

Creditreform Rating AG Rating Methodology

# Trade Receivable Securitizations

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Version 2.0

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## 1 Introduction

This methodology outlines Creditreform Rating AG's (henceforth also referred to as Creditreform or CRA) approach to rating trade receivable securitizations. It provides the parties involved, investors and the wider public with the opportunity of developing a deeper understanding of the mechanisms behind its ratings.

Trade receivables are unsecured financial obligations that allow customers to purchase goods or services from a company and pay at a later date. Such instruments are generally non-interest-bearing and have a short term, usually not exceeding 90 days. Each trade receivable backed securitization is unique. Its performance is affected by transaction-specific factors such as underwriting policies, market conditions, the originator's business strategy, counterparty risks, etc. The underlying pool may be exposed to dilution risk due to a number of factors, including returns, refunds, errors in billing, warranty claims, discounts, or non-credit-related reasons that reduce the receivables' face value. Trade receivable securitizations generally feature a revolving structure that allows the issuer to purchase new receivables with the principal collections from older receivables. Due to the short-term nature of trade receivables, the securitized pool is subject to a high turnover rate and may vary significantly from its initial composition, which introduces uncertainties regarding the potential deterioration of the underlying pool's credit quality.

The issued financial instruments are generally structured in tranches, which may be senior or subordinated, and are serviced according to a predefined order of priority. The rating of the debt classes is based—among other factors—on the predefined tranching, which takes into account the respective risk profiles. CRA performs ratings on these instruments but does not size the tranches.

CRA trade receivable securitization ratings are carried out taking into account all available and relevant information in order to quantify the risks of the respective issue. However, the ratings do not constitute a recommendation to buy, sell or hold financial instruments. They are also not legal opinions and do not represent an assessment of the future market values of individual assets or investments.

## **1.1 Changes**

Version 2.0 of the CRA Trade Receivables Securitization Methodology introduces a material change to our analytical framework. The most significant change in this version is the shift from a static portfolio risk analysis, which relied on Monte-Carlo simulation of defaults, to a dynamic loss calculation model incorporating rating stress factors.

## **2 Rating Indication and Process**

### **2.1 Rating Indication**

The aim of the rating process is to efficiently and consistently arrive at a reliable and appropriate risk assessment. The approach focuses on the objective of ensuring the quality and integrity of the rating process, avoiding conflicts of interest, and maintaining consistency in our decision-making process.

A team consisting of at least two rating analysts is responsible for the trade receivable securitization rating. This team of analysts is the client's point of contact throughout the entire rating and subsequent monitoring processes. All data obtained by CRA is treated by the agency with confidentiality. The final authority for the rating assessment is a rating committee.

CRA uses the following rating scale for its structured finance ratings. As the rating system for structured finance (which, among others, includes trade receivable securitizations) differs from the one used for bond and corporate ratings, structured finance ratings will be subscripted with the suffix "sf".

Rating category	Rating	Assessment
AAA <sub>sf</sub>	AAA <sub>sf</sub>	Highest level of credit quality, lowest investment risk
AA <sub>sf</sub>	AA+ <sub>sf</sub>	Very high level of credit quality, very low investment risk
	AA <sub>sf</sub>	
	AA- <sub>sf</sub>	
A <sub>sf</sub>	A+ <sub>sf</sub>	High level of credit quality, low investment risk
	A <sub>sf</sub>	
	A- <sub>sf</sub>	
BBB <sub>sf</sub>	BBB+ <sub>sf</sub>	Highly satisfactory level of credit quality, low to medium investment risk
	BBB <sub>sf</sub>	
	BBB- <sub>sf</sub>	
BB <sub>sf</sub>	BB+ <sub>sf</sub>	Satisfactory level of credit quality, medium investment risk
	BB <sub>sf</sub>	
	BB- <sub>sf</sub>	
B <sub>sf</sub>	B+ <sub>sf</sub>	Moderate level of credit quality, increased investment risk
	B <sub>sf</sub>	
	B- <sub>sf</sub>	
C <sub>sf</sub>	CCC <sub>sf</sub>	Low level of credit quality, high or very high investment risk
	CC <sub>sf</sub>	
	C <sub>sf</sub>	
D <sub>sf</sub>	D <sub>sf</sub>	Insufficient level of credit quality, total loss of investment
NR	Not Rated	Rating temporarily suspended, i.e. liquidation in process

## 2.2 Data Requirements and Preliminary Analysis

As a first step, CRA analyzes the relevant trade receivable securitization structure and gathers pertinent information, including on the economic, business, and legal environment. Documents and portfolio data shall be provided by or on behalf of the originator. In addition to the transaction parameters and data on the pool composition, CRA requests latest historical performance data to form an expectation of the future performance of the underlying pool. This methodology applies a formula-based approach. CRA requires monthly historical performance data, including information on the pool balance of receivables, defaults, delinquencies, dilution, sales, concentrations, etc. Ideally, this historical data should cover the most recent 3 to 5 years. If CRA considers the data obtained insufficient, it may use proxy data to augment the analysis, if appropriate. Furthermore, information related to the originator and servicer of the transaction is analyzed, as is that of other counterparties. Depending on the scope of the

documents provided, plausibility checks are made and, so deemed appropriate, legal opinions will be requested.

### **2.3 Management Meeting**

In the management meeting, the rating analysts discuss the transaction with representatives of the arranger (and, possibly, other parties involved) based on their review of the submitted data and documents. Generally, we raise both qualitative and quantitative issues. CRA's questions may concern: The allocation of responsibilities, operational procedures, and organizational structure at the originator-servicer; the credit standing of the parties relevant to the transaction; the historical track record and performance; credit terms and origination channels; credit scoring, underwriting, and fraud prevention; and the tools and capacities in-place with respect to portfolio management, servicing, account management, and work-out processes. The rating analysts may also inquire about issues more closely related to the trade receivable securitization's structure (e.g., planned hedging instruments, credit enhancement mechanism, or loss and liquidity reserves). If the rating is unsolicited, there may be no management meeting.

### **2.4 Rating Committee**

In a rating committee, the team of analysts assigned to the rating presents their findings. Subsequently, the committee determines the rating, taking into account the results of the quantitative and qualitative analyses. Lastly, CRA publishes the rating—following its classification and commissioning—as either “private” or “public”. A rating with a regulatory background must be commissioned as “public”, which means it must be disclosed to the ESMA authority (but such designation does not imply the rating must be published).

## **3 Rating Methodology**

When analyzing trade receivable securitizations, CRA applies a formula-based approach to assess the appropriate level of credit enhancement needed to cover the main risks from three perspectives: default risk, dilution risk and carrying cost. Trade receivables are usually purchased into a revolving structured pool. Due to the high turnover and frequent changes within

the underlying portfolio, the credit enhancement level is evaluated and adjusted at each payment date. CRA assesses the dynamic credit enhancement from the most recent historical performance. In addition, CRA may apply additional stresses or impose a rating cap if the available performance data is insufficient or incomplete. Section 3.1 will explain the formula in detail.

Besides the assessment of dynamic credit enhancement, the rating of a trade receivable securitization consists of the same analytical steps as with other structured finance ratings, including examining structural, legal/regulatory, and operational risks. In a typical trade receivable transaction, a special purpose vehicle ("SPV") invests the funds raised through the issuance of bearer bonds or other financial instruments (or sometimes via other means such as borrowing) in the purchase of the trade receivables.

In the case of a "true sale" of the receivables, the SPV becomes the owner of the receivables with the right of disposal. In general, the servicer is responsible for cash flow management and debt collection, which includes the encouragement of timely payments as well as the management of delinquencies. The servicer subsequently transfers the cash flows to the SPV. If the transaction incorporates trustees, they will monitor cash flows in the interest of the investors and will usually hold the accounts as well. Due to the revolving nature of the portfolio, the SPV typically intends to make repeated purchases and is therefore reliant on the seller's capability of continued receivables origination.

### **3.1 Dynamic Credit Enhancement Calculation**

This section introduces our formula-based approach for calculating the credit enhancement level using the most recent historical performance data. Given the rapid changes in the underlying pool composition and the varying performance of trade receivables across different individual natures and industries, constructing a fixed expectation of loss risk is challenging. Therefore, in contrast to other structured finance products that utilize static pool analysis and vintage analysis, trade receivable securitization opts for dynamic pool analysis.

Dynamic pool analysis offers several advantages over static pool analysis. By utilizing the most recent historical performance data, it can track performance changes and trends with less

delay and provide deeper insights into the overall credit quality of the transaction. Credit enhancement typically refers to mechanisms like reserve accounts and overcollateralization. To calculate dynamic credit enhancement, CRA considers credit enhancement as reserves to cover the three main risks: 1) default risk, 2) dilution risk, and 3) carrying cost.

$$\begin{aligned} \text{Dynamic credit enhancement} &= \text{dynamic loss reserve} \\ &+ \text{dynamic dilution risk} \\ &+ \text{dynamic carrying cost reserve} \end{aligned}$$

### 3.1.1 Dynamic Loss Reserve

Default risk is one of the most significant risks in trade receivable securitization. The purpose of the dynamic loss reserve is to promptly cover losses when defaults arise. The definition of a receivable default is typically outlined in the transaction documents, often specifying that a receivable is considered to be in default when it is delinquent for a certain time. The dynamic loss reserve is calculated with below formula:

$$\begin{aligned} \text{Dynamic Loss Reserve} &= \text{Loss Ratio} * \text{Loss Horizon Ratio} * \text{Stress Factor} \\ &+ \text{Default Volatility Factor} \end{aligned}$$

The default ratio serves as a proxy for the default amount generated by receivables purchased in a specific vintage. The underlying pool may consist of multiple vintages. The default ratio for one vintage is calculated by adding defaults and write-offs, and then dividing by the receivable purchases that originated in that vintage. In the assessment, the loss ratio is used as an input taking the highest 3-month rolling average default ratio over the most recent 12 months.

The loss horizon ratio represents the number of vintages encompassed in the current portfolio. It is calculated by dividing the cumulative sales originated during the loss horizon by the current non-default and eligible receivable balance. The loss horizon is defined as the average period from when a receivable is purchased into the underlying pool to when it becomes ineligible. This period is the sum of the weighted average payment term and the time a receivable is delinquent but not yet in default.



The loss ratio multiplied by the loss horizon expresses the expectation of future defaults for the current portfolio based on recent performance. CRA applies a stress factor to this expectation, which corresponds to a given rating level. This means that higher ratings are subject to greater stress to ensure they can absorb larger losses. For instance, CRA might apply a stress factor of 2.5 for AAA<sub>sf</sub> level and 1.5 for BB<sub>sf</sub> portfolios. However, each transaction is unique, and CRA may adjust the rating stress factors accordingly. For example, CRA might increase the stress factors if the underlying portfolio has a weighted payment term longer than 90 days. Below is a standard rating multiple matrix, which will be applied in the following dynamic reserve risk assessment.

Rating	Rating Stress Factor
AAA sf	2.50
AA sf	2.25
A sf	2.00
BBB sf	1.50
BB sf	1.30
B sf	1.10

Subsequently, we will add a default volatility factor to the stressed expected default loss, calculated as two times the standard deviation of the most recent 12 monthly default ratios.

### 3.1.2 Dynamic Dilution Reserve

The face value of receivables may be diluted. For instance, the reasons include, but are not limited to, goods returns, warranty claims, and early payment discounts, which can result in a reduction of the principal amount of receivables. CRA investigates the causes of dilution and calculates a sufficient stressed credit enhancement level to cover the losses caused by dilution. Below is the formula used to calculate dynamic dilution reserve:

$$\text{Dynamic Dilution Reserve} = (\text{Dilution Ratio} * \text{Stress Factor} + \text{Dilution Volatility Factor}) * \text{Dilution Horizon Ratio}$$

The dilution ratio is calculated as the dilution amount divided by the receivable purchase amount in the month when the diluted receivable was generated. To ensure consistent expectations regarding dilution risk, we use a 12-month rolling dilution ratio for this calculation. This expected ratio is then multiplied by the stress factor relevant to the specific rating level, as outlined in section 3.1.1.

To account for potential fluctuations, we add a dilution volatility factor to the stressed dilution ratio. This factor is calculated as twice the standard deviation of the monthly dilution ratio. Similar to the loss reserve calculation, we also determine a dilution horizon, defined as the weighted average time from the purchase of a receivable to when it is recognized as diluted. The dilution horizon ratio is then calculated as the dilution amount divided by the cumulative purchases during the dilution horizon.

Some transactions include dilution risk mitigation or hedging strategies, which CRA will take into account in its assessment. In certain cases, the dilution amount is predictable and quantifiable, such as when it is contractually defined in the transaction documents. When CRA assesses such expected dilution amounts, the stress factor may not be applied in the reserve calculation.

### 3.1.3 Dynamic Carrying Cost Reserve

Given that trade receivables are typically non-interest bearing, the credit enhancement mechanisms—such as liquidity reserves, subordination funds, and discount rates applied to the purchase price—are critical to the transaction. These mechanisms not only cover risk losses but also pay for the fees and interest on the note. Therefore, precise estimation of the transaction carrying cost is indispensable.

$$\text{Dynamic Carrying Cost Reserve} = (\text{Senior Cost} + \text{Interest Reserve}) / 360 \\ * \text{Days of Sales Outstanding} * \text{Stress Factor}$$

The carrying cost consists of two main components. The first is the senior costs necessary to keep the transaction operating, including servicing fees, bank account fees, trustee fees, and similar expenses. The second component reflects the interest expenses on the rating objects. Another important input in the function is days of sales outstanding (DSO), which measures

the average number of days for a receivable to be collected from the invoice date. In the formula, the sum of the annual senior costs and the interest reserve is converted to a daily

$$\text{Senior Cost} = \text{Servicer fee} + \text{other fees}$$

amount by dividing by 360.

In the formula, the servicer fee is the larger of our estimates of the current servicer's fee and a backup servicer's fee (including switching costs). This is because the servicer's role is crucial to the transaction, and in the event of a servicer default, no new receivable purchases are allowed, potentially forcing the transaction into an amortization period. Therefore, a backup servicer is commonly included to ensure continuity, but replacing the current servicer can incur additional costs. In the absence of a backup servicer, CRA may apply an additional stress on stress factors to the cost calculation. Other fees, such as trustee fees, administrative fees, and legal and regulatory fees, will also be included in the calculation.

$$\text{Interest Reserve} = \text{Margin} + \text{Base Rate} + \text{Interest Rate Stress}$$

The interest on the rating object typically falls into one of two categories: fixed or floating. Fixed interest rates can be estimated simply by taking the weighted average interest rate of the rating objects. For rating objects with floating interest rates, an additional stress factor will be applied to the base rate, and a floor will be set for cases where the base rate is negative or below the floor. The additional interest stress will be derived from historical base rates over at least one economic cycle, and structured similarly to the rating stress factor: the higher the rating level, the greater the stress applied to the interest.

#### 3.1.4 Concentration Risk

Ideally, trade receivable securitizations are built around well-diversified and granular pools containing a large number of obligors, with each obligor representing only a small percentage of the underlying portfolio. In a rating assessment, CRA will analyze the extent to which a transaction is affected by concentration risks. Significant exposure to a single obligor—or a group of similar obligors—will generally increase the likelihood of substantial default losses. Additionally, portfolio concentration may elevate dilution risk, such as when a large obligor or obligor group opts for early payment to obtain a discount.

A concentration of obligors is not always evident in historical performance data until it causes severe damage. CRA incorporates eligibility criteria for concentration limits and considers characteristics of the underlying portfolio, such as the distribution of obligor creditworthiness, industry, business features, etc., to adjust the dynamic credit enhancement for each rating level. For example, if the underlying pool has a concentration in specific countries, the CRA will refer to the sovereign rating and adjust the stress factor accordingly. If, in CRA's opinion, the pool is likely to contain a disproportionately large share of unrated or low-rated obligors, we will take that into consideration when determining the dynamic credit enhancement, which may be subjected to a floor.

#### 3.1.5 Qualitative adjustment

Some risk factors cannot be quantified and included in the dynamic credit enhancement formula. Therefore, in certain circumstances, qualitative adjustments are necessary and applied in the calculation, such as adjustments to stress factors or the imposition of rating caps. The stress factors can be adjusted upward or downward. In the event of significant potential risk or severe transaction structural weakness, CRA may cap the rating to certain level. For example, if a transaction lacks eligibility criteria to prevent key risks such as default, dilution, maximum average payment term, or concentration limits, the CRA may limit the rating to no higher than a certain rating level. These adjustments will be presented and approved in a rating committee to ensure proper scrutiny and stringency.

#### 3.1.6 Rating Sensitivity

The trade receivable securitization includes a dynamic discount rate applied to the purchase price during the revolving period. This discount rate is computed based on the latest performance data and the risk exposure on each purchase date. Additionally, the eligibility criteria should be designed to mitigate or reduce the key risks to which the portfolio might be exposed. Stop-purchase and early amortization triggers ensure a transition to the amortization period, preventing severe deterioration. With these features in place, the CRA believes that most risk sensitivities affecting transaction performance are largely mitigated.

However, CRA may decide on a case-by-case basis if certain sensitivity tests are warranted.

## 3.2 Transaction Features and Structural Risks

### 3.2.1 Legal Considerations at the Issuer Level

CRA conducts a thorough assessment of the risks associated with the transfer of the receivables to the issuer and evaluates the legal structure of the issuer. Key considerations in this assessment include determining whether there is a "true sale" of the pool of assets from the originator to the SPV. In addition, CRA examines provisions beyond a true sale that protect the SPV from the originator's insolvency, such as separation agreements. In addition, CRA will review the SPV to ensure that it contains valid and enforceable features designed to prevent its own insolvency, including limited recourse, non-petition and subordination criteria.

Our understanding of the presence and effectiveness of such structural characteristics will feed the subsequent quantitative analysis. Note that the transaction documents (term sheet, prospectus, related contracts, etc.) and related legal opinions and documents are the focus of our inspection. These documents are typically prepared with the involvement of specialized lawyers. CRA forms an opinion about them, but no additional legal examination will be conducted. If potential risks related to the transaction's legal structure become apparent, the analysts will state these in their assessment. However, it is important to note that such statements do not constitute a legal opinion of CRA. In addition to transaction-specific legal risks, we examine regulatory risks more broadly. Findings will be taken into account in our issue rating.

### 3.2.1 Eligibility Criteria

Eligibility criteria establish boundaries and limits for purchasing receivables and managing the underlying pool. Due to the high turnover and frequent new purchases during the revolving period, a well-designed set of eligibility criteria is particularly important in trade receivable securitizations to maintain the credit quality of the underlying portfolio. Eligibility criteria may be related to various factors, including the absence of defenses or payment delinquencies, the court of jurisdiction and legal framework, the status and enforceability of the receivables, limits for individual obligor concentrations, geographical or industry concentrations, compliance with the originator's underwriting guidelines, obligor creditworthiness, and interest

rates. Regular monitoring of eligible receivables and implementation of remedy plans are essential. If a receivable is deemed ineligible, it must be repurchased or replaced with an eligible receivable. Failure to execute this remedy can trigger a stop purchase or an early amortization event.

For transactions with poor eligibility criteria such as a lack of restrictions on weighted average maturity, default risk, dilution risk, and concentration risk, CRA may apply additional rating stress or a rating cap in the rating assessment.

### 3.2.2 Early Amortization Events and Stop-Purchase Trigger

Trigger events may help to prevent the credit quality of the transaction from falling below a certain threshold. Well-designed triggers reduce the risk that transactions suffer from a significant loss. Determining the extent to which a trigger serves to protect investors from a deterioration of the quality of the asset pool is therefore clearly relevant to the rating process. Further examples of trigger events include a decline in the credit standing of the originator or servicer, a breach of contractual obligations (covenants), the deterioration of existing collateral (credit enhancement), the concentration of pool composition exceeding predefined limits, and delinquencies and receivables terms (i.e., remaining maturities) exceeding given values.

The consequences of a trigger breach may vary from one transaction to another. In trade receivable transactions, the breach of a performance-based trigger may lead to the acceleration of early amortization. Conversely, if a counterparty fails to maintain a specified credit rating, this may constitute a breach that triggers a replacement of the counterparty or stop receivable purchasing.

As discussed in more detail in section 3.3.1 below, the originator and servicer are key counterparties in trade receivable securitization due to the revolving nature of the receivables. Therefore, it is quite common to see both rating-based as well as non-rating-based triggers in relation to the servicer and the seller. CRA studies the triggers and their implications (as defined in the transaction documents) carefully and considers them during the rating process.

### 3.2.3 Credit Term

CRA will review the documentation and data of the defined credit terms between the obligor and seller in order to obtain details such as due date, pricing, and other relevant conditions. Trade receivables are usually short-term, typically ranging from 30 to 90 days. Long-term receivables may lead to a weighted average maturity of longer than 90 days, which exposes the underlying portfolio to greater uncertainty in performance. The due date indicates the remaining period for the receivable. Pricing can vary depending on the specific terms or industry. For instance, a buyer may receive a 5% discount for early payment, which affects the assessment of dilution risk in the rating process. Late payment terms specify the consequences of not paying an invoice on time, commonly involving penalties or legal actions.

### 3.2.4 Revolving period

The revolving period is a key feature of trade receivable securitizations. Due to the short-term nature of trade receivables, existing receivables mature quickly, necessitating the repeated purchase of new receivables. During the revolving period, the principal collected from old receivables is used to purchase new ones, often at a discount rate. This discount rate is typically calculated based on recent historical performance and aims to cover the transaction's expenses and interest payment obligations.

The seller is bound by eligibility criteria and typically guarantees compliance when transferring new receivables to the portfolio. Additionally, the seller usually commits to compensating for any breach of eligibility criteria, either by repurchasing the non-conforming receivables or by providing an acceptable substitute or remedy. Failure to comply with these criteria can trigger events such as an early redemption event.

## 3.3 Counterparties and Operational Risks

### 3.3.1 Originator and Servicer

The originator—usually a bank or other financial institution—is the initiator of the underlying trade receivables securitization. The originator generates and sells the receivables to the issuer. Due to the short-term nature of trade receivables and the frequently changing portfolio, the performance of these assets is closely tied to the ongoing performance of the originator.

For CRA, the underwriting standards of the originator are a key aspect. Acceptance and quality

criteria that need to be met by the underlying trade receivables, the documentation requirements, and the scoring processes are examined in the rating assessment. Evaluating the originator is crucial. On the one hand, it provides a comprehensive understanding of the methods and policies employed during the origination and underwriting processes, allowing us to gauge the reliability and quality of the assets, which is fundamental for maintaining a robust and well-balanced portfolio. Moreover, it reveals the operational and financial health of the originator, which can directly impact the performance of the securitized assets. On the other hand, assessing the originator provides insights into potential counterparty risks by uncovering their adherence to regulatory compliance and the reliability of their representations and warranties. This evaluation enables us to anticipate risks that may arise from operational shortcomings or legal non-compliance on the part of the originator. CRA will continuously review the originator's performance and profile throughout the life of the transaction.

The servicer is responsible for managing and processing payments from receivables in the transaction. Typically, the servicer is the same as the originator for the single-seller transaction, and one of the main sellers in the multiple-sellers transaction. In addition to the servicing processes and receivables management, the human and technical resources constitute important aspects of CRA's due diligence. The servicer carries out the administration of the receivables, in particular the management of cash flows, debt collections, management of delayed payments, and, if applicable, collateral repossession. Given the revolving nature of trade receivables transactions, there is an increased need for active management by the servicer. The ability of the servicer to effectively handle collections and manage receivables directly affects the losses on the pool of securities. In the evaluation of operational risks, it is necessary to consider the effectiveness of the debt collection processes and the capacities of cash management, as well as the capacity of IT systems involved in debtor management and the quality of internal controlling. Valuable indications related to future performance can be derived from historical data regarding servicing performance and by examining business practices.

A servicer default may have further negative consequences for the transaction. Firstly, following a servicer default, the cash flows from the pool of receivables to the issuer may be delayed, potentially causing liquidity issues. Secondly, a default of the originator-servicer may give rise to set-off or commingling risks, or both, as discussed in the following section.



Due to the critical role of servicer in the trade receivable transaction, it is important to have a backup servicer in place. A suitably experienced backup servicer mitigates the risk of an interruption to the collection process. Transaction documents should explicitly outline the events that result in a servicer termination event and the appointment of a backup servicer. Having comprehensive and reliable data systems is essential to ensure a smooth transfer of the collection responsibilities to the backup servicer.

Similar to the evaluation of the servicer, CRA will conduct thorough due diligence on the backup servicer, if applicable, and include the findings in the qualitative assessment (see chapter 3.1.5).

### 3.3.2 Set-off Risks

Set-off refers to the legal process of netting financial claims and obligations between two or more entities, which may be either business entities or individuals. In the specific case of trade receivables securitizations, a situation in which set-off may occur is when the debtor of a purchased trade receivable holds deposits with the originator-servicer. If the originator-servicer defaults, the borrower may be able to declare a set-off of his claim against the originator-servicer versus his liability from the trade receivable, in turn reducing the outstanding principal amount of the purchased trade receivable.

In evaluating set-off risks, CRA will take into account the likelihood of the originator defaulting, mitigating structural features such as a set-off reserve account (if present), and the pertinent legal environment.

### 3.3.3 Commingling Risks

Following the sale of the receivables to the issuer, the servicer is responsible for managing the receipt of collections on the receivables in its bank accounts. In the normal course of business, these funds are subsequently passed on to the issuer. However, following the bankruptcy of the servicer, it is conceivable the funds collected on behalf of the issuer are not transferred but commingled with the insolvency estate of the defaulted servicer instead. CRA will assess such commingling risks, taking into account the likelihood of a servicer bankruptcy, potential mitigating structural features, as well as jurisdiction-specific legal aspects.

### 3.3.4 Other Counterparty Risks

In addition to the analysis of counterparty risks related to the originator and servicer, we consider the creditworthiness and experience of appointed account banks, trustees, and swap counterparties. Here, we endeavor thoroughly examining all dependencies on the counterparties involved. Counterparty risks arising, e.g., due to the provision of derivatives, credit lines, or financial guarantees constitute risks beyond the credit risk of the pool of receivables. We therefore consider a review of the solvency and credit quality of counterparties such as account banks, guarantors, insurance companies, swap counterparties, and trustees to be an integral part of the rating process.

## 4 Environmental, Social, and Governance factors

Environmental, social, and governance (ESG) factors are included in our rating. If ESG-related risk drivers have a material impact on the rating, we will make that explicit in the internal documentation as well as the rating report instead of accounting for it implicitly through the risk drivers' impact on financial variables. In our view, that approach facilitates transparency and allows us to provide information more granularly.

Within the context of trade receivable securitization transactions, ESG factors may matter at different levels. E.g., it is conceivable that an important counterparty to the transaction is affected by a regulatory risk (i.e., a governance factor); at the same time, it is possible that a risk related to climate change (an environmental factor) matters for the expected performance of the pool of receivables.

CRA provides further details on its approach to ESG-related risks in the basic document "The Impact of ESG Factors on Credit Ratings". This document and the rating methodology related to the issuer-relevant ESG factors are readily available on our website ([www.creditreform-rating.de](http://www.creditreform-rating.de)).

## **5 Continuous Monitoring and Follow-up Rating**

A rating is typically valid for one year. During this period, our team of analysts continuously monitors developments pertinent to the issue. For monitoring purposes, the analysts remain in direct contact with the relevant parties to the transaction while also evaluating relevant information. We strive to ensure, at all times, that the indication provided by the rating is valid. If, during the monitoring period, there is an event with significant effect on the risk profile of the issue, CRA will update its rating.

## Appendix 1: Interest-Rate Stress factor

This section outlines our approach to assess the interest rate stress on a portfolio of trade receivables transactions. Though trade receivable is typically non-interest bearing, the issued instrument can have a floating coupon. This methodology is designed to evaluate how fluctuations in interest rates might affect the carrying cost reserve and the overall financial stability of trade receivables securitizations.

CRA analyzes the historical movements in relevant benchmark interest rates (such as LIBOR, EURIBOR, or other pertinent rates) to determine the potential stress factors. These stress factors are then used to simulate the impact of both sudden and gradual changes in interest rates on the trade receivables securitized instruments.

Depending on the prevailing interest environment, CRA will apply either a relative stress to the current spot reference rate (usually in a high interest environment) or an absolute stress factor (usually in a low interest environment).

In the context of the 1M EURIBOR, CRA typically applies an absolute floor of 2% and a relative stress of 100% for an AAA scenario. Consequently, if the current 1M EURIBOR rate is above 2%, it will be doubled in order to determine the stressed rate. However, if the current rate is below 2%, the stressed rate will be set to the floor rate of 2%.

## Appendix 2: Common Key Eligibility Criteria

Due to the high turnover and frequent new purchases during the revolving period, a well-designed set of eligibility criteria is particularly important in trade receivable securitizations to maintain the credit quality of the underlying portfolio. Below is a common set of key eligibility criteria:

- The obligor is not an affiliate or subsidiary of seller and originator.
- The receivable is not delinquent or defaulted.
- The receivable is not subject of any disputes, counterclaims, repurchase obligations, or set-offs.
- The receivable is not subject to any reduction, cancellation, refund, lien, or defense whatsoever.
- The receivable is for goods and/or services and already delivered or performed in full.
- The receivable has originated in the ordinary course of seller's business to an obligor payable in cash.
- The receivable is fully assignable by the seller and arises under a legal, valid, and binding contract.
- The receivable is denominated and payable in a specified currency; hedges and other mitigations must be in place if foreign exchange or sovereign risk is present.
- The receivable complies with all applicable laws, rules, and regulations.
- The receivable has payment terms consistent with the relevant legal documents and does not exceed specified limits to maintain portfolio characteristics.
- The receivable satisfies all applicable requirements of the seller's credit and collection policy.
- The receivable has a seller that has complied with any representations and warranties as dictated in the relevant legal documents.
- Payments on the receivable are to be made to a permitted collection account.
- The obligor of the receivable has not defaulted or been delinquent on receivables comprising more than a small percentage of the aggregate receivables owed.
- The sale of the receivable does not breach any concentration limits set forth in the relevant legal documents.
- The obligor is domiciled in a specified country, economic area, or region (country concentration limits may apply).