of default of the securitised pool.

Derivation of default rate assumption: We analysed the available historical performance data the originator had provided and the performance of previous transactions originated by CaixaBank. We extrapolated the default vintage data to define the cumulative default curve for each of the origination vintages.

Exhibit 18

Summary of historical default data analysis

	Weighted average total pool
Default rate	3.67%
Coefficient of variation	35.99%
Moody's equivalent	Ba1

Source: Moody's Investors Service

We complemented the historical data analysis with a top-down approach, which we typically apply when rating SME loan transactions, and as described in more detail in our methodology report, [SME Asset-Backed Securitizations methodology, July 2023](#). Starting from a base rating proxy of Ba2 for a SME based in [Spain](#) (Baa1/(P)P-2), we evaluate the portfolio based on several features, including:

1. The size of the companies: We assume a one-notch penalty for micro-SMEs and self-employed individuals (around 47% of the pool balance).
2. The borrowers' sector of activity: For example, we applied a one-notch penalty to assets whose underlying borrower was active in the construction sector (9.48% of the pool balance, excluding real estate developers) and a two-notch penalty for borrowers classified as real estate developers (5.38%). Additional penalties were applied to certain industries due to impact of the current geopolitical situation.
3. The payment holidays: We applied a penalty on the default probability of the assets for that currently enjoy payment holidays (around 13.9% of the pool balance).

We adjusted our assumption to take into account (i) the current economic environment and its potential impact on the portfolio's future performance (0.5 notch penalty), as well as (ii) industry outlooks or historically observed cyclicity of industry sectors by analysing sector-specific delinquency and default rates. We also evaluated and benchmarked the originator's underwriting capabilities against other Spanish originators (0.5 notch benefit).

As a result, we expect an average portfolio credit quality equivalent to a probability of default corresponding to a Ba3 proxy rating for an average life of around 3.3 years for the portfolio. This translates into a gross cumulative default rate of 9%.

Default distribution

Because of the high granularity of the pool, we used a normal inverse default distribution. The two basic parameters needed to be assessed as main inputs to generate the default distribution are:

- » the mean default probability for the portfolio (9% over the average life of around 3.3 years, as explained above), and
- » the standard deviation of the normal inverse distribution.

Standard deviation: To define the standard deviation for the normal inverse default distribution, we ran a Monte Carlo simulation (using Moody's CDOROM™ tool) based on the securitised portfolio's actual loan-by-loan information to capture the pool concentrations in terms of single obligors and industry segments. We used, inter alia, the loan-by-loan default probabilities (that is, outcome of the

analysis carried out in "Primary asset analysis"), the borrower industry sectors, the weighted-average life and a probabilistic correlation framework. Finally, we performed a benchmark analysis against other recent Spanish SME deals and took into account the Aa1 country local-currency country risk ceiling to calibrate the curve.

As a result, we assume a normal inverse default distribution with a coefficient of variation (ratio of standard deviation and mean default rate) of 45%, resulting in a portfolio credit enhancement of 21%, which takes into account sovereign risk as well.

Timing of default: We assumed a flat default timing curve as the base case, spread over the portfolio's weighted average life ("WAL"), rounded to 3.3 years and starting after the default definition.

Severity

We analysed the historical recovery data provided by the originator.

Derivation of recovery rate assumption: Assumptions for recoveries were made on the basis of (1) historical recovery information provided specifically for this deal and data available from previous deals of the originator; (2) statistical information on the Spanish SME market; and (3) loan-by-loan portfolio information. None of the loans are secured by mortgages over real estate properties.

Based on this analysis, we assumed a stochastic mean recovery rate of 35% and a standard deviation of 20%. We assumed the base case recovery timing as follows: 50% in the second year after default and 50% in the third year.

Portfolio credit enhancement (PCE)

To sum up and for comparison purposes, the aforementioned assumptions of 9% on cumulative mean default for the initial portfolio, 45% of coefficient of variation together with 35% of stochastic recoveries correspond to a portfolio credit enhancement of 21%.

Prepayments

Based on the performance of the previous deals originated by CaixaBank and the benchmark analysis against recent similar transactions, we assumed an annual prepayment rate of 5% per annum.

Data quality

The quantity and quality of the originator's historical default data we received is in line with other transactions that have achieved investment-grade ratings in this sector.

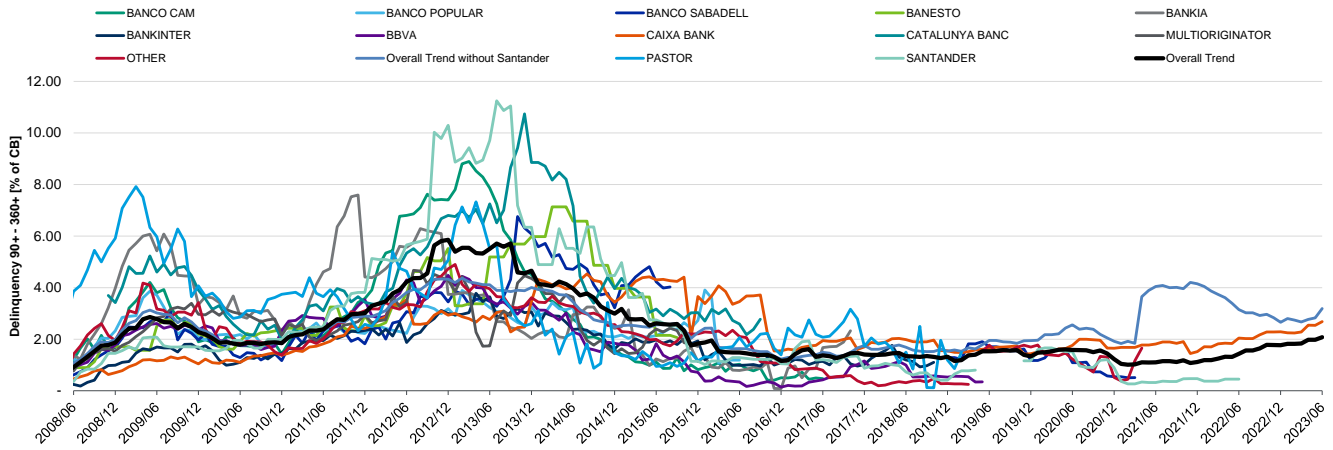
Comparables

Prior transactions of the sponsor

The performance of the originator's previous transactions have been slightly better than that of the remaining Spanish originators in the SME segment (see details in the exhibits below).

Exhibit 19

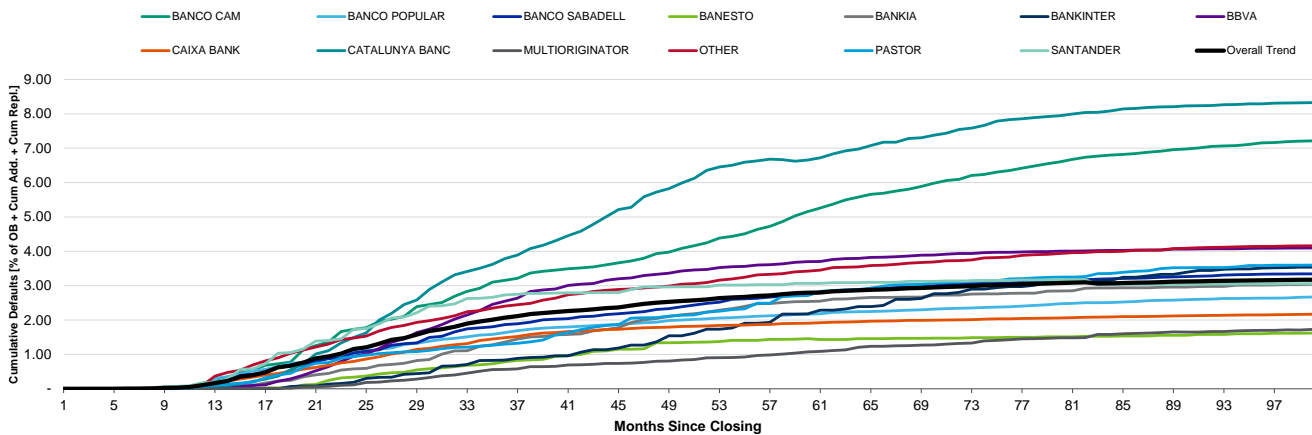
Spanish SME 90-360 days delinquency - trend by originator



Source: Moody's Investors Service, Moody's Performance Data Service and periodic investor/servicer reports

Exhibit 20

Spanish SME 90-360 cumulative defaults- trend by originator



Source: Moody's Investors Service, Moody's Performance Data Service and periodic investor/servicer reports

Previous transactions from the sponsors

Exhibit 21

Benchmark table: Part 1

Deal name	CAIXABANK PYMES 13, FONDO DE TITULIZACION	CAIXABANK PYMES 12, FONDO DE TITULIZACION	CAIXABANK PYMES 11, FONDO DE TITULIZACION	CAIXABANK PYMES 10, FONDO DE TITULIZACION
Country	SPAIN	Spain	Spain	SPAIN
Closing date or rating review date (dd/mm/yyyy)	14-Nov-23	20-Nov-20	27-Nov-19	27-Nov-18
Name of originator / servicer	CaixaBank, S.A.	CaixaBank, S.A.	CaixaBank, S.A.	Caixabank
Long-term rating (SU/ CRA)	Baa1/A3(cr)	Baa1/A3(cr)	Baa1/A3(cr)	Baa1/A3(cr)
Short-term rating (SU/ CRA)	P-2/P-2(cr)	P-2/P-2(cr)	P-2/P-2(cr)	P-2 / P-2 (cr)
Portfolio information (as of ...)	25-Sep-23	20-Oct-20	22-Oct-19	18-Oct-18
Rated notes volume (excluding NR and equity) - EUR	3,000,000,000	2,550,000,000	2,450,000,000	3,325,000,000
No. of contracts	41,979	31,024	36,146	65,807
No. of obligor groups	37,713	28,838	33,066	57,930
Effective number (obligor group level)	2,265	Over 1000	Over 1000	Over 2000
WAL of total pool (in years)	3.30	3.20	3.80	3.82
WA seasoning (in years)	1.19	1.10	1.20	2.60
WA remaining term (in years)	6.22	5.60	6.70	6.70
Obligor information (as a % Total pool)				
Top single obligor (group) concentration %	0.66%	1.19%	0.63%	0.65%
Top 10 obligor (group) concentration %	3.57%	5.52%	5.03%	4.43%
Name Largest industry	Beverage, Food & Tobacco	Beverage, Food & Tobacco	Construction & Building	Construction & Building
Second-largest industry	Construction & Building	Hotel, Gaming & Leisure	Beverage, Food & Tobacco	Beverage, Food & Tobacco
Third-largest industry	Hotel, Gaming & Leisure	Construction & Building	Hotel, Gaming & Leisure	Hotel, Gaming & Leisure
Size % Largest industry	27.15%	24.70%	22.46%	23.23%
Second-largest industry	14.86%	14.25%	19.63%	18.35%
Third-largest industry	8.39%	8.21%	15.99%	13.20%
Name Largest region	Catalonia	Catalonia	Catalonia	Catalonia
Second-largest region	Andalusia	Madrid	Madrid	Madrid
Size % Largest region	24.59%	26.76%	27.10%	30.40%
Second-largest region	13.97%	11.58%	12.10%	15.80%
Debtor size: Micro companies % (incl. self-employed)	46.94%	32.00%	44.40%	51.09%
Medium-sized companies %	53.06%	45.00%	46.60%	48.90%
Corporates %	0.00%	23.00%	9.00%	0.00%
Contract information (as a % Total pool)				
Portion of bullet / balloon contracts %	0.00%	2.27%	3.55%	3.29%
Fixed-rate contracts %	44.93%	49.60%	44.30%	34.40%
WA initial yield (Total pool)	4.10%	1.57%	2.00%	2.30%
Collateral information (as a % Total pool)				
Portfolio share collateralised by first-lien mortgage	0.00%	11.30%	17.90%	16.60%
WA LTV for first-lien mortgage sub pool	N/A	51.40%	49.30%	48.30%

*As of the date of assigning the rating to the transaction.

Source: Moody's Investors Service and CaixaBank, S.A.

Exhibit 22

Benchmark table: Part 2

Deal name	CAIXABANK PYMES 13, FONDO DE TITULIZACION	CAIXABANK PYMES 12, FONDO DE TITULIZACION	CAIXABANK PYMES 11, FONDO DE TITULIZACION	CAIXABANK PYMES 10, FONDO DE TITULIZACION
Key collateral assumption				
Moody's equivalent rating for initial pool	Ba3	Ba3	Ba3	Ba3
Mean gross default rate - initial pool	9.00%	8.70%	9.50%	10.00%
Mean gross default rate - replenished pool	N/A	N/A	N/A	N/A
CoV	45.00%	44.20%	47.60%	43.20%
PCE (initial pool)	21.00%	19.00%	20.00%	20.00%
Type of recoveries modelled? - stochastic or fixed	Stochastic	Stochastic	Stochastic	stochastic
Mean recovery rate	35.00%	38.00%	42.00%	42.00%
Prepayment rate(s)	5.00%	5.00%	5.00%	5.00%
Structural features				
Revolving period (in years)	No	No	No	No
Reserve fund(s) available and how can it be used?	yes - liquidity & CE ongoing	yes - liquidity & CE ongoing	yes - liquidity & CE ongoing	yes - liquidity & CE ongoing
Reserve upfront amount(s)	5.00%	5.00%	4.70%	4.75%
Principal available to pay interest?	Yes	Yes	Yes	Yes
Type of swap	No Swap	No Swap	No Swap	No Swap
Back-up servicer (BUS)	No BUS	No BUS	No BUS	No BUS
Back-up servicer facilitator	Yes	Yes	Yes	Yes
Capital structure (as % Total pool)				
Size of	Aaa rated class			
	Aa1 rated class			
	86.00%			
	Aa2 rated class			
	87.00%			
	84.00%			
	Aa3 rated class			
	87.00%			
	A rated class			
	Baa rated class			
	Ba rated class			
	B rated class			
	14.00% (B2)			
	Caa1 and below rated class			
	13.00% (Caa1)			
	13.00% (Caa1)			
	16.00% (Caa2)			
	NR/Equity class			

*As of the date of assigning the rating to the transaction.

Source: Moody's Investors Service and CaixaBank, S.A.

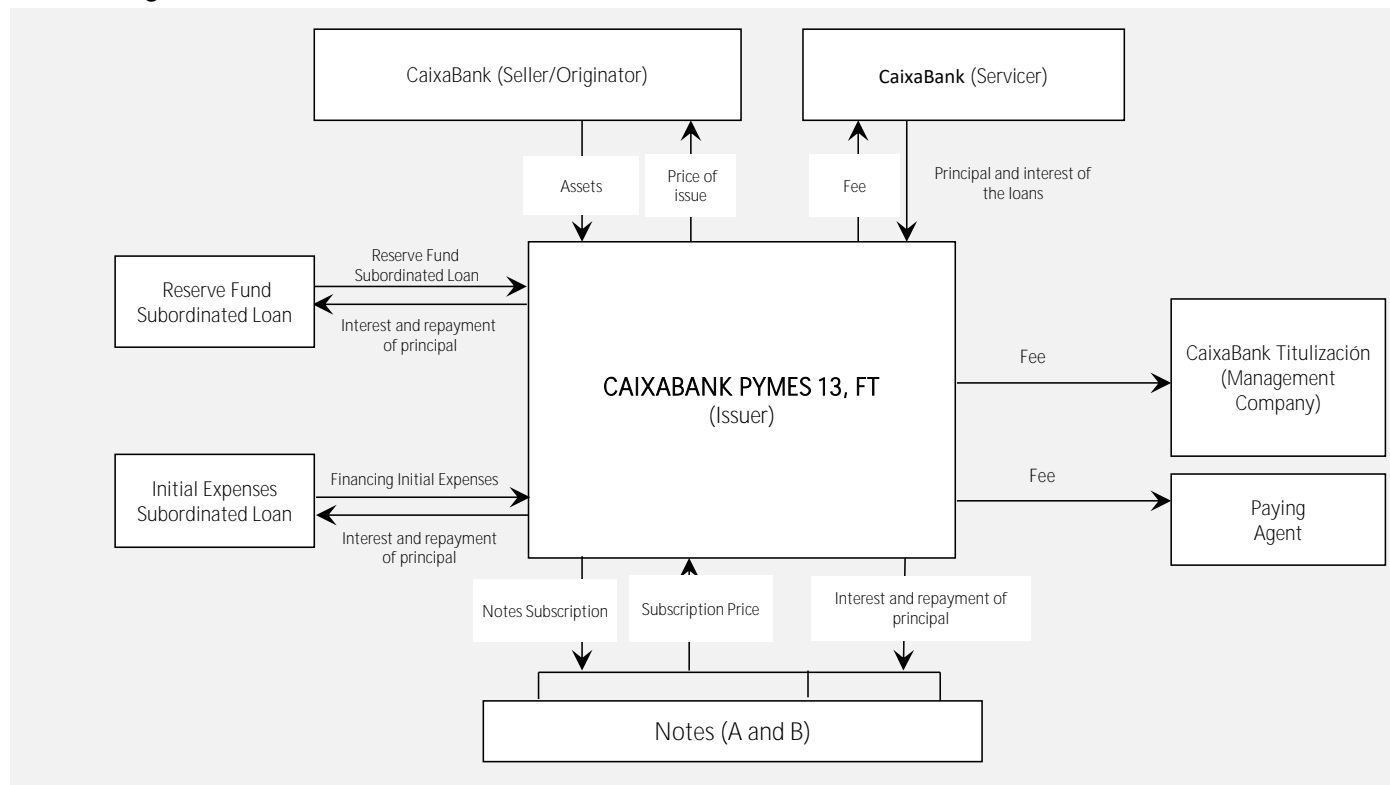
Securitisation structure description

The proceeds of the notes will be used to finance the acquisition of the portfolio, the original amount of which equals EUR 3 billion (as of closing). The interest and principal priorities of payment are combined in a single waterfall. The amortisation period will start on the first interest payment date.

Structural diagram

Exhibit 23

Structural diagram



Source: Moody's Investors Service, based on transaction documents

Detailed description of the structure

Credit enhancement

The main sources of credit enhancement are the subordination (13% in the case of Class A notes, as a percentage of the initial pool of assets), the reserve fund and the excess spread.

Reserve fund: At closing, the transaction will have a reserve fund equivalent to 5% of the principal outstanding amount of Series A and B notes, that is, EUR 150 million. The reserve fund will be used on an ongoing basis to cover potential shortfalls on interest or principal on the Series A notes, for as long as these are outstanding. Only after the Series A notes have been fully redeemed, the reserve fund will be available to cover any interest or principal shortfalls on the Series B notes.

Liquidity

The single waterfall means that principal is also available to make interest payments. The reserve fund is a further source of liquidity; at closing it covers around one and a half years of interest payments on the notes after stressed servicing fees.

Priority of payments

On each quarterly payment date, the issuer's available funds (that is, interest and principal amounts received from the portfolio, the reserve fund and interest earned on the issuer's account) will be applied in the simplified order of priority shown in Appendix 2.

Principal deficiency ledger (PDL) mechanism

A PDL is defined as the negative difference between the principal available funds and a target principal amount. A target principal amount is the difference between the notes' outstanding principal and the performing assets. In this transaction, a nonperforming asset is defined as (1) one in arrears for a period equal to or exceeding 12 months for amounts due; (2) one classified as nonperforming by the

management company because there is reasonable doubt that it will be repaid in full; or (3) one in which the debtor has been declared insolvent.

Triggers

Exhibit 24

Originator, servicer, cash manager and counterparty triggers

Originator, servicer, cash manager and counterparty triggers	
Key servicer termination events	» Insolvency; » Breach of service obligation resulting in being substituted as servicer; or » At the request of the management company (acting in the best interest of the noteholders)
Appointment of back-up servicer upon	N/A
Key cash manager termination events	Insolvency
Notification of obligors of true sale	Following the termination of the appointment of the servicer
Conversion to daily sweep (if original sweep is not daily)	Not applicable (daily sweeping since closing)
Notification of redirection of payments to SPVs account	Following the termination of the appointment of the servicer
Accumulation of set off reserve	N/A
Accumulation of liquidity reserve	N/A
Set up liquidity facility	N/A
Issuer account bank/Paying agent replacement	If CaixaBank's long- term rating falls below Ba2 it will have to find a suitably rated guarantor or substitute

Source: Moody's Investors Service, based on transaction documents

Exhibit 25

Performance triggers

Performance triggers		
Trigger	Conditions	Remedies / cure
Interruption of Reserve Fund Amortisation	» The reserve fund was not funded at its required level » Less than one year have elapsed since closing	The target amount of the reserve fund will not be reduced on any payment date on which these occur

Source: Moody's Investors Service, based on transaction documents

Management company

CaixaBank Titulización, S.G.F.T., S.A.U. is the transaction's management company, which, according to Spanish law and the transaction legal documentation, is responsible for the organisation, management and legal representation of the SPV and is also responsible for the representation and defence of the interests of the noteholders.

The management company's main responsibilities are described in Appendix 3.

Securitisation structure analysis

We modelled the bond structure and cash flow waterfall to assess the amount of credit enhancement supporting the rated securities. We also analysed the allocation of payment, bankruptcy remoteness and other structural issues.

Primary structural analysis

Expected loss

We determine expected losses for each tranche based on a number of assumptions, which are listed in the exhibit below.

Exhibit 26

Expected loss assumptions

Expected loss assumptions	
Default distribution	Inverse Normal
Default rate	9.0% over a WAL of 3.3 years (equivalent to the DP of a Ba3 rating)
Default definition	12 months
CoV (Standard deviation/mean)	44.95%
Portfolio credit enhancement (PCE)	21.00%
Timing of default	flat over portfolio WAL
Recovery mean	35.00%
Recovery Stdev. Sev	20.00%
Recovery lag	50% in the second year and 50% in the third year after default
Correlation defaults/recoveries	10.00%
Conditional prepayment rate (CPR)	5.00%
Amortisation profile	Calculated from the loan-by-loan information
Portfolio yield vector	Calculated from the loan-by-loan information with applied stresses
Fees (as modeled)	0.50%
Euribor/Swap rate	N/A
PDL definition	Defaults

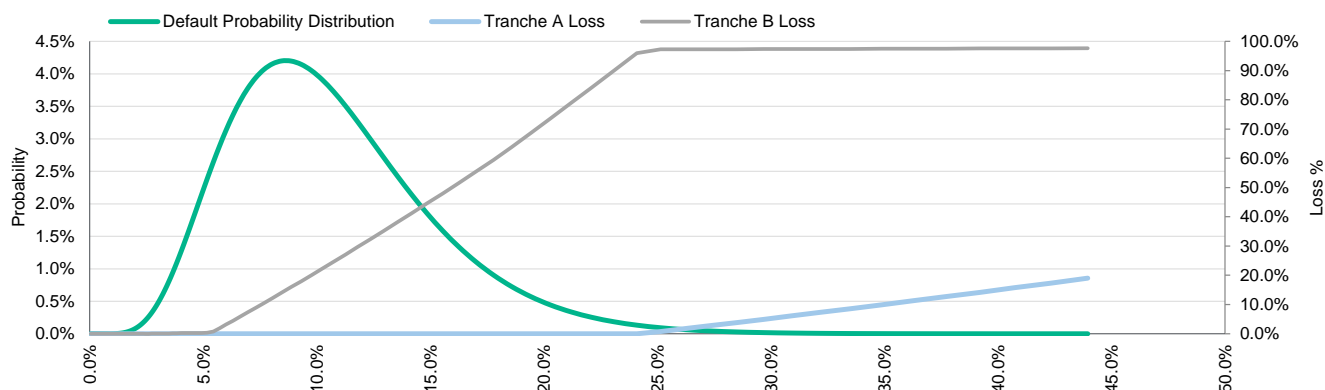
Source: Moody's Investors Service

Tranching of the notes

To derive the level of losses on the notes, we applied the default distribution and the stochastic recovery distribution explained in "Primary asset analysis" to numerous default scenarios on the asset side.

Exhibit 27

Loss probability distribution



Source: Moody's Investors Service

We have considered how the cash flow generated by the collateral are allocated to the parties within the transaction and the extent to which various structural features of the transaction might themselves provide additional protection to investors, or act as a source of risk.

To determine the rating assigned to the notes, we used an expected loss methodology that reflects the probability of default for each series of notes times the severity of the loss expected for the notes. To allocate losses to the notes in accordance with their priority of payment and relative size, we used a cash flow model (ABSROM) that reproduces many deal-specific characteristics such as the main input parameters of the model described above. Weighting each default scenario's severity result on the notes with its probability of occurrence, we calculated the expected loss level for each series of notes as well as the expected average life. We then compared the quantitative values to the Moody's Idealised Expected Loss table to determine the ratings assigned to each series of notes.

Cash commingling risk and account bank risk

Commingling risk generally arises when cash belonging to the SPV is deposited in an account held in the name of a third party, specifically the servicer. The servicer collects all of the payments under the loans in its portfolio under a direct debit scheme into its account and transfers them daily to a treasury account in the name of the SPV.

As a result, in the event of insolvency of the servicer, and until notification is delivered to the relevant debtors to redirect their payments, payments by the underlying debtors will continue to be collected by the servicer and may be commingled with other funds belonging to the servicer.

The issuer account bank trigger is set at the loss of Ba2 (deposit rating); the remedy is to replace the issuer account bank or find a guarantor.

Given the fact that the servicer is rated above Baa2 and the limited commingling exposure, we view the risk as immaterial.

Set-off risk

All the obligors have accounts with the originator. According to Spanish law, set-off is very limited because only unpaid installments before the declaration of insolvency might be offset against the deposits held by the debtors (considered as fully due and payable before the insolvency).

Renegotiations

Although the servicer can renegotiate the terms of the loans, its ability to do so is limited. For example:

- » Interest renegotiation for floating rate loans:
 - The weighted-average margin of the floating rate loans after interest rate renegotiation cannot fall below 1%.
 - Index cannot be different than Euribor.
 - If interest rate type is changed to fixed, the interest rate level needs to comply with the condition below on minimum weighted-average interest rate.
- » Interest renegotiation for fixed rate loans:
 - The weighted-average interest rate of the fixed rate loans after interest rate renegotiation cannot fall below 2%.
 - If interest rate type is changed to floating, the interest rate level needs to comply with the condition above on minimum weighted-average margin.
 - the amount of loans changed from fixed to floating cannot exceed 5% of initial portfolio balance
- » The maturity date on a loan may be extended (limited to 5% of the initial portfolio), provided that the new amortization date does not fall later than on September 1, 2043. The loans that qualify for any moratoriums are excluded from this calculation.

Additional structural analysis

Interest rate mismatch

At closing, 55.1% of the pool balance consist of floating rate loans (the majority of them linked to Euribor) with a weighted average spread of 1.30%, and the remaining 44.9% being fixed rate loans with a weighted average interest rate of 3%, whereas the notes are fixed rate liabilities.

As a result, the issuer is subject to interest rate mismatch risk (i.e. the risk that the interest rate on the notes will differ from the interest rate payable on the floating portion of the portfolio), given that the transaction is not hedged.

floating rate portion of the portfolio: While at closing the floating rate portion is providing excess spread to the transaction due to currently high Euribor level, such level may decrease, thus eroding the interest rate paid on these assets and hence eroding available excess spread. Therefore, based on the current Euribor level, the observed trend, and our internal projections, we assumed a stressed (decreasing) Euribor to determine the yield on this portion of the portfolio.

fixed rate portion of the portfolio: Given that the notes are fixed rate liabilities there is no interest rate type mismatch risk on this portion.

True sale and bankruptcy remoteness

True sale: According to the legal opinion received, the sale of credit rights has been carried out in compliance with the Spanish securitisation law.

Bankruptcy remoteness: Under the Spanish securitisation law, a Spanish SPV (Fondo de Titulización) is not subject to the Spanish Insolvency Act. Only the management company, acting in the best interest of the noteholders, can decide to liquidate the SPV.

Claw-back risk

As per the Spanish legal framework, in the case of the transfer of credit rights, claw-back risk is limited to those activities performed during a period of two years before the declaration of the bankruptcy state and only in the event of fraud.

ESG considerations

We assess ESG credit risks in our analysis based on general principles described in detail in the ESG cross-sector rating methodology available on moodys.com.

Environmental considerations

We consider this transaction to have low environmental credit risk, driven by portfolio granularity (see exhibit 5 – top pool concentration level), geographic and industry diversification (see exhibit 7 – region concentration and exhibit 6 – industry concentrations). Additionally, the available credit enhancement limits the transaction's overall exposure if any environmental risk factors materialises.

Social considerations

Social credit risks for this transaction are low. Social risks include changing demographic trends, changing regulations or incidences related to health and safety issues of their employees and/or contactors at the workplace. As the portfolio of SME loans represents broadly the economic activities of the regions in which CaixaBank is active within Spain, the portfolio is broadly exposed to the demographic and social trends and related risk factors of Spain.

However, portfolio diversification (exhibit 6 – industry concentrations) across asset sectors protects the transaction from any large-scale impact of social risks arising from any one single industry sector; the relatively short tenor of the transaction; and the credit enhancement available to support the rated notes mitigate the potential negative impact from social risks.

Governance considerations

This transaction's governance credit risk is low and is similar to other like transactions in the market. Various transaction features contribute to our assessment, such as

- » risk retention: CaixaBank, as the originator and servicer of the transaction, retains 5% of the total notes, keeping its interest aligned with those of other transaction parties.

- » servicer experience, expertise and track record in servicing similar collateral (see "Asset description - Originator and servicer")
- » Issuer activities limited to those related to the transaction: The transaction documents limit the issuer's permitted activities to those related to the underlying assets and this transaction.
- » bankruptcy remoteness (See "Securitisation structure analysis - Additional structural analysis - True sale and bankruptcy remoteness),
- » quarterly reporting (See "Methodology and monitoring"), and
- » the issuer is an SPV incorporated under the Spanish securitisation law (See "Securitization structure description").

Methodology and monitoring

Methodology

- » [SME Asset-Backed Securitizations methodology, July 2023](#)

To access the reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Monitoring

We will monitor the transaction on an ongoing basis to ensure that it continues to perform in the manner expected, including checking all supporting ratings and reviewing periodic servicing reports. Any subsequent changes in the rating will be publicly announced and disseminated through Moody's Client Service Desk.

The following factors may have a significant impact on the subject transaction's rating: the performance of the underlying assets, the counterparty risk and Spain's country risk.

Monitoring report:

Data quality:

- » The investor report format is expected to be in line with previous transactions originated by CaixaBank.
- » The investor report includes all necessary information for us to monitor the transaction.
- » The servicer undertakes to provide us with the updated pool cut periodically.

Data availability:

- » The frequency of the publication of the investor report is quarterly, as is the frequency of the notes payment date
- » Investor reports are publicly available on the management company's website.
- » The management company will provide us with periodic information on the status of the SPV and the performance of the loans.

Appendix 1: Originator and servicer detail

Exhibit 28

Summary of originator's underwriting policies and procedures

Originator ability	At closing
Sales and marketing practices	
Origination channels	Relationship managers, bank branches
Digital/electronic interface origination	Not available
Underwriting procedures	
% of Loans manually underwritten	100% (often contracts are signed with certified digital signature)
% of Loans pre-approved	7% on SMES and 15% on Microenterprises (< €2m)
Ratio of loans underwritten per fte* per day	315
Average experience in underwriting or tenure with company**	Not disclosed
Approval rate	In microenterprises close to 98%, due to the impact of pre-approvals and the review by
Percentage of exceptions to underwriting policies	Zero (every loan is fully compliant)
Specific procedures for digital underwriting	not available
Digitization of the loan contracts	Y
Use of smart contracts	Not disclosed
Use of blockchain technology in underwriting	N
Alternative credit data used	Y
Type of alternative credit data used, if relevant	Scores of credit bureaus (e.g. ASNEF, Experian, RAI)
Applications/business activities where alternative credit data is being used	Acceptance scoring, embedded in rating systems
Use of data due to "second payment services directive" (psd2)	N
Analytical techniques applied to alternative credit data	Neural network for computing internal ratings
Use of an automated valuation model (avm) for real estate collateral	0%
Type of data used for avm	Not disclosed
Underwriting policies	
Use of internal ratings	Y
Internal ratings used to calculate regulatory capital requirements	Y
Key components for borrowers' repayment capabilities	Not disclosed
Source of credit history checks	Not disclosed
Other borrower's exposures (i.e. other debts) taken into account in affordability calculations	Y, through the analysis of the financial statements of the borrower and Central Risk
Risk-adjusted pricing applied	Y
Maximum loan size	Depends on the expected loss to prevent excessively high nominal amounts from being
Collateral requirement policy	Not disclosed
Valuation types used for secured loans & ltv limits	Not disclosed
Valuation types & procedure for construction loans & ltv limits	Not disclosed
Collateral valuation policies and procedures	
Value in the ltv calculation	Not disclosed
Type, qualification and appointment of valuers	Not disclosed
Monitoring of quality of valuers	Not disclosed
Credit risk management	
Reporting line of chief risk officer	Not disclosed
Internal rating system	Not disclosed
Approach adopted under Basel II	Not disclosed
Segmentation of the portfolio by rating models	Not disclosed
Validation of the model	Not disclosed
Originator stability	
At closing	
Quality controls and audits	
Responsibility of quality assurance	Not disclosed
Number of files per underwriter per month being monitored	Not disclosed
Management strength and staff quality	
Average turnover of underwriters	Not disclosed
Training of new hires and existing staff	Not disclosed
Technology	
Frequency of disaster recovery plan test	Not disclosed

Source: CaixaBank, S.A.

Exhibit 29

Originator and servicer detail

Servicer ability	At closing
Loan administration	
Entities involved in loan administration	Not disclosed
Early stage arrears practices	Not disclosed
Entities involved in early stage arrears	Not disclosed
Definition of arrears	Not disclosed
Arrears strategy for 1-29 days delinquent	Not disclosed
Arrears strategy for 30 to 59 days delinquent	Not disclosed
Arrears strategy for 60 to 89 days delinquent	Not disclosed
Loss mitigation and asset management practices	
Transfer of a loan to the late stage arrears team	Not disclosed
Entities involved in late stage arrears	Not disclosed
Ratio of loans per collector (fte)	Not disclosed
Time from first default to litigation and from litigation to sale	Not disclosed
Average recovery rate	Not disclosed
Special servicer agreement in place	Not disclosed
Main special servicer	Not disclosed
Use of new technologies	
Use of alternative data to monitor the loans	N, the data used is such as balance sheet, CIRBE, behavioural, bureaus, etc.
Use of advanced analytics, such as machine learning to detect trends	Y, ranking method is a machine learning model approved by ECB in the inspection IMI-2021-ESCA-0178070
Servicer stability	
Management and staff	
Average experience in servicing or tenure with company	Not disclosed
Training of new hires specific to the servicing function (i.e. excluding the company induction training)	Not disclosed
Quality control and audit	
Responsibility of quality assurance	Not disclosed
IT and reporting	
Frequency of disaster recovery plan test	Not disclosed

Source: CaixaBank, S.A.

Appendix 2: Eligibility criteria and waterfall

Eligibility criteria

The key eligibility criteria are as follows:

- » All the loans have been either formalised under a public deed or through a private contract
- » The loans have been granted to companies and self-employed individuals located in Spain
- » The pool does not include lease contracts or syndicated loans
- » Euro-denominated contracts pay by direct debit
- » All contracts have been originated by CaixaBank following its underwriting standards
- » 1% of the definitive portfolio may be composed of contracts that are delinquent between 30 and 90 days. No loans delinquent more than 90 days will be included.
- » All contracts are regulated by Spanish law
- » The principal of all securitised loans has been 100% disbursed
- » There are no refinanced/restructured contracts (as currently defined by the Bank of Spain)

Waterfall

Allocation of payments/pre-accelerated waterfall: On each quarterly payment date, the issuer's available funds will be applied in the following simplified order of priority:

1. Senior fees and expenses
2. Interest on Class A notes
3. Principal on Class A notes
4. Fill-up of the cash reserve account up to the required level (for as long as Class A bonds are still outstanding)
5. Interest on Class B notes
6. Principal on Class B notes
7. Fill-up of the cash reserve account up to the required level (once Class A bonds have fully amortised)
8. Other subordinated fees and expenses

Allocation of payments/post accelerated waterfall:

1. Senior fees and expenses
2. Interest on Class A notes
3. Principal on Class A notes
4. Interest on Class B notes
5. Principal on Class B notes
6. Other subordinated fees and expenses

Appendix 3: The management company's main responsibilities

The main responsibilities of the management company are the following:

- » Handling the accounting of the SPV with due separation from that of the Management Company
- » Complying with its formal, documentary and reporting duties to the Spanish Securities Market Commission (Comisión Nacional del Mercado de Valores or CNMV), the rating agencies and any other supervisory bodies
- » Appointing and, if necessary, replacing and dismissing the auditor responsible for reviewing and audit the SPV's annual accounts
- » Validating and controlling the information it receives from the servicer regarding the loans
- » Complying with the calculation duties provided for and taking the actions laid down in the Deed of Constitution and in the Prospectus
- » Checking that the amounts actually paid to the SPV match the amounts that must be received by the SPV
- » Calculating and determining on each determination date the principal to be amortised and repaid on each bond series on the relevant payment date
- » Verifying that the amounts credited to the treasury account return the yield set in the agreement
- » Instructing the transfer of funds between the various borrowing and lending accounts, and issuing all relevant payment instructions, including those allocated to servicing the bonds
- » Calculating the available funds, the available funds for the notes amortisation, the liquidation available funds and the payment or withholding obligations to be complied with, and applying the same in the priority of payments or, as the case may be, in the liquidation priority of payments
- » The management company may extend or amend the agreements entered into on behalf of the SPV, and substitute, as necessary, each of the SPV's service providers on the terms provided for in each agreement

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