#### 3 August 2018

# Juno 1 S.r.l. Italian Non-Performing Loans (NPL) ABS

### Ratings

Tranche	Rating	Size (EUR m)	% of Assets (GBV¹)	% of Notes	Coupon	Final maturity
Class A	BBB+ <sub>SF</sub>	136.0	14.2	83.0	6m-Euribor + 0.6%	July 2038
Class B	NR	26.0	2.7	15.9	6m-Euribor <sup>2</sup> + 8.0%	July 2038
Class J	NR	1.9	0.2	1.1	10% + variable return	July 2038
Total		163.9	17.1	100		

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. Scope's analysis is based on the latest loan-by-loan data tape and the servicer's business plan dated 18 July 2018

and 5 June 2018, respectively, and both provided by the arranger.

<sup>1</sup> Gross book value (GBV) of the securitised portfolio at closing (EUR 957m)

<sup>2</sup> 6m-Euribor + 8.0% capped at 8.0% senior to the repayment of class A principal

### **Transaction details**

Purpose	Risk transfer
Issuer	Juno 1 S.r.l.
Originator	Banca Nazionale del Lavoro S.p.A.
Servicer	Prelios Credit Servicing S.p.A.
Portfolio cut-off date	1 April 2018
Issuance date	26 July 2018
Payment frequency	Semi-annual (January and July)
Arranger	BNP Paribas S.A.

The transaction is a static cash securitisation of an Italian NPL portfolio worth around EUR 957m by gross book value. The pool comprises both secured (30.4%) and unsecured (69.6%) loans; the proportions indicated are based on Scope's adjusted pool balance, explained below under the section 'portfolio characteristics'. The loans were extended to companies (96.6%) and individuals (3.4%) and were originated by Banca Nazionale del Lavoro S.p.A. Secured loans are backed by residential (29.2% of indexed property valuations) and non-residential (70.8%) properties that are concentrated in the non-metropolitan areas in Italy's north (35.3%) and centre (16.4%) as well as in Rome (12.1%). The issuer acquired the portfolio at the transfer date, 18 July 2018, but is entitled to all portfolio collections received since 1 April 2018 (portfolio cut-off date).

The structure comprises three classes of notes with fully sequential principal amortisation: senior class A, mezzanine class B, and junior class J. The class B interest (up to 8%) ranks senior to class A principal at closing, but will be subordinated if i) cumulative amounts collected are around 15% below the level indicated in the servicer's business plan, or ii) the present value cumulative profitability ratio falls below 85%. Class J principal and interest are subordinated to the repayment of the senior and mezzanine notes.

### Rating rationale (summary)

The rating is mainly driven by the recovery amounts and timing from the assets in the portfolio. Recovery and timing assumptions applied in the analysis incorporate Scope's economic outlook for Italy and positive view of the special servicer's capabilities. The rating is also supported by the structural protection provided to the notes, the absence of equity leakage provisions and an interest rate hedging agreement, and on the other hand constrained by the relatively limited liquidity protection available to the class A notes.

The rating also addresses exposures to the key transaction counterparties: i) Banca Nazionale del Lavoro S.p.A., the originator and seller regarding representations and warranties, and eventual payments to be made by the borrowers) and provider of the

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#### **Related Research**

**General Structured Finance** Rating Methodology

Methodology for Counterparty **Risk in Structured Finance** 

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#### Structured Finance



Scope Ratings

# Juno 1 S.r.l.

SCOPE

Italian Non-Performing Loans (NPL) ABS

limited-recourse loan; ii) Prelios Credit Servicing S.p.A., the servicer; iii) Securitisation Services S.p.A., the back-up servicer, corporate services provider, calculation agent, noteholders' representative and monitoring agent; iv) BNP Paribas Securities Services (Milan Branch), the issuer's account bank, agent bank, cash manager, and principal paying agent; and v) BNP Paribas, the cap counterparty. In order to assess counterparty risks Scope has taken into account its rating on BNP Paribas (AA-/S1) the parent company of BNP Paris Securities Services and Banca Nazionale del Lavoro S.p.A. as well as publicly available ratings. In Scope's view, none of the above exposures limits the maximum ratings achievable by this transaction.

Scope has applied a specific analysis to recoveries and differentiated its 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; 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, Scope has 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 4.1 years as of closing.

#### **Rating drivers and mitigants**

#### Positive rating drivers

**High credit enhancement level**. The 85.8% credit enhancement to the class A is significantly higher than for peer transactions, providing extra protection for these notes.

**Geographically diversified pool**. The portfolio is well distributed among Italian regions, with some concentration in the north. The north of Italy benefits from the country's most dynamic economic conditions and, in general, the most efficient tribunals.

**High portion of proceedings in advanced stages**. Around 30.8% of the secured loans are in the auction phase and 2.5% in the court distribution phase, which reduces the expected time for collections compared with loans in the initial phases of legal proceedings.

**Valuation types**. Bank appraisals represent the majority of the valuations. The appraisals for properties worth more than EUR 300,000 were conducted mostly as drive-by valuations, which, in Scope's view, are generally more accurate than common bank appraisals performed via desktop.

#### Negative rating drivers and mitigants

**Class A notes' liquidity protection.** The cash reserve, which is 4% of the balance of outstanding class A notes, covers the tranche's senior expenses, legal costs and Class A notes' interest for about 2.5 payment dates as of closing. This is low compared to some of peer transactions.

Low portfolio credit quality. The portfolio is composed of a large proportion of low credit quality features compared to peer transactions rated by Scope considering the greater relative portion of SMEs, corporates, unsecured loans and bankrupt borrowers, as well as the lower share of residential assets. All four factors have historically led to lower recovery rates on average.

**Low granularity.** The concentration in the portfolio, in terms of borrowers and loan amount per borrower, is very high compared to peer transactions rated by Scope, exposing the transaction to idiosyncratic risks.

**Seasoned unsecured portfolio**. The weighted average time since loan default is approximately 4.1 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

**Servicer unsecured recovery outperformance**. Consistent servicer outperformance in terms of unsecured recoveries could positively impact the rating. According to the servicer's business plan, the unsecured portfolio's collections are expected to be 7.8% of its gross book value, which is low compared to peer transactions.

#### Downside rating-change drivers

**Higher-than-expected legal costs**. An increase in legal expenses could negatively affect the rating. Scope has factored in the legal expenses for collections detailed in the servicer's business plan, which average about 4.2% of gross collections and are low compared to peer transactions.

**Collateral appraisal values**. An upward bias of appraisal values beyond the liquidity stresses captured by Scope could result in a rating downgrade. NPL collateral appraisals are more uncertain than standard appraisals because repossessed assets are more likely to deteriorate in value.



1.

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#### Figure 1: Transaction diagram:

Transaction summary



Sources: Transaction documents and Scope Ratings.

Scope has adjusted the pool's gross book value using information on collections and sold properties. Specifically, the analysis has excluded portfolio loans that the agency has assumed to be closed based on i) collections already received, ii) cash in court to be received, capped at the servicer's expected recoveries, and iii) unsecured loans granted to foreign borrowers. Collateral connected with these positions has also been removed. Overall, Scope's adjustments have reduced the pool to EUR 880.8m in gross book value, by deducting the gross book value associated with cash already collected and cash in court (where the latter is assumed to be received with a one-year delay). All stratifications in this report include these adjustments. Figure 2 shows the main characteristics of the preliminary portfolio analysed by Scope:

#### Figure 2: Key portfolio stratifications

	Unadjusted pool	All	Secured	Unsecured
Number of loans	2,859	2,787	494	2,293
Number of borrowers	740	734		
Gross book value (EUR m)	956,992,441	880,876,721	267,685,489	613,191,233
% of gross book value (GBV)	100%	100%	30.4%	69.6%
Weighted average seasoning (years)		4.0	3.9	4.1
Sum of collateral appraisal values (EUR m)	540,387,869		473,471,811	
Borrower type (% of GBV)				
Corporate	96.6%	96.6%	27.9%	68.6%
Individual	3.4%	3.4%	2.4%	1.0%
Primary legal procedure (% of GBV)				
Bankrupt borrower		70.2%	11.8%	58.4%
Non-bankrupt borrower	-	28.5%	18.5%	10.0%
Not started or unknown		1.2%	0.0%	1.2%
Stage of procedure (% of appraisal values)				
Initial			54.9%	
Court-appointed valuation (CTU)			11.8%	
Auction			30.8%	
Distribution			2.5%	
Collateral location (% of appraisal values)				
North			43.9%	
Centre			34.8%	
South and islands			21.3%	
Borrower concentration (% of GBV)				
Top 10		8.6%		
Top 100		34.4%		
Property type (% appraisal values)				
Residential			29.2%	
Non-residential			70.8%	

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



Gradual property price recovery despite economic challenges

### 2. Macroeconomic environment

The portfolio recovery amount and timing expectations reflect Scope's expectation of Italy's gradual recovery in real estate prices and progress in delivering structural reforms, notwithstanding the 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.

Large and diversified economy

Moderate private-debt levels

Weak long-term growth

prospects

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.

#### Figure 3: Percentage-point contribution to real GDP growth



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

The IMF, in its April 2018 World Economic Outlook (WEO), revised Italy's 2018 growth forecast to 1.5% from 1.1% and raised its 2019 expectations to 1.1% from 0.9%. 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 156% of GDP as of Q3 2017, comparing favourably against euro area peers.

While the cyclical rebound exceeded expectations, long-term growth prospects remain weak. The IMF's medium-term forecast<sup>1</sup> remained at 0.8% in the April 2018 WEO. Italy's production capacity fell in the aftermath of the global financial crisis. As of February 2018, industrial production volumes stood at 81% of early 2008 levels. 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.

<sup>&</sup>lt;sup>1</sup> Referring to the IMF's April 2018 WEO's forecast for 2023 growth.



Unemployment continues to gradually drift down from its 2014 peak (13% in November) and was 10.9% as of February 2018. Wage growth has picked up 1.0% YoY as of March 2018. However, inflation remains tepid at only 0.5% YoY in April 2018.

Political and banking system challenges

Rating-conditional recovery assumptions

Scope's assumptions reflect significant recovery timing stresses

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 rose 1.9% YoY in February 2018, a modest growth after the previous years of contraction.

### 3. Portfolio analysis

Figure 4 compares Scope's lifetime gross collections and recovery timing assumptions for the entire portfolio against those of the servicer's business plan. Scope has applied ratingconditional recovery rates (i.e. lower recoveries as the instrument's target rating increases). These assumptions result from the blending of secured and unsecured recovery expectations. Scope has applied different analytical frameworks to the secured and unsecured segments to derive recoveries.

Under a base case scenario, Scope expects a gross recovery rate of 27.9% over a weighted average life of 4.1 years. By portfolio segment, Scope expects gross recovery rates of 59.4% and 12.5% for the secured and unsecured portfolios, respectively.

For the analysis of the class A notes, Scope has applied a 16.1% recovery rate haircut and a recovery lag stress of almost nine months. This results in a 23.4% gross recovery rate over a weighted average life of 4.8 years. By portfolio segment, Scope assumed gross recovery rates of 54.8% and 9.7% for the secured and unsecured portfolios, respectively.

Analytical assumptions applied for the analysis of the rated notes reflect a significant stress on cash-flow timing, driven, among other factors, by a slower ramp-up period and tribunal timing stresses. Scope's recovery amount stresses are not significantly below those expected in the business plan, mainly due to the agency's credit-positive view on the real estate cyclical recovery.

#### Figure 4: Business plan's total expected recoveries vs Scope's assumptions



Sources: Special servicer's business plan and Scope Ratings



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

#### 3.1. Analysis of secured portfolio segment

Figure 5 shows Scope's lifetime gross-collections vectors for the secured portfolio compared to those in the servicer's business plan. Scope's analytical approach consists mainly 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 based mainly 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. Scope's analysis also captures concentration risk, the servicer's business plan, and available workout options.

Figure 5: Secured portfolio expected recoveries in business plan vs Scope's assumptions



Sources: Special servicer's business plan and Scope Ratings

#### 3.1.1. Appraisal analysis

Scope has relied on line-by-line appraisals of the properties' market value. The vast majority of the valuations are recent, i.e. conducted between 2017 and 2018. Scope has indexed seasoned valuations using a variety of regional price indices. Indexation has a marginal impact on this NPL portfolio because property prices have remained fairly flat since 2015.





Source: Transaction data tape

Scope views positively that most of the portfolio's collateral valuations are bank appraisals (72.8%), for which the bank has appointed well recognised third parties valuers to conduct these appraisals for properties worth more than EUR 300,000, to which Scope has applied a 1% rating-conditional haircut. A smaller portion is composed of CTU (13.4%) and desktop (3.6%) valuations, to which Scope has applied 10.3% and 5.2% rating-

Positive credit given to the quality of property appraisals



conditional haircuts, respectively. The remainder (10.2%) consists of both drive-by, mainly conducted by the servicer, and full valuations; no rating-conditional haircuts were applied for these. The haircuts reflect Scope's view of the lower levels of quality and accuracy due to the simplified procedures connected to these valuations.

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

Valuation type	% of collateral value	Class A analysis haircut
Full	2.6	0.0%
Drive-by	7.6	0.0%
Bank appraisal	72.8	1.0%
Desktop	3.6	5.2%
СТU	13.4	10.3%

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

#### 3.1.2. Property market value assumptions

Figure 8 details Scope's base case assumptions on property price changes over the transaction's lifetime, and the rating-conditional stresses applied for the analysis of the class A 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.

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

			Ν	lorth			Centre			South		Islands	
Region	Milan	Turin	Genoa	Bologna	Venice	Others	Rome	Florence	Others	Naples	Others	Metropolitan cities	Rest of provinces
Class A analysis	6.5	6.5	7.5	6.5	10.5	9.0	11.5	9.0	9.0	11.5	14.0	12.5	14.0
Portfolio distribution (%)	2.5	0.5	0.8	1.3	6.1	32.7	12.1	6.3	16.4	1.3	7.7	5.6	6.7

#### 3.1.3. Collateral liquidity risk

At times of severe economic stress during which NPLs typically accumulate, tight financing conditions and/or restricted access to capital markets drive liquidity risk. During recovery and expansionary phases of the cycle, liquidity risk may persist, mainly due to information asymmetries and collateral obsolescence, the latter primarily affecting industrial properties.

Asset illiquidity risk is captured through additional 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 property sales data provided by the servicer and reflect Scope's 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			
Residential	29.2	25.8%			
Non-residential	70.8	31.0%			

# High NPL collateral liquidity and

Moderate market downturn risk

obsolescence risk



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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

#### 3.1.4. Concentration haircuts

Scope has addressed borrower concentration risk by applying to the 10 largest borrowers 11.7% rating-conditional recovery haircuts for the analysis of the class A notes. This assumption has a minimal impact, given that the largest 10 borrowers account for only 8.6% 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 the mortgaged property. Secured creditors generally rank equally 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 (i.e. a judgment such as an agreement signed before a public notary).

For corporate loans, Scope has given no credit to potential further recoveries on residual claims after the security is enforced. This is due to three practical limitations. Firstly, unsecured recoveries tend to be binary with a high probability of zero recoveries and a low probability of 100% recoveries. This implies that in scenarios where secured creditors are not fully satisfied after the security's enforcement, expected recoveries for unsecured creditors will be close to zero<sup>2</sup>. Secondly, special servicers are generally less incentivised to pursue alternative enforcement actions, given that foreclosure proceedings are more cost-efficient. Lastly, in a bankruptcy proceeding the receiver will decide to close the proceedings after a prudential amount of time, setting a practical limitation for any potential recovery upside.

Scope has given credit to residual claims on 80% of loans to individuals. This is because if the borrower is an individual, the elapsed time after a default might have a positive impact. An individual may, for example, find new sources of income over time and become solvent again.

#### **3.1.6. Tribunal efficiency**

Scope 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, Scope has grouped Italian courts into seven categories, based on public data regarding the average length of bankruptcy and foreclosure proceedings between 2015 and 2017 (see Figure 10 below). Most courts are concentrated in group 4, which are reasonably distributed across all Italian regions. Nevertheless, northern regions tend to have more efficient tribunals on average (see Figures 14 and 15 for transaction-specific details).

<sup>&</sup>lt;sup>2</sup> Conversely, in the unlikely scenario that secured creditors are fully satisfied after the enforcement of the security, expected recoveries for unsecured creditors could be close to 100%.

Court group	Bankruptcy proceedings	tcy proceedings Non-bankruptcy proceedings				
1	4	2	0.8%			
2	6	3	15.9%			
3	8	4	8.7%			
4	10	5	72.4%			
5	12	6	1.6%			
6	14	7	0.0%			
7	18	9	0.5%			

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

\* by collateral appraisal value

#### 3.2. Analysis of unsecured portfolio segment

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

Scope's base case recovery amount and timing assumptions are slightly higher, calculated using recovery vintage data on the performance of peer transactions with comparable distributions by geography and asset type. The recovery vintages were recalculated based on loan size bucket and borrower status. Scope has applied a 19% rating-conditional recovery rate haircut for the analysis of class A notes. The special servicer's ability, compared to other special servicers and banks, has also been considered in the analysis.

Scope's 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 4.1 years as of the cut-off date<sup>3</sup>.

# Figure 11: Unsecured portfolio's expected recoveries in business plan vs Scope assumptions



Sources: Special servicer's business plan and Scope Ratings

Unsecured portfolio analysis is based on statistical data

<sup>&</sup>lt;sup>3</sup> Scope's analysis used 3.1 years, reflecting a qualitative adjustment driven by the special servicer's superior ability to treat unsecured loans compared to an originator.



## 4. Portfolio characteristics

Further detail on key portfolio characteristics as of 1 April 2018 is provided below. Percentage figures refer to gross book value, unless otherwise stated.

#### 4.1. Eligible loans

Scope is satisfied with the representations and warranties on receivables provided by the originator as they generally align with those of peer transactions rated by Scope. 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, with the exception of three foreign corporate residents.

Corporates and individuals represent 96.6% and 3.4% of the pool, respectively. The share

of secured individual borrowers (2.4%) is only marginal. Scope gives partial credit to residual claims from individuals after security enforcement for the reasons given in the

The relatively small amount of first-lien secured loans (30.4%) is negative. Scope has

assumed that recovery proceeds from junior-lien secured loans (2.4%) will be the same

- Financings secured by mortgages are backed by real estate assets located in Italy.
- Borrowers are not employees, managers or directors of the originator.

Figure 13: Loan type

#### 4.2. Detailed stratifications

#### 4.2.1. Borrower type

as for unsecured loans.

previous section.

Share of secured individual borrowers is only marginal

**Customary eligibility criteria** 

# Small share of first-lien secured loans is credit-negative

#### Figure 12: Borrower type



Geographical concentration in the north is credit-positive

### 4.2.2. Geographical distribution

The locations in the portfolio should positively affect the level and timing of recovery proceeds, because the collateral and court proceedings are concentrated in Italy's northern and central regions and metropolitan cities. These regions benefit from the most dynamic economic conditions in Italy, typically reflected by more resilient property values (see Figure 8) and, in general, the most efficient tribunals. The latter is not reflected in the transaction's court group distribution, which is skewed towards the average efficient groups (compare Figure 10 with Figure 15).



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#### Figure 14: Collateral location

# Figure 15: Court group distribution of secured loans with started proceedings

Sources: Transaction data tape; calculations by Scope Ratings

80%

#### 4.2.3. Collateral type

Higher liquidity stresses applied to industrial properties

Collateral is composed of industrial (32.4%), residential (29.2%), commercial (19.5%), land (4.8%) and other non-residential assets (14.1%). The relatively large share of industrial properties is negative for the transaction given that such assets are less liquid, reflected in Scope's higher fire-sale discount assumptions (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 Scope's recovery rate assumptions for each loan-to-value bucket (under Scope's base case and the rating-conditional stresses for the analysis of the class A notes). For secured loans this results in a weighted average recovery rate of i) 59.4% under Scope's base case, and ii) 54.8% under the class A rating-conditional stress.

All else equal (e.g. for two portfolios with equivalent loan-to-value ratios on an aggregated basis), collateral is less beneficial if its value is skewed towards low loan exposures. This is because, on a loan-by-loan basis, recovery proceeds are capped by the minimum of

# Recovery rate assumptions reflect portfolio's LTV distribution



Ageing of unsecured portfolio

reduces expected recoveries

the loan's gross book value and mortgage value. This partly explains why recovery rates flatten at low loan-to-value buckets<sup>4</sup>.

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



#### Sources: Transaction data tape; calculations by Scope Ratings

#### 4.2.5. Loan seasoning

The weighted average time since default is around 4.1 years for unsecured exposures<sup>5</sup>. The pool's ageing reduces the expected recoverable amount of unsecured loans significantly, since most recoveries are concentrated in the first years after a default, according to historical vintage data.



#### Figure 18: Unsecured portfolio seasoning distribution as of cut-off date

#### 4.2.6. Borrower status

Figure 19 below shows the main legal proceedings for each loan (one loan can have several), as assumed by Scope based on the transaction's data tape. About 1.2% of the

<sup>&</sup>lt;sup>4</sup> Another reason is that syndicated loans are concentrated in the low LTV buckets for this portfolio. The reported LTVs of syndicated loans are downward-biased because the loan amount reflects only the syndicated percentage whereas the appraisal reflects the total collateral value.

<sup>&</sup>lt;sup>5</sup> Scope used 3.1 years in its analysis, reflecting Scope's qualitative adjustment of the superior capacity of the special servicer to treat unsecured loans compared to an originator.



loans have either no ongoing legal proceeding or the nature of the proceeding is unknown. Scope has conservatively assumed that such positions will fall into bankruptcy.

Bankruptcies result in lower recoveries than non-bankruptcy proceedings

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 rather than maintaining borrowers as a going concern.

#### Figure 19: Borrower status assumptions



Sources: Transaction data tape; calculations by Scope Ratings

#### 4.2.7. Recovery stage of secured exposures

A relatively high portion of the secured loans is in auction or already in court distribution stage, which partly explains the relatively short expected weighted average life of portfolio collections. Figure 20 below shows the stage of legal proceedings for bankruptcies and non-bankruptcies in relation to secured loans.





Sources: Transaction data tape; calculations by Scope Ratings

High share of proceedings in later stages drive relatively short recovery timing assumptions



	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:
	<ol> <li>Servicer fees and other issuer counterparty fees, taxes and transaction expenses (estimated initial annual ongoing fees of EUR 350,000, excluding servicing fees)</li> </ol>
	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 200,000)
	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
	<ol> <li>Interest on class B notes (6-month Euribor + 8%, capped at 8%) provided no subordination trigger is breached</li> </ol>
	10.Principal on class A notes
	11.Class B interest, if any interest is above the 8% cap provided no subordination trigger is breached
	12. Class B interest, if any class B subordination trigger is breached
	13. Principal on class B and a portion of deferred servicer performance fees, if any
	14. Other junior payments and a portion of deferred servicer performance fees, if any
Full deferral of class B interest is unlikely	Class B subordination triggers may be relatively ineffective at protecting the 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 interest amounts due and unpaid at the preceding payment dates will be paid senior to class A principal. The subordination of the class B interest component will be triggered if i) the cumulative collection ratio <sup>6</sup> falls below 85%, and ii) the present value cumulative profitability ratio <sup>7</sup> falls below 85%.
Scope's ratings do not address the GACS guarantee	The GACS guarantee ensures timely payment of interest and the ultimate payment of principal by final maturity. Scope's 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-timely class A interest payment would trigger accelerated waterfall	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
Alignment of servicer and noteholder interests	<b>5.2.1. Servicing fees</b> 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

<sup>&</sup>lt;sup>6</sup> '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.

<sup>&</sup>lt;sup>7</sup> 'Present value cumulative profitability ratio' is defined as the ratio between i) the sum of the present value (calculated using an annual rate of 3.5%) 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.



noteholders. Incentive fees constitute most of the expected servicing fees.

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 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.

- Haircut/increase on servicing fees upon the closure of a position: On the payment date in which a position is closed, servicing fees may increase or decrease by up to 15% depending on the final value of the present value profitability ratio of the closed position.
- Payment subordination of servicing fees: Based on the present value profitability ratio, a portion of the servicing fees may be paid on a more junior position in the order of payments, either together with the class B principal payments or with the junior notes' principal payment.

#### 5.2.2. Servicer monitoring

An overview of the servicer's activities and calculations, prepared by the monitoring agent (Securitisation Services S.p.A.), mitigates operational risks and moral hazard that could negatively impact the interests of noteholders. 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 back-up servicer in the event of a servicer termination event and, as the monitoring agent, would also appoint a suitable 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 consistent underperformance from the sixth collection period.

#### 5.3. Liquidity protection

A cash reserve calculated as 4% of the balance of class A notes at issuance, with a yield of 1.5% p.a., will be funded at closing through a limited-recourse loan provided by Banca Nazionale del Lavoro S.p.A..

Monitoring function protects noteholders' interests

Back-up arrangements mitigate servicing disruption risk

Cash reserve protects liquidity of the senior noteholders



The cash reserve will amortise senior to the class A with no floor during the life of the transaction. The target amount of cash reserve at each payment date will be equal to 4% of the outstanding balance of the 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

On the asset side, 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 class A notes and six-month Euribor plus a 8% fixed margin on class B notes.

An interest rate cap with progressively increasing strikes (Figure 21) and a notional balance cap (Figure 22) partially mitigate the risk of increased liabilities on the class A notes due to a rise in Euribor.

A delay in recoveries beyond Scope's stressed recovery timing vector would increase interest rate risk exposure, as it would widen the gap between the transaction's interest rate cap notionals and the respective outstanding principal of class A notes (Figure 22). For the analysis of the class A notes, Scope stressed the Euribor forward curve, as shown in Figure 21.



#### Figure 22: Cap notional vs outstanding class A notes



Sources: Transaction documents, Bloomberg, and Scope Ratings

#### 6. Cash flow analysis and rating stability

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

Scope's ratings reflect expected losses over the instrument's weighted average life

Scope has 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 initial annual senior fees of about EUR 350,000 (including VAT). Scope has considered the reference rate payable on the notes based on the six-month Euribor forward curve, considering the progressive cap rates of the swaps.

The BBB+ $_{SF}$  rating of the class A notes considers the expected loss over the instrument's weighted average life and commensurate with the associated expected loss level as per the idealised expected loss table in Scope's General Structured Finance Ratings Methodology.

mitigate interest rate risk under a recovery timing stress

Cap notionals do not fully



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

For class A, the following shows how the results negatively 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 two years, zero notches.

### 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 agency's 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 Nazionale del Lavoro S.p.A., the originator and seller (in terms of representations and warranties, and eventual payments to be made by the borrowers), and provider of the limited-recourse loan; ii) Prelios Credit Servicing S.p.A., the servicer; iii) Securitisation Services S.p.A., the back-up servicer, corporate services provider, calculation agent, monitoring agent and noteholders' representative; iv) BNP Paribas Securities Services (Milan Branch), the issuer's account bank, agent bank, cash manager, and principal paying agent; and v) BNP Paribas SA, the cap counterparty. In order to assess counterparty risks Scope has taken into account its public rating on BNP Paribas (AA-/S1) the parent company of BNP Paris Securities Services and Banca Nazionale del Lavoro S.p.A. as well as publicly available ratings. In Scope's view, none of these exposures limits the maximum ratings achievable by this transaction.

The issuer's accounts will be held at BNP Paribas Securities Services, Milan Branch. Scope has factored in counterparty replacement triggers implemented in the transaction into its analysis.

There is a rating trigger for the replacement of the account bank at loss of BB/S-3 if rated by Scope, and a replacement must be found within 30 calendar days.

The cap agreement contains a replacement trigger at BB by Scope and a collateral trigger at loss of BBB by Scope. Posting of collateral will be marked to market plus a buffer detailed in the cap agreement.

Eligible investments are subject to minimum rating threshold depending on maturity.

#### 8.1. Servicer disruption risk

A servicer disruption event may have a negative impact on the transaction's performance. The transaction arranges for the servicer's monitoring, back-up and replacement, together with payments based on estimates 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 by the 10<sup>th</sup> business day of the following calendar month.

No mechanistic cap

Counterparty risk does not limit the transaction's rating

Limited commingling risk



#### Limited claw-back risk

#### 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 duly authorised representative, and iii) a certificate from the bankruptcy court (tribunale civile – sezione fallimentare), if applicable, confirming that the originator is not subject to insolvency or similar proceedings. This mitigates claw-back risk as the issuer can prove it was unaware of the issuer's insolvency as of the transfer date.

Assignments of receivables made under the Italian Securitisation Law are subject to clawback in the following events:

i) pursuant to article 67, paragraph 1, of the Italian Bankruptcy Law, if the bankruptcy declaration of the relevant originator is made within six months from the purchase of the relevant portfolio of receivables, provided the receivables' sale price exceeds their value by more than 25% and the issuer cannot demonstrate it was unaware of the originator's insolvency, or

ii) pursuant to article 67, paragraph 2, of the Italian Bankruptcy Law, if the adjudication of bankruptcy of the relevant originator is made within three months from the purchase of the relevant portfolio of receivables, provided the receivables' sale price does not exceed their value by more than 25% and the originator's insolvency receiver can demonstrate that the issuer was aware of the originator's insolvency.

#### 8.4. Enforcement of representations and warranties

The issuer will rely on the representations and warranties, limited by time and amount, provided by the originators in the transfer agreement. If a breach of a representation and/or warranty materially and adversely affects a loan's value, the originators may be obliged to indemnify the issuer for damages within 10 business days of the notification. However, the total indemnity amount is capped at 5% of the portfolio purchase price and can only be paid for claims made within two years of the closing date. In addition, the minimum claim is EUR 250,000 on a portfolio basis, and EUR 5,000 on a single loan basis.

Listed below are the key representations and warranties on claims and real estate assets:

#### Receivables

- All receivables are valid, existing and enforceable (except for effects deriving from the eventual failure to apply interest as set forth in the relevant agreement due to the application of anti-usury legislation).
- Every mortgage has the rank indicated in the database and is not subject to any procedure that could change this rank.
- Information provided by the originators in the transaction data tape (including gross book value, collateral value and mortgage lien, among others) is true, complete and accurate.
- The transfer of all receivables is valid and without limitation.
- All receivables are free from encumbrances.
- No claims may be set off against any receivable.
- All loans have been entirely issued.
- All loans are denominated in euros.
- All loan agreements are governed by Italian law.

Representations and warranties limited by time and amount



#### Debtors

- All debtors are reported by the originator as defaulted (in sofferenza) to the Italian Credit Bureau (Centrale Rischi) of the Bank of Italy.
- Bankruptcy proceedings are ongoing as of the portfolio cut-off date.
- The borrowers are not employees, managers or directors of any of the originators.
- Each claim corresponds to the entire debt relationship ascribed to the relevant borrower.

#### Mortgages

• All mortgages are backed by real estate assets located in Italy.

#### Missing representations (typical for NPL transactions)

- No mortgages will expire within 60 calendar days after the transfer date.
- The borrowers are i) individuals residing or domiciled in Italy, or ii) entities incorporated under Italian law with a registered office in the country. Three corporate borrowers in the portfolio are not incorporated in Italy but in the USA, Luxembourg and Switzerland, which could impede the recovery of unsecured non-Italian assets. Scope has assumed zero recoveries for unsecured positions relating to these borrowers (the impact is negligible).
- Real estate assets charged with a mortgage have a valid insurance policy covering fire, explosions or lightning for an amount at least equal to the outstanding debt of the relevant receivable.
- The SPV entered into an umbrella insurance after the transfer date but before the closing date.

#### 9. Legal structure

#### 9.1. Legal framework

The transaction documents are governed by Italian law, whereas English law governs the interest cap agreements 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

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

#### 10. Monitoring

Scope 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 Scope has applied its General Structured Finance Rating Methodology and Methodology for Counterparty Risk in Structured Finance, both available on www.scoperatings.com.

On 25 July 2018, Scope published a dedicated methodology to analysed non-performing loans ABS – the proposal is available on www.scoperatings.com. Scope does not expect that this proposal, under its current, form shall affect the rating assigned to the class A of Juno 1 S.R.L.

Transaction governed by Italian law

Continuous rating monitoring

# I. Summary appendix – deal comparison

Transaction	Juno 1	BCC NPLS 2018	2Worlds	4Mori Sardegna	Aragorn NPL 2018	Red Sea SPV	Siena NPL 2018	Bari NPL 2017	Elrond NPL 201
losing	Jul-18	Jul-18	Jun-18	Jun-18	Jun-18	Jun-18	May-18	Dec-17	Jul-17
riginators	BNL	ICCREA	BPS, BDB	Banco di Sardegna	Creval	Banco BPM, BPM	MPS	BPB, CRO	Creval
laster servicer	Prelios	Prelios	Cerved	Prelios	Credito Fondiario		Credito Fondiario	Prelios	Cerved
pecial servicer	Prelios	Prelios	Cerved	Prelios	Cerved, Credito Fondiario	Prelios	Juliet, Italfondiario, Credito Fondiario, Prelios	Prelios	Cerved
neral portfolio attributes									
oss book value (EUR m)	880	1,009	968	900	1,676	5,113	23,939	345	1,422
umber of borrowers	731	2518	3,956	11,412	4,171	12,651	79,669	1,565	3,712
umber of loans	2787	5359	13,234	20,098	8,289	33,585	545,939	4,569	6,951
A seasoning (years)	3.0*	2.6*	2.7*	4.8*	2.5	3.8	4.4*	4.5	3.7
(A seasoning (years) - unsecured portfolio	3.1*	2.9*	3.2*	6.4*	3.2	3.5	4.8*	N/A	N/A
/A LTV buckets (% or secured portfolio)									
ucket [0-25]	3.5	4.3	2.8	5.7	2.0	2.3	5.7	N/A	3.6
ucket [25-50]	7.6	6.8	13.0	14.6	4.2	8.1	12.4	N/A	11.1
ucket [50-75]	14.3	12.5	17.9	21.8	8.2	14.7	16.8	N/A	13.7
oucket [75-100]	16	15.1	15.8	20.4	13.9	18.1	17.0	N/A	19.6
ucket [100-125]	14.7	11.8	14.5	12.8	22.3	16.7	13.4	N/A	24.6
ucket [125-150]	6.3	7.7	7.5	4.0	17.9	12.0	8.3	N/A	8.6
ucket [150-175]	5.3	6.4	4.9	1.8	11.9	6.6	5.3	N/A	4.8
ucket [175-200]	5	6.1	6.6	4.4	3.7	4.8	3.9	N/A	1.6
ucket > 200	27.3	29.3	17.1	14.5	16.0	16.7	17.1	N/A	12.5
sh in court (% of total GBV)	7.2	24	8.5	18.3	0.5	3.2	N/A	N/A	2
oan types (% of total GBV)									
cured first-lien	30.4	70	53.1	56.1	67.3	70.6	41.6	53.6	66.4
ecured junior-lien	2.4	0.9	0	0.6	8.1	1		2.5	7.6
nsecured	67.2	29.1	46.9	43.3	24.6	28.4	58.4	43.9	26.0
ndicated loans		6.1	3.8	3.3	1.8	1.4	5.7		
ebtors (% of total GBV)									
dividuals	3.4	14.3	26.4	24.4	9.9	28.4	19	12	12.7
orporates or SMEs	96.6	85.7	73.6	75.6	90.1	71.6	81	88	87.3
ocedure type (% of total GBV)	2010								
ankrupt	71.5	62.7**	29.3	39.1	55.0	49.4	36.6	46.5	57.6
on-bankrupt	28.5	37.3	70.7	60.9	45.0	50.6	63.4	53.5	42.4
her	2010		-						
ot started		-	-		-			-	
prover concentration (% of total GBV)									
op 10	8.6	6.7	3.6	8	8.3	1.8	2.1	28.2	13.4
p 100		29	18.1	27.7	39.5	9.1	9.5		42.4
ollateral regional concentration (% of total appraisal value)	34.4	23	10.1	27.7	33.3	5.1	3.3	69	42.4
	42.0	72.4	43.5	1.2	58.5	67.8	35.0	10.2	(1)
orth	43.9	19.5	45.5	1.3	18.4	20.7	35.9	18.3	61.6 14.6
buth	21.3	8.1	5.2	87.4	23.1	11.4	28.1	67.6	23.8
ollateral type (% of total appraisal value)		20.2		54.3	42.4	54.0	20.2	42	22.6
esidential	29.2	39.3	44.4	51.3	43.4	54.8	28.2	43	32.6
ommercial	19.5	29.5	24.6	23.7	22	15.4		40	32.4
dustrial	32.4	11.2	10.5	11.3	15.3	9.4	71.8		23.2
nd	4.8	13.7	6.6	6.2	0.0	8.6		18	8.7
her or unknown	14.1	6.3	13.9	7.6	19.3	11.8			3.4
luation type (% of total appraisal value)									
ll or drive-by	10.2	68.4	79.5	38.8	96.1	74.0	10	96.31	70.8
sktop	3.6	5.4	12.0	40.0	1.2	14.5	65		4.0
υ	13.4	12.1	8.5	20.5	2.7	11.5	15	3.69	23.6
her	72.8	14.1		0.6	0	0	10	0	0.5
cured portfolio procedure stage (% of total appraisal value)									
itial	54.9	73.6	75.6	61.2	66.6	64.4	52.6	55.5	36.1
υ	11.8	11	6.3	18.3	23.4	9.1	5.4	14.2	10.7
iction	30.8	11.5	16.9	20.5	4.7	21.3	35.2	26.5	36.4
stribution	2.5	3.8	1.2	0	5.5	5.2	6.7	3.8	16.8
mmary of assumptions (BBB rating-conditional stress)									
maining lifetime recovery rate (%)									
cured (=net LTV after all stresses)	52.1	50.3	65.5	66.2	48.3	62.8	58.6	51.8	61.7
secured	10.4	13.5	14	9.9	16.8	12.3	9.2	11.1	13.7
tal	24.1	39.6	41.4	41.8	40.6	48.0	0.0	33.1	47.1
eighted average life of collections (years)									
cured	5.4	8.2	6.8	7.2	7.9	6.8	N/A	N/A	4.8
secured	4.2	4.5	4.7	4.2	4.2	4.1	N/A	N/A	3.1
tal	5.1	7.8	6.4	6.9	7.9	6.6	N/A	N/A	4.6
uctural features									
uidity reserve (% of class A notes)	4.0	5.0	4.05 (% of A and B)	4.9 (% of A and B)	5.0	4.375 (% of A and B)	3.5	4.0	4.0
iss A Euribor cap strike	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%
iss A curbor cap strike	0.070-6.370	0.378-2.378	0.370-1.2.370	0.370-1.2.370	078-01478	0.378-2.078	0.3-3.076	0.1078	0.3076
of GBV	14.2	27.0	28.8	22.2	30.5	32.5	12.1	25.3	33.0
edit enhancement	14.2 85.8	73.0	71.2	77.8	69.5	67.5	87.9	74.7	67.0
	85.8	/5.0	/1.2	//.8	09.5	C.10	67.9	/4./	67.0
iss B	2.0	2.0	2.0	10	40	2	25	2.1	2.0
of GBV	2.9	3.0	3.0	1.2	4.0	3	3.5	3.1	3.0
edit enhancement	82.9	70.0	68.2	76.6	65.5	64.5	84.4	71.6	64.0
nal rating			0.11		0	PC -	007	200	
ass A	BBB+	BBB-	BBB	A-	BBB-	BBB	BBB+	BBB	BBB-
ass B	NR	B+	B	BB-	В	NR	NR	B+	B+

The weighted average seasoning includes Scope's qualitative adjustment driven by the special servicer's superior capacit
 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.



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