Ibla S.r.I. Italian Non-Performing Loans ABS

Ratings

Tranche	Rating	Size (EUR m)	Thickness (%)	% of GBV ¹	Coupon	Final maturity
Class A	BBB _{SF}	85.0	87.2	24.4	6m-Euribor + 0.6%	April 2037
Class B	B _{SF}	9.0	9.2	2.6	6m-Euribor + 8.0%	April 2037
Class J	NR	3.5	3.6	1.0	Variable	April 2037

Scope's Structured Finance Ratings constitute an opinion about the relative credit risks and reflect the expected loss associated with the payments contractually promised by an instrument on a particular payment date or by its legal maturity. See Scope's website for the SF Rating Definitions.

¹ Gross book value (GBV) of the securitised portfolio at closing (EUR 349m)

Transaction details

Purpose	Risk transfer
Issuer	Ibla S.r.I.
Originator	Banca Agricola Popolare di Ragusa S.C.p.A.
Servicer	Italfondiario S.p.A.
Portfolio cut-off date	31 December 2017
Issuance date	5 September 2018
Payment frequency	Semi-annual (March and September)
Arranger	Banca IMI S.p.A.

The transaction is a static cash securitisation of an Italian NPL portfolio worth around EUR 349m by gross book value. The pool is comprised of both secured (67.2%) and unsecured (32.8%) loans; the proportions indicated are based on our adjusted pool balance, explained below under the section 'quantitative analysis and key assumptions'. The loans were extended to companies (74.4%) and individuals (25.6%) and were originated by Banca Agricola Popolare di Ragusa S.C.p.A. Secured loans are backed by residential and non-residential properties (57.8% and 42.2% of property value, respectively). Almost all properties are located on the island of Sicily. The issuer acquired the portfolio at the transfer date, 9 August 2018, but is entitled to all portfolio collections received since 31 December 2017 (portfolio cut-off date).

There are three classes of notes with fully sequential principal amortisation: senior class A, mezzanine class B, and junior class J. The class B margin ranks senior to class A principal at closing, but will be subordinated if the cumulative amounts collected are around 15% below the level indicated in the servicer's business plan, or if the present value cumulative profitability ratio falls below 85%. The class B base rate is permanently subordinated to class A principal. Class J principal and interest are subordinated to the repayment of the senior and mezzanine notes.

Rating rationale (summary)

The ratings are mainly driven by the expected recovery amounts and timing of collections from the NPL portfolio. The recovery amounts and timing assumptions consider the portfolio's characteristics as well as our economic outlook for Italy and positive assessment of the special servicer's capabilities. The ratings are supported by the structural protection provided to the notes, the absence of equity leakage provisions, liquidity protection, and an interest rate hedging agreement.

The ratings also address exposures to the key transaction counterparties: i) Italfondiario S.p.A.; the servicer, ii) Securitisation Services S.p.A., the back-up servicer, corporate services provider, calculation agent, and representative of the noteholders; iii) Zenith Services S.p.A., the monitoring agent; iv) BNP Paribas Securities Services (Milan Branch), the issuer's account bank, agent bank, cash manager, and paying agent; v) Banca IMI S.p.A., the cap counterparty; and vi) Banca Agricola Popolare di Ragusa

Structured Finance



Scope Ratings

Rating team

Thomas Miller-Jones +49 30 27891 231 t.miller-jones@scoperatings.com

David Bergman +49 30 27891 135 d.bergman@scoperatings.com

Paula Lichtensztein +49 30 27891 0 p.lichtensztein@scoperatings.com

Guillaume Jolivet +49 30 27891 241 g.jolivet@scoperatings.com

Related Research

General Structured Finance Rating Methodology

Methodology for Counterparty Risk in Structured Finance

Scope Ratings GmbH Lennéstraße 5 10785 Berlin

 Tel.
 +49 30 27891 0

 Fax
 +49 30 27891 100

 info@scoperatings.com

 www.scoperatings.com

in 🎐 Bloomberg: SCOP



S.C.p.A., provider of the limited-recourse loan. In our view, none of these exposures limits the maximum ratings achievable by the transaction.

We have applied a specific analysis to recoveries and differentiated our approach between secured and unsecured exposures. For secured exposures, collections were based mostly on the latest property appraisal values, which were stressed to account for liquidity and market value risks, while the recovery timing assumptions were derived using line-by-line asset information detailing the type of legal proceeding, the court issuing the proceeding, and the stage of the proceeding as of the cut-off date. For unsecured exposures, we have used historical line-by-line market-wide recovery data on defaulted loans between 2000 and 2017 and calibrated recoveries, taking into account that unsecured borrowers were classified as defaulted for an average of 4.8 years as of the 31 December 2017 cut-off date.

Rating drivers and mitigants

Positive rating drivers

High credit enhancement level. The 75.6% credit enhancement level for the class A is high relative to several peer transactions, providing extra protection for these notes.

Loan type. The share of first-lien secured loans in the portfolio (67.2%) is high compared to peer transactions we have rated. First-lien secured loans have higher average recovery rates than other types of loans.

Low share of bankruptcy proceedings. The portfolio share of bankrupt exposures, at 13.2%, is low compared to peer NPL transactions rated by Scope. Bankruptcy proceedings typically result in lower recoveries and can take longer to resolve compared to non-bankruptcy resolution methods.

Residential collateral. Approximately 57.8% of the secured collateral consists of residential real estate, which typically has higher liquidity, lower discount rates, and shorter liquidation times than commercial, industrial and land properties.

Liquidity protection. The cash reserve, at 7.5% of the outstanding class A note balance, can cover the transaction's senior expenses, legal costs, procedural costs and class A note interest for about 4.6 payment dates as of closing. This coverage is high compared to peer transactions.

Negative rating drivers and mitigants

Geographic concentration. Most of the portfolio is concentrated in eastern Sicily, which exposes the transaction to specific local risks. These include the possible weak performance of the economy and its impact on property prices, slow court resolution timelines, and the impact of seismic activity, all of which potentially affect the realisation of value for the properties securing the loans. Exposure to seismic events is partially mitigated by insurance.

Pool audit. The pool audit reported more errors than the norm for peer transactions. This is partially mitigated by the servicer's commitment to examine all loans within the indemnity period and report any breach of representations and warranties.

Seasoned unsecured portfolio. The weighted average time since default as of closing is approximately 5.5 years for the unsecured portion. Most unsecured recoveries are realised in the first years after a default, according to historical data.

Upside rating-change drivers

Legal costs. We have factored in the legal expenses for collections as detailed in the servicer's business plan. A decrease in legal expenses could positively affect the ratings.

Servicer outperformance regarding recovery timing. Consistent servicer outperformance in terms of recovery timing could positively impact the ratings. Portfolio collections will be completed over a weighted average period of 4.4 years according to the servicer's business plan. This is about 52.8 months faster than the recovery timing vector applied in our analysis. We expect recent legal reforms to have a positive impact on court performance and has applied a limited stress on recovery timing assumptions.

Downside rating-change drivers

Fragile economic growth. The trajectory of Italy's public debt is of concern given its weak medium-term growth potential of 0.75% alongside the new government's plans to reverse reforms, raise spending, and cut taxes.

Interest rate cap. An interest rate cap, with a strike schedule increasing from 0.1% as of closing to 2.0% in April 2028, partly mitigates the risk of increased liabilities on the notes in the event of a rise in Euribor. Delayed recoveries beyond Scope's stressed recovery timing vector would increase the mismatch between the swap notional and the outstanding principal of the rated notes.

Ibla S.r.I.

Italian Non-Performing Loans ABS

Table of contents

SCOPE

1. Transaction summary

The transaction structure comprises three tranches of sequential principal-amortising notes, an amortising liquidity reserve equal to 7.5% of the outstanding class A with a EUR 650,000 floor, and an interest rate cap agreement.

Figure 1: Transaction diagram:



Sources: Transaction documents and Scope Ratings.

We have adjusted the pool's gross book value using information on collections and sold properties since the 31 December 2017 cut-off date. Specifically, we have classified receivables whose cash-in-court collections were already received as closed loans. These loans and their associated collateral have been removed from the portfolio, under the assumption that no further collections will be received from these positions. These adjustments have reduced the portfolio to EUR 329.7m by gross book value. Collections received since the cut-off date is assumed to be cash available at closing, while cash-in-court is assumed to be received after one year. All stratifications in this report include these adjustments.

Figure 2 shows the main characteristics of the preliminary portfolio we have analysed:

1.	Transaction summary	3
2.	Macroeconomic environment	4
3.	Portfolio analysis	5
4.	Portfolio characteristics	10
5.	Key structural features	14
6.	Cash flow analysis and rating stability	17
7.	Sovereign risk	17
8.	Counterparty risk	17
9.	Legal structure	18
10	.Monitoring	19
11	.Applied methodology	19
I.	Summary Appendix – Deal comparison	20



Ibla S.r.I. Italian Non-Performing Loans ABS

Figure 2: Key portfolio stratifications

Data summary as of pool cut-off date 31 De	cember 2017	Scope-adjusted pool						
	Unadjusted pool	All loans	Senior secured Ioans	Unsecured and junior secured Ioans				
Number of loans	4,867	4,805	1,474	3,331				
Number of borrowers	1,610	1,598						
Gross book value (EUR m)	348,598,448	329,666,531	231,080,293	98,586,239				
% of gross book value (GBV)	100%	100%	70.1%	29.9%				
Weighted average seasoning (years)		2.2	2.0	2.7				
Sum of collateral appraisal values (EUR m)	321,905,967		310,824,557					
Borrower type (% of GBV)								
Corporate	74.1%	74%	49.6%	24.7%				
Individual	25.9%	26%	19.6%	6.1%				
Primary legal procedure (% of GBV)								
Bankrupt borrower	13.6%	13%	6.7%	6.5%				
Non-bankrupt borrower	86.4%	87%	62.5%	24.3%				
Not started or unknown								
Stage of procedure (% of appraisal values)								
Initial			49.7%					
Court-appointed valuation (CTU)			28.8%					
Auction			10.9%					
Distribution			10.7%					
Collateral location (% of appraisal values)								
North	0.5%		0.2%					
Centre	0.2%		0.0%					
South and islands	99.3%		99.8%					
Borrower concentration (% of GBV)								
Тор 10	9.8%	6.5%						
Тор 100	35.3%	26.9%						
Property type (% appraisal values)								
Residential	57.8%		57.8%					
Non-residential	42.2%		42.2%					

* Some loans have more than one type of ongoing procedure. This distribution partly reflects Scope's assumptions regarding the primary type of procedure. Source: Transaction data tape; calculations and/or assumptions by Scope Ratings

2. Macroeconomic environment

The portfolio recovery amount and timing expectations reflect our expectation of a gradual recovery of Italian real estate prices, notwithstanding its weak medium-term economic growth potential. The cyclical recovery from the current trough will be driven by moderate private-sector indebtedness and improving property affordability.

Scope's sovereign rating on Italy (A-/Negative) is underpinned by a large and diversified economy and a cyclical rebound against the backdrop of long-term economic challenges. The Negative Outlook reflects that Italy's public-debt trajectory is of concern given its weak medium-term growth potential of 0.75% alongside the new government's plans to reverse reforms, raise spending, and cut taxes.

Gradual property price recovery despite economic challenges

Large and diversified economy





Figure 3: Percentage-point contribution to real GDP growth

Sources: IMF; national statistical accounts; calculations by Scope Ratings

The IMF, in its July 2018 World Economic Outlook (WEO) Update, revised Italy's 2018 growth forecast to 1.2% from 1.5% and revised its 2019 expectations to 1.0% from 1.1%. Italy's manufacturing sector – the second largest in the euro area after Germany's – has helped to generate current account surpluses since 2013 (2.8% of GDP in 2017). Unlike many advanced economies, Italy did not experience a credit-driven boom-bust cycle before the 2008 crisis. Domestic non-financial private debt stands at a comparatively moderate 155% of GDP as of Q1 2018, comparing favourably against euro area peers.

While the cyclical rebound exceeded IMF expectations, long-term growth prospects remain weak. The medium-term IMF forecast¹ remained at 0.8% in the July 2018 WEO. Italy's production capacity fell in the aftermath of the global financial crisis. Industrial production volumes stood at 81% as of June 2018. This comes in contrast to the full recovery in Germany's industrial production post-crisis.

The drop in industrial production capacity reflects the vulnerabilities in Italy's production infrastructure. More than 90% of manufacturing output is generated by micro-firms concentrated in industrial districts. While these firms are competitive in their global niche markets (luxury clothing, household goods, food processing, mechanical products, and motor vehicles), they remain susceptible to market shocks. Their financing capacities are limited and were hit hard during the euro crisis.

Unemployment continues to gradually drift downward from its 2014 peak (13.1% in November 2014) and was 10.4% as of July 2018. Wage growth has picked up 2.0% YoY as of July 2018. However, inflation remains modest at 1.7% YoY in August 2018.

At the same time, political uncertainties following the March 2018 general elections, as well as ongoing challenges in the banking sector, may weigh on the economic rebound. Italian banks' lending to residents continued to contract by 1.9% YoY in June 2018.

3. Portfolio analysis

Figure 4 compares Scope's lifetime gross collections and recovery timing assumptions for the entire portfolio against those from the servicer's business plan. We have applied rating-conditional recovery rates (i.e., assumed expected recoveries decrease as the

Moderate private-debt levels

Weak long-term growth prospects

Political and banking system challenges

Rating-conditional recovery assumptions

¹ Referring to the IMF's July 2018 WEO's forecast for 2023 growth.



instrument's target rating increases). These assumptions result from the blending of secured and unsecured recovery expectations. We have applied different analytical frameworks to the secured and unsecured segments to derive recoveries.

For the portfolio analysis under a BBB rating scenario, using our adjusted pool figures, we have assumed a gross recovery rate of 42.1% over a weighted average life of 8.8 years (excluding collections already received). By portfolio segment, we have assumed gross recovery rates of 55.3% and 12.4% for the secured and unsecured segments, respectively.

For the portfolio analysis under a B rating scenario, using our adjusted pool figures, we have assumed a gross recovery rate of 52.7% over a weighted average life of 7.9 years. By portfolio segment, we have assumed gross recovery rates of 69.5% and 15.0% for the secured and unsecured segments, respectively.

The assumptions applied to analyse the rated notes reflect a significant stress on cashflow timing, driven, among other factors, by a slower ramp-up period and tribunal timing stresses.





Sources: Special servicer's business plan and Scope Ratings

3.1. Analysis of secured portfolio segment

Figure 5 shows our lifetime gross-collections vectors for the secured portfolio segment compared to those from the servicer's business plan. Our analytical approach mainly consists of estimating the security's current value based on property appraisals and then applying security-value haircuts to capture forward-looking market value and liquidity risks. Recovery timing assumptions are mainly based on the efficiency of the assigned court (based on historical data on the length of the proceedings), the type of legal proceeding, and the stage of the proceeding. Our analysis also captures concentration risk, the servicer's business plan, and available workout options.

Scope's assumptions reflect significant recovery timing stresses

Valuation haircuts mainly address forward-looking market value and liquidity risks

Ibla S.r.I. Italian Non-Performing Loans ABS

SCOPE

Positive credit given to the

quality of property appraisals



Figure 5: Secured portfolio expected recoveries in business plan vs Scope assumptions²

Sources: Special servicer's business plan and Scope Ratings

3.1.1. Appraisal analysis

We have relied on line-by-line appraisals of the properties' market value. All valuations have been conducted in 2018.

Figure 6: Collateral valuation dates



Source: Transaction data tape

We view positively that 60.5% of the portfolio's collateral appraisals are drive-by valuations. Desktop valuations comprise 33.3% of the appraisals, to which we have applied a 5% haircut. A smaller portion is composed of CTU valuations and non-standard valuations, to which we have applied 5% and 15% haircuts, respectively, reflecting our view of their lower levels of quality and accuracy due to simplified procedures.

² Note that the servicer's business plan is based at the loan level and segmented by secured loans, junior secured loans and unsecured loans. Scope's analysis is also based at the loan level; however, a loan is considered secured when it is secured by at least a first-lien mortgage. It is otherwise treated as unsecured.

Figure 7: Portfolio appraisal types and Scope's transaction-specific valuation	
haircut assumptions	

Valuation type	% of collateral value	Class A analysis haircut	Class Banalysis haircut
Full	0.0	0.0%	0.0%
Drive-by	60.5	0.0%	0.0%
Desktop	33.3	5.0%	4.0%
CTU	3.1	10.0%	8.0%
Other	3.5	15.0%	12.0%

Sources: Transaction data tape; calculations and/or assumptions by Scope Ratings

3.1.2. Property market value assumptions

Moderate market downturn risk

Figure 8 details our base case assumptions on property price changes over the transaction's lifetime, and the rating-conditional stresses applied for the analysis of the rated notes. These assumptions are i) specific to the transaction and region; ii) based on an analysis of historical property price volatility; and iii) based on fundamental metrics relating to property affordability, property profitability, private-sector indebtedness, the credit cycle, population dynamics and long-term macroeconomic performance.

The stresses shown in Figure 8 for the rest of provinces on Italy's islands incorporate a stress level that is approximately 58% higher than our standard stresses at the BBB rating-conditional level. This accounts for the portfolio's high concentration in the region.

Figure 8: Collateral location and Scope's transaction-specific price change assumptions

			N	orth			Centre			South		Islands	
Region	Milan	Turin	Genoa	Bologna	Venice	Others	Rome	Florence	Others	Naples	Others	Metropolitan cities	Rest of provinces
Class A analysis	4.6	4.6	5.4	4.6	8.0	6.7	8.9	6.7	6.7	8.9	17.4	9.7	17.4
Class B analysis	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0
Portfolio distribution (%)	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	99.8

3.1.3. Collateral liquidity risk

Asset liquidity risk is captured through fire-sale haircuts applied to collateral valuations. Figure 9 below shows the rating-conditional haircuts applied for the analysis of the class A notes. These assumptions are based on historical distressed-sales data provided by the servicer and reflect our view that non-residential properties tend to be less liquid, resulting in higher distressed-sale discounts.

Figure 9: Scope's transaction-specific fire-sale discount assumptions

Collateral type	% of collateral value	Class A analysis haircut	Class Banalysis haircut
Residential	57.3	25.0%	20.0%
Non-residential	42.7	30.0%	24.0%

3.1.4. Concentration haircuts

In the analysis of the class A notes, we have addressed borrower concentration risk by applying a 10.0% rating-conditional security valuation haircut to the 10 largest borrowers

High NPL collateral liquidity and obsolescence risk

Very limited borrower concentration risk



Scope addresses potential residual claims after security enforcement

No credit to residual claims from corporate borrowers

Partial credit to residual claims from individuals

Northern regions tend to have more efficient tribunals

by gross book value. This assumption has a minimal impact, given that the largest 10 borrowers account for only 6.5% of the portfolio's gross book value.

3.1.5. Residual claims after security enforcement

A secured creditor may initiate enforcement actions against a debtor despite the closure of an enforcement action concerning a mortgaged property. Secured creditors generally rank pari-passu with unsecured creditors for amounts that have not been satisfied with the security's enforcement. The creditor's right to recover its claim, whether secured or unsecured, arises with an enforceable title (e.g., a judgment, or an agreement signed before a public notary).

For corporate loans, we have given no credit to potential further recoveries on residual claims after the security is enforced. This is due to three practical limitations: i) unsecured recoveries tend to involve either no recovery or full recovery, meaning if secured creditors are not fully satisfied after enforcement, unsecured creditors are likely to recover zero; ii) special servicers are less incentivised to pursue alternative enforcement actions as foreclosures are more economical; and iii) receivers can decide to close bankruptcy proceedings after a prudential amount of time, setting a time limit for obtaining further recoveries.

We have given credit to residual claims on 80% of loans to individuals. If the borrower is an individual, the elapsed time after a default might have a positive impact as he might find new sources of income over time and become solvent again.

3.1.6. Tribunal efficiency

We have applied line-by-line time-to-recovery assumptions that consider the court in charge of the proceedings, the type of legal proceeding (i.e., bankruptcy or non-bankruptcy), and the current stage of the proceeding.

The total length of the recovery processes is mainly determined by the efficiency of the assigned court and the type of legal proceeding. To reflect this, we have grouped Italian courts into seven categories, based on public data regarding the average length of bankruptcy and foreclosure proceedings between 2015 and 2016 (see Figure 10 below). The securitised portfolio is largely concentrated in court group 4, reflecting the concentration in Sicily where the average timing of legal proceedings is longer than in other Italian regions. This high concentration introduces the possibility of slow court resolution timelines, which was captured in our recovery lag assumptions.

Figure 10: Total length of the recovery process by court group in years (Scope's assumptions)

Court group	Bankruptcy proceedings	Non-bankruptcy proceedings	% of courts*
1	4.0	2.0	0.0%
2	6.0	3.0	0.0%
3	8.0	4.0	0.2%
4	10.0	5.0	96.2%
5	12.0	6.0	0.0%
6	14.0	7.0	2.2%
7	18.0	9.0	1.4%

* by collateral appraisal value

3.2. Analysis of unsecured portfolio segment

Figure 11 shows our lifetime gross-collections vectors for the unsecured portfolio segment compared to those from the servicer's business plan.

Our base case recovery amount and timing assumptions are based on an analysis of vintage recovery data from the servicer and the performance of peer transactions. For the

Unsecured portfolio analysis is based on statistical data



analysis of the class A and class B notes, we have applied rating-conditional recovery rate haircuts of 16% and 0%, respectively. These stresses are consistent with the granular approach prescribed by Scope's Consumer ABS Rating Methodology.

Our assumptions for unsecured exposures consider the nature of the recovery procedure because bankruptcy proceedings are generally slower and typically result in lower recoveries than non-bankruptcy proceedings. The assumptions are calibrated to reflect that unsecured borrowers in the portfolio are classified as defaulted for an average of 4.8 years as of the cut-off date³.

Figure 11: Unsecured portfolio expected recoveries from the business plan vs Scope assumptions⁴



Portfolio characteristics 4.

Further detail on key portfolio characteristics as of 31 December 2017 is provided below. Percentage figures refer to gross book value, unless otherwise stated.

4.1. Eligible loans

We are satisfied with the representations and warranties on receivables provided by the originator as they generally align with those of peer transactions we have rated. The criteria for inclusion in the securitisation portfolio are as follows:

- · Financings are denominated in euros.
- Financing agreements are governed by Italian law. •
- Borrowers are as of the selection date i) individuals residing or domiciled in Italy; and ii) entities incorporated under Italian law with a registered office in Italy.
- Financings secured by mortgages are backed by real estate assets located in Italy.
- Borrowers are not employees, managers or directors of the originator.
- Borrowers are not banks and/or other financial institutions.

Customary eligibility criteria

³ We have used 2.7 years in the analysis, reflecting our qualitative adjustment of the superior capacity of the special servicer to treat unsecured loans compared to an

originator. ⁴ Please note that the servicer's business plan has categorised loans as secured, junior secured and unsecured. Our analysis has assumed junior secured loans to be



Share of secured individual

borrowers is credit-positive

High share of first-lien secured

loans is credit-positive

4.2. Detailed stratifications

4.2.1. Borrower type

Corporates and individuals represent 74.4% and 25.6% of the pool, respectively. The share of secured individual borrowers (19.6%) is a positive feature, mainly due to the higher probability of achieving recoveries related to residual claims from individuals after security enforcement (see previous section).

The relatively high amount of first-lien secured loans (67.2%) is positive. We have treated junior-lien secured loans (2.1%) as unsecured claims.



Sources: Transaction data tape; calculations by Scope Ratings

4.2.2. Geographical distribution

The borrowers and the loan collateral are heavily concentrated in eastern Sicily, which exposes the transaction to specific local risks. These risks include the possible weak performance of the economy and its impact on property prices, slow court resolution timelines, and the impact of seismic activity, all of which potentially affect the realisation of value for the properties securing the loans. Exposure to seismic events is partially mitigated by insurance. Geographic concentration risks are sized for in our analysis via high market-value-decline assumptions and a recovery lag analysis. We also performed a sensitivity analysis to test the rating resilience to losses linked to seismic risk.



Figure 15: Court group distribution of secured loans for which proceedings have started



Sources: Transaction data tape; calculations by Scope Ratings

Figure 14: Collateral location

Geographic concentration in

Sicily is credit-negative



Lower liquidity stresses applied to residential properties

4.2.3. Collateral type

The collateral is composed of residential (57.8%), commercial (18.4%), industrial (9.6%), land (9.3%), and other non-residential (4.9%) assets. The relatively large share of residential properties is positive for the transaction as such assets are more liquid, reflected in the lower fire-sale discount assumptions in our analysis (see Figure 9).

Figure 16: Distribution by type of collateral



Sources: Transaction data tape; calculations by Scope Ratings

4.2.4. Collateral valuations and Scope's specific recovery rate assumptions

Figure 17 shows the secured loans' distribution by loan-to-value bucket as well as our recovery rate assumptions for each loan-to-value bucket (under our rating-conditional stresses for the analysis of the class A and class B notes). For secured loans this results in a weighted average recovery rate of i) 55.3% under the class A rating-conditional stress; and ii) 69.5%% under the class B rating-conditional stress.

All else equal (e.g., for two portfolios with equivalent loan-to-value ratios on an aggregated basis), the benefit of collateral is reduced if its value is skewed towards small loan exposures. This is because, on a loan-by-loan basis, recovery proceeds are capped by the minimum of the loan's gross book value and mortgage value. This partly explains why recovery rates flatten at low loan-to-value buckets.

Figure 17: Secured loans' distribution by LTV and Scope's transaction-specific secured recovery rate assumptions



Sources: Transaction data tape; calculations by Scope Ratings

Recovery rate assumptions reflect portfolio's LTV distribution



Ageing of unsecured portfolio reduces expected recoveries

4.2.5. Loan seasoning

The weighted average time since default to the 31 December 2017 cut-off is around 4.8 years for unsecured exposures⁵. The pool's ageing reduces the expected recoverable amount of unsecured loans significantly, since most recoveries are front-loaded in the first years after a default, according to historical vintage data.





Sources: Transaction data tape; calculations by Scope Ratings

4.2.6. Borrower status

Figure 19 below shows the main legal proceedings for each borrower (one loan can have several), as we have assumed based on the transaction's data tape. About 13.2% of the loans are in bankruptcy, with the remainder in a non-bankruptcy stage.

Relative to non-bankruptcy processes, bankruptcies are generally more complex, lengthy and costly. Bankruptcies also result in lower expected recoveries for unsecured exposures, given the focus on liquidating assets in lieu of getting borrowers to start remitting payments.

Figure 19: Borrower status assumptions



Sources: Transaction data tape; calculations by Scope Ratings

Bankruptcies result in lower recoveries than non-bankruptcy proceedings

⁵ We used 2.7 years in the analysis, reflecting our qualitative adjustment of the superior capacity of the special servicer to treat unsecured loans compared to an originator



Proceedings in initial stages drive relatively long recovery timing assumptions

4.2.7. Recovery stage of secured exposures

A below-average portion of the secured loans are in the initial judicial stage compared to similar transactions we have rated. Figure 20 below shows the stage of legal proceedings for bankruptcies and non-bankruptcies in relation to secured loans.

Figure 20: Secured recovery stage by borrower status



Sources: Transaction data tape; calculations by Scope Ratings

5. Key structural features

5.1. Combined priority of payments

The issuer's available funds (i.e., collection amounts received from the portfolio, the cash reserve, and payments received under the interest rate cap agreement) will be used in the following simplified order of priority:

- 1. Servicer fees and other issuer counterparty fees, taxes and transaction expenses (estimated annual ongoing fees of EUR 190,000, excluding servicing fees)
- 2. Interest on limited-recourse loan
- 3. GACS premium, provided the GACS guarantee is in place
- 4. Replenishment of recovery-expense reserve (up to EUR 400,000)
- 5. Interest on class A notes (6-month Euribor + 0.6%)
- 6. Any other amounts payable under the GACS guarantee
- 7. Cash reserve replenishment
- 8. Principal on limited-recourse loan
- 9. Margin on class B notes (8.0%) provided no subordination trigger is breached
- 10. Principal on class A notes
- The 6-month Euribor component on the class B notes, with a floor of zero, and upon a breach of a subordination trigger, the full amount of class B interest (Euribor plus a margin)
- 12. Principal on class B and a portion of deferred servicer performance fees, if any
- 13. Other junior payments and a portion of deferred servicer performance fees, if any

Class B subordination triggers may be relatively ineffective at protecting senior noteholders as the subordination event is reversible. At any point during the transaction's life both triggers are jointly cured, and all class B margin amounts due and unpaid at the preceding payment dates will be paid senior to class A principal. The subordination of the

Full class B interest deferral is unlikely



Scope's ratings do not address the GACS guarantee

Non-timely class A interest payment would trigger accelerated waterfall class B margin will be triggered if i) the cumulative collection ratio⁶ falls below 85%; ii) the present value cumulative profitability ratio⁷ falls below 85%; or iii) the interest amount paid to class A notes is lower than the due and payable interest amount.

The GACS guarantee ensures timely payment of interest and the ultimate payment of principal by final maturity. Our rating does not give credit to the GACS guarantee, but considers the potential cost (i.e., GACS premium) if the guarantee is added to the structure at a later stage.

Non-payment of timely interest on the senior notes (implying no GACS guarantee), among other customary events such as the issuer's unlawfulness, would accelerate the repayment of class A through the full subordination of class B payments.

5.2. Servicing fee structure and alignment of interests

5.2.1. Servicing fees

The servicing fee structure links the portfolio's performance with the level of fees received by the servicer, which mitigates potential conflicts of interest between the servicer and noteholders.

The servicers will be entitled to: i) a base fee, calculated at each payment date on the outstanding portfolio's gross book value; and ii) a performance fee, calculated at each payment date on the period's collections net of legal and procedural costs (collectively, the servicing fees).

In the case of underperformance, a portion of the fees will be paid on a junior position in the priority of payments and a haircut will be applied to the fees. The servicer is therefore incentivised to maximise recoveries and comply with the initial business plan.

5.2.2. Servicer monitoring

An overview of the servicer's activities and calculations, prepared by the monitoring agent (Zenith Service S.p.A.), mitigates operational risks and moral hazard that could negatively impact noteholder interests. This risk is further mitigated by a discretionary servicer termination event should the servicer underperform.

Under the servicing agreement, the servicer is responsible for the servicing, administration, and collection of receivables as well as the management of legal proceedings. The monitoring agent will verify the calculations of key performance ratios and amounts payable by the issuer, as well as perform controls based on a random sample of loans.

The monitoring agent will report to a committee that represents the interests of both junior and mezzanine noteholders. The committee can authorise the revocation and replacement of the servicer upon a servicer termination event, subject to the approval of the noteholders' representative. The monitoring agent can also authorise the sale of the receivables, the closure of debt positions, and the payment of additional costs and expenses related to recovery activities.

5.2.3. Servicer termination events

Securitisation Services S.p.A. would step in as master servicer in the event of a servicer termination event and, as the monitoring agent, would also appoint a suitable

⁶ 'Cumulative collection ratio' is defined as the ratio between i) the cumulative net collections since the cut-off date; and ii) the net expected collections. Net collections are the difference between the gross collections and the recovery expenses.

Alignment of servicer and noteholder interests

Monitoring function protects noteholders' interests

Back-up arrangements mitigate servicing disruption risk

⁷ 'Present value cumulative profitability ratio' is defined as the ratio between i) the sum of the present value (calculated using an annual rate of 10%) of the net collections of all receivables relating to closed positions; and ii) the sum of the target price (as defined in the servicer's base case scenario in the business plan) of all receivables relating to closed positions. 'Administrative closure of the debt position' is defined as the cancellation of the debt position in the servicer's IT/computer system.



replacement for the special servicer.

A servicer termination event includes i) insolvency; ii) failure to pay due and available amounts to the issuer within two business days; iii) failure to deliver or late delivery of a semi-annual report; iv) unremedied breach of obligations; v) unremedied breach of representation and warranties; and vi) loss of legal eligibility to perform obligations under the servicing agreement. The servicer can also be substituted owing to its consistent underperformance beginning in the fifth collection period.

5.3. Liquidity protection

A cash reserve will be funded at closing through a limited-recourse loan provided by Banca Agricola Popolare di Ragusa S.C.p.A.

The cash reserve will amortise to a floor of EUR 650,000 until the class A notes are redeemed or the transaction reaches legal maturity. The target cash reserve amount at each payment date will be equal to 7.5% of the outstanding balance of class A notes.

The cash reserve will be available to cover any shortfalls in interest payments on the class A notes as well as any items senior to them in the priority of payments.

Class B will not benefit from liquidity protection.

5.4. Interest rate hedge

Due to the non-performing nature of the securitised portfolio, the issuer will not receive regular cash flows and the collections will not be linked to any defined interest rate. On the liability side, the issuer will pay a floating coupon on the notes, defined as six-month Euribor plus a 0.6% fixed margin on the class A notes and six-month Euribor plus an 8.0% fixed margin on the class B notes.

An interest rate cap, with a progressively increasing strike (cap rate) partially mitigates the risk of increased liabilities on the class A notes due to a rise in Euribor. The swap counterparty is Banca IMI S.p.A,

A delay in recoveries beyond our stressed recovery timing vector would increase interest rate risk exposure, as it would widen the gap between the transaction's interest rate cap notional amount and the outstanding principal of the class A notes, as shown in Figure 21 and Figure 22. For the analysis of the class A notes, we have stressed the Euribor forward curve, as shown in Figure 21 and Figure 23.

Cap notionals do not fully mitigate interest rate risk under a recovery timing stress

Cash reserve protects liquidity

of the senior noteholders



Figure 21: Interest rate cap class A

Figure 22: Cap notional vs outstanding class A notes



Sources: Transaction documents, Bloomberg and Scope Ratings



Scope's cash flow analysis considers the structural features of the transaction

The ratings are a forwardlooking opinion on relative credit risks 6. Cash flow analysis and rating stability

We have analysed the transaction's specific cash flow characteristics. Asset assumptions have been captured through rating-conditional gross recovery vectors. The analysis captures the capital structure, an estimate of legal costs based on the servicer's business plan, and senior fees of about EUR 190,000 annually (including VAT). We have considered the reference rate payable on the notes based on the six-month Euribor forward curve, considering the progressive cap rates of the swaps. We have incorporated an additional two-year recovery lag in our analysis of the rated notes, reflecting the high exposure to a limited number of tribunals and the outcome of the Agreed Upon Procedures report. After this adjustment, our applied recovery vector has a weighted average life of 8.7 years for the class A notes, which is relatively high compared to peer transactions we have rated.

The BBB_{SF} and B_{SF} ratings assigned to the class A and class B notes, respectively, constitute a forward-looking opinion on relative credit risks. The ratings reflect the expected loss associated with payments contractually promised by an instrument on a payment date or by its legal maturity. We calculate an instrument's expected loss over an expected risk horizon, with the result benchmarked against our idealised expected loss table reported in the General Structured Finance Rating Methodology.

We tested the resilience of the ratings against deviations from expected recovery rates and recovery timing. This analysis has the sole purpose of illustrating the sensitivity of the ratings to input assumptions and is not indicative of expected or likely scenarios.

We also tested the sensitivity of the analysis to deviations from the main input assumptions: recovery rate and recovery timing.

For class A, the following shows how the results change compared to the assigned credit rating in the event of:

- a decrease in secured and unsecured recovery rates by 10%, one notch.
- an increase in the recovery lag by one year, one notch.

For class B, the following shows how the results change compared to the assigned credit rating in the event of:

- a decrease in secured and unsecured recovery rates by 10%, zero notches.
- an increase in the recovery lag by one year, one notch.

7. Sovereign risk

Sovereign risk does not limit any of the ratings. The risks of an institutional framework meltdown, legal insecurity or currency convertibility problems due to Italy's hypothetical exit from the Eurozone are not material for the notes' rating.

For more insight into Scope's fundamental analysis on the Italian economy, refer to the rating report on the Republic of Italy, dated 8 June 2018.

8. Counterparty risk

The transaction is mainly exposed to counterparty risk from the following counterparties: i) Banca Agricola Popolare di Ragusa S.C.p.A., regarding representations and warranties, and eventual payments to be made by the borrowers, and being the transaction's limited-recourse loan provider; ii) Italfondiario S.p.A., the servicer; iii) Securitisation Services S.p.A., the back-up servicer, corporate services provider, calculation agent, and noteholders' representative; iv) Zenith Services S.p.A., the monitoring agent; v) BNP Paribas Securities Services (Milan Branch), the issuer's

No mechanistic cap

Counterparty risk does not limit the transaction's rating



account bank, agent bank, cash manager, and paying agent; vi) Banca IMI S.p.A., the cap counterparty. In our view, none of these exposures limits the maximum ratings achievable by this transaction.

Our analysis has incorporated the transaction's counterparty replacement triggers, and has relied on public ratings assigned to BNP Paribas Securities Services (Milan Branch) and Banca IMI S.p.A.

The issuer will hold all its accounts with BNP Paribas Securities Services (Milan Branch). There is a rating trigger for the replacement of the account bank.

8.1. Servicer disruption risk

A servicer disruption event may have a negative impact on the transaction's performance. The transaction incorporates servicer-monitoring, back-up and replacement arrangements that mitigate operational disruption (see section 5.2).

8.2. Commingling risk

Commingling risk is limited, as debtors will be instructed to pay directly to an account in the name of the issuer. In limited cases where the servicer received payments from a debtor, the servicer would transfer the amounts within two business days.

8.3. Claw-back risk

The originator has provided i) a 'good standing' certificate from the Chamber of Commerce; ii) a solvency certificate signed by a representative duly authorised; and iii) a certificate from the bankruptcy court (tribunale civile – sezione fallimentare) confirming that the originator is not subject to any insolvency or similar proceedings. This mitigates claw-back risk, as the issuer should be able to prove it was unaware of the issuer's insolvency as of the transfer date.

8.4. Enforcement of representations and warranties

The issuer will rely on the representations and warranties, limited by time and amount, provided by the originator in the transfer agreement. If a breach of a representation and/or warranty materially and adversely affects a loan's value, the originator may be obliged to indemnify the issuer for damages within 10 business days of the notification. However, the total indemnity amount will be capped at 25% of the portfolio purchase price and will be only be paid if claims are filed within two years of the transfer date. In addition, indemnity is only payable in relation to damages worth more than EUR 10,000 on a single loan basis and EUR 150,000 on a portfolio basis.

9. Legal structure

9.1. Legal framework

The transaction documents are governed by Italian law, whereas English law governs the interest cap agreement and the deed of charge.

The transaction is fully governed by the terms in the documentation and any changes are subject to the risk-takers' consent, with a superior voting right of the most senior noteholders at the date of the decision.

9.2. Use of legal opinions

We had access to the legal opinions produced for the issuer, which provide comfort on the legally valid, binding and enforceable nature of the contracts.

Limited commingling risk

Limited claw-back risk

Representations and warranties limited by time and amount

Transaction governed by Italian law



Continuous rating monitoring

10. Monitoring

We will monitor this transaction based on performance reports as well as other public information. The ratings will be monitored continuously and reviewed at least twice a year, or earlier if warranted by events.

Scope analysts are available to discuss all the details of the rating analysis, the risks to which this transaction is exposed, and the ongoing monitoring of the transaction.

11. Applied methodology

For the analysis of the transaction we have applied our General Structured Finance Rating Methodology, and Methodology for Counterparty Risk in Structured Finance, both available on www.scoperatings.com.

I. Summary appendix – deal comparison

Transaction	IBLA	Maior SPV	Maggese	Juno 1	BCC NPLS 2018	2Worlds	4Mori Sardegna	Aragorn NPL 2018	Red Sea SPV	Siena NPL 2018	Bari NPL 2017	Eirond NPL 201
Closing	Sep-18	Aug-18	Jul-18	Jul-18	Jul-18	Jun-18	Jun-18	Jun-18	Jun-18	May-18	Dec-17	Jul-17
Driginators	Banca di Ragusa	UBI Banca	C.R. Asti, Biver	BNL	ICCREA	BPS, BDB	Sardegna	Creval	Banco BPM, BPM	MPS	BPB, CRO	Creval
Master servicer	Italfondiario	Prelios	Prelios	Prelios	Prelios	Cerved	Prelios	Credito Fondiario	Prelios	Credito Fondiario	Prelios	Cerved
Special servicer	Italfondiario	Prelios	Prelios	Prelios	Prelios	Cerved	Prelios	Cerved, Credito Fondiario	Prelios	Juliet, Italfondiario, Credito Fondiario,	Prelios	Cerved
General portfolio attributes								1 Ondiano		Credito i Undiano,		
Gross book value (EUR m)	330	2,496	697	880	1,009	968	900	1,676	5,113	23,939	345	1,422
Number of borrowers	1,598	11,061	1,313	731	2,518	3,956	11,412	4,171	12,651	79,669	1,565	3,712
Number of loans	4,805	22,580	5,313	2,787	5,359	13,234	20,098	8,289	33,585	545,939	4,569	6,951
WA seasoning (years)	2.2*	4.2*	3.1*	3.0*	2.6*	2.7*	4.8*	2.5	3.8	4.4*	4.5	3.7
portfolio	2.7*	4.6*	3.9*	3.1*	2.9*	3.2*	6.4*	3.2	3.5	4.8*	N/A	N/A
WA LTV buckets (% or secured portfolio												
bucket [0-25]	2.8	10.3	2.1	3.5	4.3	2.8	5.7	2.0	2.3	5.7	N/A	3.6
bucket [25-50]	7.4	19.2	6.3	7.6	6.8	13.0	14.6	4.2	8.1	12.4	N/A	11.1
bucket [50-75]	12.5	21.2	11.6	14.3	12.5	17.9	21.8	8.2	14.7	16.8	N/A	13.7
bucket [75-100]	16.3 15.9	14.9	13.9	16 14.7	15.1	15.8	20.4	13.9	18.1	17.0	N/A	19.6
bucket [100-125]	12.1	5.0	20.8	6.3	11.8 7.7	14.5	12.8	22.3 17.9	16.7 12.0	13.4	N/A	24.6
bucket [125-150]	7.3	4.4	8.4	5.3	6.4	7.5	1.8	11.9	6.6	8.3 5.3	N/A N/A	8.6 4.8
bucket [150-175] bucket [175-200]	6.6	2.0	6.8	5	6.1	4.9	4.4	3.7	4.8	3.9	N/A N/A	4.6
bucket > 200	19.2	12.9	22.2	27.3	29.3	17.1	14.5	16.0	4.6	17.1	N/A	12.5
Cash in court (% of total GBV)	2.2	4.0	2.7	7.2	29.3	8.5	14.5	0.5	3.2	N/A	N/A	2
Loan types (% of total GBV)	2.2	4.0	2.1		24.0	0.0	10.0	0.0	5.2	19/75	19/75	2
Secured first-lien	67.2	39.9	43.1	30.4	70	53.1	56.1	67.3	70.6	41.6	53.6	66.4
Secured junior-lien	2.1	6.7	9.6	2.4	0.9	0	0.6	8.1	1		2.5	7.6
Unsecured	30.8	53.4	47.3	67.2	29.1	46.9	43.3	24.6	28.4	58.4	43.9	26.0
Syndicated loans	0.5	1.1	1.0		6.1	3.8	3.3	1.8	1.4	5.7		
Debtors (% of total GBV)												
Individuals	25.6	17	18.9	3.4	14.3	26.4	24.4	9.9	28.4	19	12	12.7
Corporates or SMEs	74.4	83	81.1	96.6	85.7	73.6	75.6	90.1	71.6	81	88	87.3
Procedure type (% of total GBV)												
Bankrupt	13.2	49.5**	53.4	71.5	62.7**	29.3	39.1	55.0	49.4	36.6	46.5	57.6
Non-bankrupt	86.8	50.5	46.6	28.5	37.3	70.7	60.9	45.0	50.6	63.4	53.5	42.4
Other		-		-					-		-	-
Not started												
Borrower concentration (% of total GBV)												
Top 10	6.5	1.9	8.6	8.6	6.7	3.6	8	8.3	1.8	2.1	28.2	13.4
Top 100	26.9	10.4	31	34.4	29	18.1	27.7	39.5	9.1	9.5	69	42.4
Collateral regional concentration (% of to			1									
North	0.2	57.9	98	43.9	72.4	43.5	1.3	58.5	67.8	35.9	18.3	61.6
Centre	0	19.2	0.4	34.8	19.5	51.3	11.5	18.4	20.7	36	14.1	14.6
South	99.8	22.9	1.6	21.3	8.1	5.2	87.4	23.1	11.4	28.1	67.6	23.8
Collateral type (% of total appraisal value		57.0										
Residential	57.8	57.3	46.7	29.2	39.3	44.4	51.3	43.4	54.8	28.2	43	32.6
Commercial	18.4	16.2	15.4	19.5	29.5	24.6	23.7	22	15.4	-	40	32.4
Industrial	9.6	14.8 7.9	21.8	32.4 4.8	11.2	10.5	11.3	15.3	9.4	71.8		23.2
Land	9.3 4.9	3.9	10.1	4.0	13.7	6.6	6.2	0.0	8.6	-	18	8.7
Other or unknown		3.8	6	14.1	6.3	13.9	7.6	19.3	11.8			3.4
Valuation type (% of total appraisal value) Full or drive-by	60.5	16.9	58.3	10.2	68.4	79.5	38.8	96.1	74.0	10		70.8
Desktop	33.3	69.2	18.5	3.6	5.4	12.0	40	1.2	14.5	65	96.31	4.0
CTU	3.1	10.4	0	13.4	12.1	8.5	20.5	2.7	14.5	15	3.69	23.6
Other	3.1	3.5	23.2	72.8	14.1	0.0	0.6	0	0	10	0	0.5
Secured portfolio procedure stage (% of			23.2	12.0	14.1		0.0	0	0	10		0.5
Initial	49.7	65.0	60.9	54.9	73.6	75.6	61.2	66.6	64.4	52.6	55.5	36.1
СТU	28.8	12.2	10.3	11.8	11	6.3	18.3	23.4	9.1	5.4	14.2	10.7
Auction	10.9	22.5	27.5	30.8	11.5	16.9	20.5	4.7	21.3	35.2	26.5	36.4
Distribution	10.7	0.3	1.3	2.5	3.8	1.2	0	5.5	5.2	6.7	3.8	16.8
Summary of assumptions (BBB rating	g-conditional stres											
Remaining lifetime recovery rate (%)												
WAMVD									#N/A			
WA Firesales									#N/A			
Secured (=net LTV after all stresses)	55.3	63	54.9	52.1	50.3	65.5	66.2	48.3	62.8	58.6	51.8	61.7
Unsecured	12.4	11.5	10.1	10.4	13.5	14	9.9	16.8	12.3	9.2	11.1	13.7
Total	42.1	35.5	33.7	24.1	39.6	41.4	41.8	40.6	48.0	0.0	33.1	47.1
Weighted average life of collections (yea			1									
Secured	7.0	6.7	6.4	5.4	8.2	6.8	7.2	7.9	6.8	N/A	N/A	4.8
Unsecured	4.8	4.1	4.6	4.2	4.5	4.7	4.2	4.2	4.1	N/A	N/A	3.1
Total	6.8	6.3	6.1	5.1	7.8	6.4	6.9	7.9	6.6	N/A	N/A	4.6
Structural features				4.2								
Liquidity reserve (% of class A notes)	7.5	4.0	4.0	4.0	5.0	B)	4.9 (% of A and B) 0.3% -1.25%	5.0	B)	3.5	4.0	4.0
Class A Euribor cap strike Class A	0.1%-2.0%	0.5%-2.5%	0.5%-3.0%	0.8%-2.5%	0.5%-2.5%	0.3% -1.25%	0.3% -1.25%	0%-0.1%	0.5%-2.0%	0.5-3.0%	0.10%	0.50%
	04.1	00.0	045	14.0	07.0	00.0	00.0	00.5	00.5	40.1	05.0	00.0
% of GBV	24.4	22.9	24.5	14.2	27.0	28.8	22.2	30.5	32.5	12.1	25.3	33.0
Credit enhancement Class B	75.6	77.1	75.5	85.8	73.0	71.2	77.8	69.5	67.5	87.9	74.7	67.0
	2.6	2.2	3.5	2.9	3.0	3.0	1.2	4.0	3	3.5	3.1	3.0
	2.0			2.9 82.9			76.6	4.0	3 64.5			3.0 64.0
% of GBV	72.0											
% of GBV Credit enhancement	73.0	75.0	72.0	62.9	70.0	68.2	70.0	03.5	04.5	84.4	71.6	64.0
% of GBV Credit enhancement Model-implied rating	73.0	75.0	72.0	62.9	70.0	08.2	76.6	65.5	04.5	84.4	71.6	64.0
% of GBV Credit enhancement	73.0 BBB	75.0 BBB	72.0 BBB	BBB+	BBB-	BBB	A-	BBB-	BBB	84.4 BBB+	71.6 BBB	BBB-

* The weighted average seasoning includes Scope's qualitative adjustment driven by the special servicer's superior capacity to treat unsecured loans compared to an originator. ** This includes loans with no ongoing legal proceeding or loans where the nature of the proceeding is unknown.

Transactions' preliminary data tapes; calculations and assumptions by Scope Ratings. Closing portfolio stratifications might show non-material deviations.



Scope Ratings GmbH

Headquarters Berlin

Lennéstraße 5 D-10785 Berlin Phone +49 30 27891 0

London

Suite 301 2 Angel Square London EC1V 1NY

Phone +44 203-457 0 4444

Oslo

Haakon VII's gate 6 N-0161 Oslo

Phone +47 21 62 31 42

info@scoperatings.com www.scoperatings.com

Frankfurt am Main

Neue Mainzer Straße 66-68 D-60311 Frankfurt am Main

Phone +49 69 66 77 389-0

Madrid

Paseo de la Castellana 95 Edificio Torre Europa E-28046 Madrid

Phone +34 914 186 973

Paris

33 rue La Fayette F-75009 Paris

Phone +33 1 82885557

Milan

Via Paleocapa 7 IT-20121 Milan

Phone +39 02 30315 814

Disclaimer

© 2018 Scope SE & Co. KGaA and all its subsidiaries including Scope Ratings GmbH, Scope Analysis GmbH, Scope Investor Services GmbH and Scope Risk Solutions GmbH (collectively, Scope). All rights reserved. The information and data supporting Scope's ratings, rating reports, rating opinions and related research and credit opinions originate from sources Scope considers to be reliable and accurate. Scope does not, however, independently verify the reliability and accuracy of the information and data. Scope's ratings, rating reports, rating opinions, or related research and credit opinions are provided 'as is' without any representation or warranty of any kind. In no circumstance shall Scope or its directors, officers, employees and other representatives be liable to any party for any direct, indirect, incidental or other damages, expenses of any kind, or losses arising from any use of Scope's ratings, rating reports, rating opinions, related research or credit opinions. Ratings and other related credit opinions issued by Scope are, and have to be viewed by any party as, opinions on relative credit risk and not a statement of fact or recommendation to purchase, hold or sell securities. Past performance does not necessarily predict future results. Any report issued by Scope is not a prospectus or similar document related to a debt security or issuing entity. Scope issues credit ratings and related research and opinions with the understanding and expectation that parties using them will assess independently the suitability of each security for investment or transaction purposes. Scope's credit ratings address relative credit risk, they do not address other risks such as market, liquidity, legal, or volatility. The information and data included herein is protected by copyright and other laws. To reproduce, transmit, transfer, disseminate, translate, resell, or store for subsequent use for any such purpose the information and data contained herein, contact Scope Ratings GmbH at Lennéstraße 5 D-10785 Berlin.

Scope Ratings GmbH, Lennéstrasse 5, 10785 Berlin, District Court for Berlin (Charlottenburg) HRB 192993 B, Managing Director: Torsten Hinrichs.