STRUCTURED FINANCE RATING CRITERIA

GLOBAL COLLATERALISED LOAN OBLIGATIONS ('CLO') RATING CRITERIA

This is an update to the methodology previously published in February 2020.

There are no material changes and as such no rating impact.

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I. INTRODUCTION

ARC Ratings' ('ARC') Global Collateralised Loan Obligations ('CLO') Rating Criteria (the 'Criteria') apply to managed transactions comprising granular and diverse pools of assets, typically broadly syndicated loans or loans to small and medium sized enterprises ('SMEs'). Whilst the exact definition of SMEs may vary per jurisdiction and in line with the European Union's definition, an SME may also include self employed individuals, including artisans, sole traders and entrepreneurs, as well as small, medium sized enterprises and micro businesses. ARC will consider all these types of entities as SMEs within its CLO rating analysis.

CLOs typically have three distinct liability tranches: senior, mezzanine and subordinated/equity. The senior tranche has priority of payment before the mezzanine and the subordinated/equity tranche is the 'first loss piece'. The respective size of the senior, mezzanine and subordinated/equity tranches plays an important role in the individual tranche ratings' determination given the significance of subordination towards the available credit enhancement in a CLO transaction. Under a CLO structure that has super senior, senior, mezzanine and subordinated bonds, collateral principal is first paid to the super senior bonds (unless there is provision for pro rata payment of tranches, subject to meeting specified performance tests), followed by the senior, mezzanine and subordinated bonds. Collateral losses of interest and/or principal are typically absorbed first by excess spread, then by the lowest rated tranches and then by the more highly rated tranches, in reverse order of payment priority. Where there is provision for pro rata payment of tranches (as opposed to only sequential payment) typically overcollateralisation (OC) and interest coverage (IC) tests must be passed for interest to be paid to the individual tranches. If the tests are failed, interest and principal that would have been paid to the junior tranches will be diverted to the senior tranche. Cash diverted under the interest waterfall may be used to acquire additional assets or to pay down the senior tranches until the OC and IC tests are passed.

The majority of CLO transactions are managed by a Collateral Manager, therefore an assessment of the Collateral Manager's quality and performance is crucial as it services the portfolio and may also execute purchases and sales in/out of the transaction, subject to documented covenants.

The Criteria provide an overview of how ARC analyses CLO transactions. Whilst the Criteria apply globally some countries and specific transactions may require additional actions or deviations, in which case this will be disclosed in the transaction specific report. These Criteria address timely payment of interest as well as ultimate repayment of principal.

II. RELATED RESEARCH

This Criteria report should be read in conjunction with ARC' Global Structured Finance Rating Methodology, available on www.arcratings.com.

III. ANALYTICAL APPROACH

There are many aspects that make up ARC' analysis of a CLO transaction. These are discussed in further detail throughout this report. A list of data requirements can be found in Appendix A. The key steps of the analysis however, are:

i. Evaluation of the quality and likely performance of the loan originator, Servicer and Collateral Manager.

ii. Analysis of the loan obligations to be included in the pool in respect of their current rating, performance, concentration and correlation.

iii. Review of the performance data of the loan originator with respect to defaults and recoveries.

iv. Calculation of the annualised probability of default ('PD') of the pool as well as the stressed recovery rates at each rating level.

v. Using the information in iv) above to then calculate a lifetime pool default rate for each rating level (also this known as the Stressed Default Rate). This Stressed Default Rate is based upon the calculated PD as well as the assets' concentration and correlation with respect to tenor, geography and industry.

vi. Do cash flow analysis. Such analysis will take into consideration default timings, stressed recoveries, recovery timings and interest rates. This information will be used to calculate a 'Break Even Default Rate' for each rated tranche. This is the percentage of the portfolio collateral that can default without the respective tranche experiencing a loss. ARC will compare the Break-Even Default Rate to the Stressed Default Rate in order to accord a rating in line with the documented transaction structure.

vii. Documentation review, ARC expects to receive full transaction documentation as well as legal and tax opinions for review.

RATINGS OF ASSETS

ARC's preference is for an ARC' rating on the underlying assets to indicate the implied hypothetical default probability, however where an ARC's rating is not available, ARC will use the ratings assigned by a set of Credit Rating Agencies ('CRAs') considered relevant by the rating panel (in case where multiple ratings are available the second best rating will be used). ARC will only notch (i.e. adjust) these ratings if it has a different view with respect to the methodology applied to determine the ratings. Where such rating is on Negative Outlook, ARC may notch down one notch from the existing rating, and if the rating is on Negative Watch ARC will notch down by one notch. If no rating exists, ARC may carry out a credit assessment or conduct a mapping from an originator's internal rating scale. The Collateral Manager is required to regularly, or as events warrant, provide ARC with relevant information to allow it to update its credit assessment as necessary. In the absence of such information it will not be possible to maintain the credit assessment.

IV. DEFAULT AND RECOVERY ANALYSIS

DEFAULT ANALYSIS

The definition of default, as applied to the underlying loans, can vary per jurisdiction and even per asset type, however a default is typically defined as when a borrower fails to pay after an applicable grace period. The standard definition of default is defined as 90 days after payment was contractually due.

ARC's model will take account of the asset life and asset correlations when calculating the Stressed Default Rate. The model will calculate a distribution of scenarios based upon varying rating levels. Stress factors are the result of the analysis conducted on publicly available single-B corporate default market data, with additional stress applied to determine the stress factors applicable to higher ratings.

ARC will analyse the expected lifetime pool defaults and compare these against available credit enhancement at various stressed rating levels. Credit enhancement can appear in different forms such as OC, subordination, excess spread and guarantees. Credit enhancement is a key factor in a structure as it is the mechanism that provides protection against losses from the underlying pool. Credit enhancement for the transaction should be proposed by the arranger through the capital structure. ARC will then, in most instances, calculate an expected loss rate to determine the appropriateness of the credit enhancement proposed, as well as perform cash flow modelling to test the level of availability of cash flows and credit enhancement in a stressed rating scenario.

CORRELATION AND CONCENTRATION

Typically for CLO transactions ARC expects to be presented with a granular, highly diversified pool of assets. ARC will apply positive or negative factors within its model to account for correlation and concentration. Where applicable these typically relate to industry and geographic correlations. ARC determines industry correlation by grouping the assets into 26 distinct industries (see Appendix B: Corporate Correlation). The industry grouping allows the identification of individual industry concentrations, where ARC can then calculate the levels of correlation and their respective impact. Where the portfolio is not particularly granular or diversified ARC may apply more stringent stresses to account for this.

ASSET LIFE

The life or tenor of an asset is considered in the analysis and is a key determinant in the establishment of a base case. Generally, if the pool is static the asset life will be the Weighted Average Life ('WAL') of the pool after factoring in each asset's amortisation schedule. For revolving pools, this is not so straight forward. Typically, for a revolving pool, the revolving period will be added to the WAL.

RECOVERY ANALYSIS

ARC Ratings analyses loan-by-loan data for CLO transactions. Recoveries from defaulted loans form a key part of this analysis. International rating agencies' studies indicate that the average recovery rate on defaulted corporate senior unsecured debt obligations is approximately 40%. Note must be taken that the data supporting these studies is mainly derived from observations from the US market and other developed markets where rated debt issuance typically takes place. For other jurisdictions, lower average recovery rates may be expected, particularly if such jurisdictions have less developed legal systems and/or where practical enforcement of creditors' rights is deemed sub-optimal. In addition, a corporate that has ceded the vast majority of its assets as security for debt obligations will typically have a lower average senior unsecured debt obligation recovery rate. Recovery rates will be estimated on a case by case basis by an ARC rating panel.

Recovery timing is also a key factor in the analysis. This tends to vary per asset type and per jurisdiction. ARC will review timings with respect to current market practice, as well as the transaction documentation, and will assess if the Servicer/Collateral Manager is considered able to recover upon the underlying assets efficiently. It is common for there to be a lag in respect of timing of recoveries. This lag is typically estimated at around 15 months but will depend on the underlying asset type and/or jurisdiction. This will be reviewed on a case-by-case basis.

V. CASH FLOW ANALYSIS

ARC will analyse the cash flows of the transaction in order to determine if a tranche can meet its interest and principal payment obligations at a given rating level taking account of excess spread. Principal collections based upon amortisation schedules are considered as well, and these will also include default and recovery assumptions. ARC will model the cash flows to accurately reflect the priority of payments and transaction covenants defined within the transaction documentation. Payments may be pro rata or sequential and can vary dependent upon compliance or breach of certain trigger tests. The cash flow model will incorporate any OC or interest coverage tests that divert cash flows to more senior tranches, as well as reflect fees and senior costs and expenses of the transaction that may be paid out ahead of the note holders.

ARC expects to see a cap on senior fees and expenses because, if these are uncapped, they pose a potential risk to the transaction if paid out ahead of note holders.

VI. POOL COMPOSITION

Pools are expected to be granular and diversified. Where they are more concentrated, additional stresses may be applied through the analysis. ARC will typically analyse a worst-case pool. A worst-case notional pool is a portfolio that is 'constructed' by assuming the least conservative limits of the transaction's covenants and portfolio guidelines apply whilst for static pools, the modelling reflects the characteristics of the actual portfolio rather than a notional one. CLO pools can be revolving or static. Pool composition is reviewed at the initial rating as well as on a continuous basis. Factors that may impact the analysis are the geographic concentration, industry concentration, weighted average life, weighted average spread, asset type and security type, amongst others. ARC will expect to review eligibility criteria for the underlying assets. Also, the tenor of the asset is not expected to be longer than the tenor of the notes it is financing.

ARC also expects to see performance triggers on the pool in relation to delinquency, default, loss and concentration. Again, these triggers will be reviewed at the initial rating as well as on an on-going basis.

VII. COLLATERAL MANAGER REVIEW

ARC will carry out an on-site review of the Collateral Manager to understand its asset management processes. The Collateral Manager plays a crucial role in the transaction and as such, ARC will review the Collateral Manager's historic performance of managing such transactions, organisation, staffing, process and procedures, credit strategy, credit decision process in line with the transaction's features. This will form part of ARC's qualitative analysis. ARC will also look for replacement language within the documentation should the appointment of the Collateral Manager be terminated for any reason to ensure a replacement can be identified and transitioned seamlessly.

ARC may also elect to carry out an on-site review of the Originator/Servicer where a significant portion of the underlying portfolio composition comes from a small number of entities. The on-site review will take a similar form to that of the Collateral Manager and will focus, amongst other things, on policies and procedures, origination, credit granting and servicing in respect of collections. If there is an existing Servicer Quality rating this will be factored into the analysis.

VIII. LEGAL ANALYSIS

ARC expects to receive full transaction legal documentation as well as legal opinions, as discussed in its Global Structured Finance Rating Methodology. ARC may request independent external counsel to review the legal opinion.

A separate tax opinion addresses all relevant taxes that could impact the transaction. Without limitation, this includes a description of the potential impact on the transaction of deferred tax liabilities, withholding tax, value added tax, stamp duty, transfer tax and corporate income tax. ARC is interested to understand how the transaction documents incorporate adequate provision for taxes, where relevant.

There are many risks that can have an impact on the performance of CLO pools and ARC expects these to be sufficiently mitigated. ARC expects counterparties to the transaction to meet its counterparty criteria set out in its Global Structured Finance Rating Methodology. The following discusses some of these risks.

COMMINGLING

ARC expects, amongst others, the legal opinion to identify any commingling risk to which the transaction may be exposed and to describe any mitigants. If the risk is not appropriately mitigated, additional credit enhancement may be necessary to accommodate certain rating scenarios or deductions may be required within the portfolio analysis. This is assessed on a case-by-case basis.

Commingling risk can occur when a Servicer defaults and money that has been paid to such defaulted entity cannot be transferred to the transaction in a timely fashion; this therefore creates a liquidity issue to the transaction. In a worst-case scenario, there is potential risk that asset collections commingle with funds in the insolvency estate of the originator and are lost to the transaction.

SET-OFF

Set-off is another risk prevalent in CLO transactions. ARC expects set-off risks to be mitigated. This is typically done by the implementation of a funded reserve account, although ARC will consider other mitigants in its analysis. Where set off risks are not mitigated, ARC will expect to receive information in respect of deposit balances held at the same deposit taking institutions as well as marked-to-market values of any loans that form part of the transaction composition. The set-off amount can then be calculated and applied in the analysis.

INTEREST RATE STRESS

A transaction may be sensitive to interest rate movements in the event that either the assets or the liabilities earn interest on a floating rate basis. The transaction's account balances may also earn interest on a floating rate basis. ARC therefore runs a sensitivity analysis where certain movements of the relevant floating rate index are assumed. This movement is determined by analysing the historical behaviour of the relevant index and the expectations during the life of the transaction. ARC will disclose in each transaction specific report the relevant assumptions.

A swap may hedge (partly) the interest rate risk in a transaction. In this case ARC adds the swap mechanics to the cash flow model. ARC prefers the transaction's specific swap notional amount to follow the performing asset balance of the transaction.

HEDGING

Hedging, particularly of interest rates but potentially also of currency risk, is important in CLO analysis. ARC will expect appropriate hedges to be in place. Where such hedges are not in place, ARC will look to other proposed mitigants to ensure there is no interest rate or currency risk exposure in the transaction.

REPLENISHMENT

A common feature of CLO transactions is replenishment, i.e. where the Collateral Manager has the ability to sell new assets into the portfolio post-closing, typically these assets are purchased with the proceeds of amortised assets. Replenishment periods typically range from 2 to 5 years. Often there will be a performance trigger in place shortening (ending) the replenishment period if breached. This acts as a safeguard so that the amortisation proceeds from well performing assets are not replaced by assets of lower quality, thus deteriorating the overall quality of the pool from that assessed at transaction closing.

LIQUIDITY

Liquidity is assessed within the cash flow analysis. Liquidity issues can arise in a CLO due to a mismatch in the frequency and quantum of liability payments compared to asset collection proceeds. Liquidity risk may occur even on well performing portfolios. ARC expects liquidity risk to be mitigated, this can be achieved by liquidity facilities, reserve accounts, deferral triggers or other mitigants.

IX. PERFORMANCE MONITORING

Upon each reporting period, typically monthly or quarterly, ARC will review the performance information provided and, for public transactions, ARC will publish a surveillance report. In addition, a formal rating review will be held annually at a minimum, or as events warrant. As noted on Section III ARC expects to receive regularly, or as events warrant, relevant information to allow it to update its credit assessments as necessary.

X. RATING MODIFIERS

Indicative Rating - evidenced by the suffix (ind) – is a rating assigned by ARC to an issuer or an instrument (most commonly structured or project finance debt issues) when the assignment of a final rating is dependent upon the fulfilment of specific contingencies. Any material deviation in the fulfilment of these contingencies from the assumptions underlying the Indicative Rating can have a material impact on the final rating accorded, which accordingly may be fundamentally different to the initial Indicative Rating. Moreover, ARC reserves the right not to issue a final rating. Potential investors are advised to bear this in mind when considering any indicative rating.

As with all other structured finance ratings, CLO ratings are required to include the suffix (sf) following the rating assigned.

XI. QUALIFICATION

Note that ARC is not a legal, taxation or financial adviser and will only provide a credit opinion of the rated securities. For example, a rating does not cover a potential change in the applicable laws nor can it be regarded as an audit. Moreover, ARC is not a party to the transaction documents, nor does it provide legal, tax or structuring advice.

APPENDIX A. DATA REQUIREMENTS

To assess a CLO portfolio ARC expects to receive loan level data including the following information as a minimum:

- Originator's internal credit scoring/external credit ratings accorded.
- Originator's default data.
- Default data on a monthly/quarterly basis (this should include number of loans, as well as par amount of originated per period and number of loans that default per cohort).
- Collection and prepayment data on a monthly/quarterly basis.
- Recovery data.
- Delinquency data split per delinquency bucket for each origination cohort.
- Concentration data including industry and geographic region.
- Interest rates applied.
- Amortisation schedule for assets.
- Weighted average life of assets.
- Proposed triggers and covenants.
- Capital structure.
- Origination date.
- Legal maturity date.
- An overview of the scheduled interest and principal to be received each month on the cut-off portfolio.
- Other relevant data.

In the event that the historical data does not cover a full economic cycle, ARC may also use other sources to complement the originator's information.

In respect of information required to be able to perform a credit assessment:

Required Data (as a minimum):

1. Latest two years consolidated annual accounts (preferably audited).
2. All available Accounts (BS, P&L, CF) since the last audited FYE and updated Financial Information for YTD.
3. Capital structure showing the respective debt position. Description of the seniority of the CLO's position relative to other debt/equity, including if there is a negative pledge clause. For debt or preferred equity, the key terms (e.g. senior/subordinated, secured/unsecured, repayment/maturity terms, interest rate, total amount/GS share and any financial loan covenants).
4. Group structure/ownership chart.
5. Any internal due diligence on a proposed obligor.
6. Principal clients (% of revenue for top 10 clients), client and geographical concentration.
7. Order Book, where applicable.

Additional Data (highly preferable):

1. Consolidated annual accounts for 3-5 years.
2. Latest available management forecasts/budgets.
3. Any other internal corporate profile and performance data.

APPENDIX B. CORPORATE CORRELATION

Code	Industry
1	Banks
2	Mining
3	General Retail
4	Travel & Leisure
5	General Finance
6	Education
7	Life Insurance
8	Municipalities
9	Business Industrial
10	Healthcare Equipment & Services
11	Gas & Water
12	Household Goods
13	Recreational Services
14	Real Estate
15	Support Services
16	Industrial Engineering
17	Food Producers
18	Equity Investment Instruments
19	Industrial Transportation
20	Fixed Line Telecom
21	Sovereigns
22	Software & Computer Services
23	Chemicals
24	Mobile Telecom
25	General Industrials
26	Forestry and Paper

DISCLAIMERS

ARC Ratings, S.A. is registered as a Credit Rating Agency with the European Securities and Markets Authority (ESMA), within the scope of the Regulation (EC) Nº 1060/2009 of the European Parliament and of the Council, of 16 September, and recognised as External Credit Assessment Institution (ECAI).

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Credit Ratings assigned by ARC Ratings are independent and forward-looking opinions on the capacity and willingness of an entity or the capacity of a transaction to make all required interest and principal payments on a given obligation in a timely manner interest and principal. The meaning of each rating category is explained in www.arcratings.com. ARC's credit ratings are based on ARC's published rating criteria.

Ratings do not constitute a recommendation or offer or solicitation to buy or sell any investments that may be mentioned, and are only one of the factors that investors may wish to consider. The use of any rating is entirely at the user's own risk.

In the rating process, ARC Ratings adopts procedures and methodologies aimed at ensuring transparency, credibility and independence, and also that rating classifications are not influenced by conflicts of interest.

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