

Creditreform Rating AG

Rating Criteria and Definitions

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Version 1.3

Creditreform 
Rating

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This document (v1.3) updates an older document while preserving its basic methodological approach. Certain statements were more precisely worded. The update was performed in January 2018.

1 Introduction

Over the past 15 years, Creditreform Rating AG (“CRA” or the “Rating Agency”) has become an established European rating agency. In this document, CRA discloses the fundamental elements and principles of its rating process in order to provide the parties involved, investors and the wider public with the opportunity of developing a deeper understanding of the mechanisms behind its ratings. This document will be updated from time to time to reflect changes in our methods and philosophy. The CRA rating methodologies and Code of Conduct can be freely accessed on our web page (www.creditreform-rating.de).

This document describes the fundamental principles and processes that inform, guide and control the CRA rating process independently from the nature of the specific rating object. The basic principles that are disclosed herein define individual steps of a rating process as well as the general rules of how to arrive at a rating. Our analysts have been instructed to comply with these principles at any time. We shall also specify under which circumstances the obligation of complying with the general procedural rules may be suspended, which process steps will take their place and what specific regulations must be applied in these cases to guarantee that the rating process is completed in a systematic and structured fashion.

2 Ratings of Creditreform Rating AG

2.1 What Is a Rating?

Creditreform ratings represent well-informed assessments of a given debtor’s creditworthiness or the credit quality of a given financial instrument. They issue no recommendation of whether or not to purchase, sell or hold certain financial instruments. Neither must ratings be misconstrued as legal opinions or as independent assessments of the rating object’s future market value. Ratings of Creditreform Rating AG take into account all available information that CRA deems relevant for a balanced, professionally and diligently performed assessment of the rating object’s inherent risks.

CRA ratings are future-oriented. They address the question of whether or not a given natural person or legal entity (a company, e.g.) is in an economic position and willing to meet its obligations from the financing arrangement under review (creditworthiness) or to duly service the financial instrument that has been issued, mainly through regular payments of interest and principal (credit quality). Creditworthiness and credit quality are determined by a range of factors that may have different levels of relevance and impact over time and depend on the rating object or on the specific nature of the underlying conditions.

The final rating compresses all rating-relevant information into a single grade on a one-dimensional rating scale. CRA ratings and their underlying rating scales represent a relative classification of the rating objects, which means that the creditworthiness of issuers or the credit quality of financial instruments

that have received higher rating scores have been assessed as superior to comparable rating objects with a lower rating. Beyond this purely ordinal rank order, a rating scale does not imply any fixed association between certain ratings and default probabilities or the extent of potential losses. The historical and empirical default rates of entities in the individual rating categories (which are released in compliance with regulatory requirements) do, however, provide certain reference points.

Ratings require the unbiased and methodical application of a coherent rating methodology. These methodologies need to determine how the analysts are meant to proceed when performing a rating, what the relevant types of risk are for the rating analysis, what information is required to assess these risks and what rating scale will be applied. CRA's rating methodologies are being continuously evaluated and upgraded.

2.2 Rating-Relevant Factors

The creditworthiness or credit quality of a rating object is determined by a wide range of factors that are assigned to different types of risk. In addition to the primary factors that are described in this document, additional, more specific risk factors may be accounted for in the individual rating methodologies.

One key element in the assessment of a given rating object's creditworthiness or credit quality is its specific default risk. This applies to both companies and financial instruments. The assessment is based on the principle of relative ranking, which means that a higher rating score, *ceteris paribus*, identifies a lower default risk. The system is based on the assumption that objects in the highest rating categories will remain stable even under scenarios of high economic stress. Lower rating scores, conversely, represent lower levels of resilience, which increases the risk of a default.

Inasmuch as financial instruments are concerned, any assessment of credit quality must also take into account their rank of seniority within the issuer's capital structure. CRA analyses the structure of the priority of payments – the sequence in which the claims of various creditors will be redeemed – in order to assess which portion of the total cash flow will be available to cover the instrument's contractual payment obligations. It is therefore possible that structurally subordinate financial instruments of an issuer receive lower ratings than comparable instruments of a senior rank.

Of equal relevance in many cases is the anticipated recovery rate in the event of a default. CRA will – especially if the financial instrument under review has been collateralized by different tangible assets or if contractual rights (such as liens) exist – perform recovery ratings in order to establish whether or not existing claims of creditors or investors can still be satisfied in the event of a specific issuer's default. In such cases, the anticipated severity of loss will be one key determinant of the credit quality.

Assessments of creditworthiness or credit quality will also be determined by a wide range of qualitative factors that can differ significantly depending on the rating object under review and the rating class. The importance assigned to specific factors also varies depending on the market conditions and general economic circumstances. The individual rating systems provide more detailed descriptions of the

different rating-relevant factors and of the ways in which they are weighted for the purposes of the ratings.

2.3 Rating Scales

CRA applies different rating scales for different classes of rating objects. For more detailed descriptions of the individual scales and their categories as well as their definitions of what constitutes a default, please see the individual rating methodologies.

2.3.1 Corporate Ratings

Rating category	Rating	Assessment
AAA	AAA	Highest level of creditworthiness, lowest default risk
AA	AA+	Very high level of creditworthiness, very low default risk
	AA	
	AA-	
A	A+	High level of creditworthiness, low default risk
	A	
	A-	
BBB	BBB+	Highly satisfactory level of creditworthiness, low to medium default risk
	BBB	
	BBB-	
BB	BB+	Satisfactory level of creditworthiness, medium default risk
	BB	
	BB-	
B	B+	Moderate level of creditworthiness, increased default risk
	B	
	B-	
C	CCC	Low level of creditworthiness, high or very high default risk
	CC	
	C	
SD	SD	Insufficient level of creditworthiness, selective default of a considerable proportion of the company's payment obligations
D	D	Insufficient level of creditworthiness, default, insolvency
NR	NR	Rating suspended, expired, temporarily suspended due to insufficient information, company has ceased to exist (merged, liquidated).

2.3.2 Issue Ratings

Rating Category	Rating	Assessment
AAA	AAA	Highest level of credit quality, lowest investment risk
AA	AA+	Very high level of credit quality, very low investment risk
	AA	
	AA-	
A	A+	High level of credit quality, low investment risk
	A	
	A-	
BBB	BBB+	Highly satisfactory level of credit quality, low to medium investment risk
	BBB	
	BBB-	
BB	BB+	Satisfactory level of credit quality, medium investment risk
	BB	
	BB-	
B	B+	Moderate level of credit quality, increased investment risk
	B	
	B-	
C	CCC	Low level of credit quality, high or very high investment risk
	CC	
	C	
D	D	Insufficient level of credit quality, total loss of investment
NR	NR	Rating temporarily suspended, i.e. liquidation in process

2.3.3 Ratings of Structured Finance Instruments (SF)

Rating Category	Rating	Assessment
AAA _{SF}	AAA _{SF}	Highest level of credit quality, lowest investment risk
AA _{SF}	AA ⁺ _{SF}	Very high level of credit quality, very low investment risk
	AA _{SF}	
	AA ⁻ _{SF}	
A _{SF}	A ⁺ _{SF}	High level of credit quality, low investment risk
	A _{SF}	
	A ⁻ _{SF}	
BBB _{SF}	BBB ⁺ _{SF}	Highly satisfactory level of credit quality, low to medium investment risk
	BBB _{SF}	
	BBB ⁻ _{SF}	
BB _{SF}	BB ⁺ _{SF}	Satisfactory level of credit quality, medium investment risk
	BB _{SF}	
	BB ⁻ _{SF}	
B _{SF}	B ⁺ _{SF}	Moderate level of credit quality, increased investment risk
	B _{SF}	
	B ⁻ _{SF}	
C _{SF}	CCC _{SF}	Low level of credit quality, high or very high investment risk
	CC _{SF}	
	C _{SF}	
D _{SF}	D _{SF}	Insufficient level of credit quality, total loss of investment
NR	NR	Rating temporarily suspended, i.e. liquidation in process

2.3.4 Bank Ratings

Long-Term Ratings

Rating category	Rating	Assessment
AAA	AAA	Highest level of creditworthiness, lowest default risk
AA	AA+	Very high level of creditworthiness, very low default risk
	AA	
	AA-	
A	A+	High level of creditworthiness, low default risk
	A	
	A-	
BBB	BBB+	Highly satisfactory level of creditworthiness, low to medium default risk
	BBB	
	BBB-	
BB	BB+	Satisfactory level of creditworthiness, medium default risk
	BB	
	BB-	
B	B+	Moderate level of creditworthiness, increased default risk
	B	
	B-	
C	CCC	Low level of creditworthiness, high or very high default risk
	CC	
	C	
SD	SD	Insufficient level of financial strength. Selective default of an essential part of the liabilities
D	D	Insufficient level of creditworthiness, negative credit events, insolvency, moratorium
NR	NR	Rating temporarily suspended, i.e. liquidation in process

Short-Term Ratings

Short-term rating	Assessment
L1	Extraordinarily high level of liquidity
L2	High level of liquidity
L3	Adequate level of liquidity
NEL	Inadequate level of liquidity or liquidity at risk
D	Default
NR	Rating temporarily suspended, i.e. liquidation in process

2.3.5 Sovereign Ratings

Rating category	Rating	Assessment
AAA	AAA	Highest level of creditworthiness, lowest default risk
AA	AA+	Very high level of creditworthiness, very low default risk
	AA	
	AA-	
A	A+	High level of creditworthiness, low default risk
	A	
	A-	
BBB	BBB+	Highly satisfactory level of creditworthiness, low to medium default risk
	BBB	
	BBB-	
BB	BB+	Satisfactory level of creditworthiness, medium default risk
	BB	
	BB-	
B	B+	Moderate level of creditworthiness, increased default risk
	B	
	B-	
C	CCC	Low level of creditworthiness, high or very high default risk
	CC	
	C	
SD	SD	Insufficient level of creditworthiness, selective default of a considerable proportion of the country's payment obligations
D	D	Insufficient level of creditworthiness, default
NR	Not Rated	Rating suspended, expired, temporarily suspended due to insufficient information

2.4 Rating Restrictions and Qualifications

CRA may use any of the following labels to qualify or restrict its ratings:

NR ("not rated") = indicates that a rating once existed which is no longer valid, perhaps because the monitoring period has expired or because the rating has been actively suspended by the analysts during the monitoring period. Analysts can suspend ratings when information required to complete the rating is not available.

i.B. = will be typically added to an NR label to indicate that, while the rating has been suspended following the expiration of the monitoring period, a request to continue the rating has already been received.

Outlook = The CRA may add a rating outlook to a rating in order to indicate the direction of a potential future change in the rating within the next 12 months following the determination of the rating outcome. The rating outlook is marked as "negative", "stable" or "positive". A change in the outlook can be made at any time during the monitoring period. At the same time, a positive or negative rating outlook will not inevitably lead to a future adjustment of the rating.

Watch = The qualifier "Watch" will typically be added to a rating if current information or events have occurred to suggest that the rating may change in the near future. These events may occur unexpectedly or be anticipated, provided that the implications for the rating are dependent on other future events (e.g., creditor votes, regulatory approvals, etc.). If a rating is set to "Watch", it will not be qualified with a rating outlook for the duration of the watch period. If the prospective direction of a short-term rating change is foreseeable in advance in particular circumstances, the qualifier "Watch" can be further marked as "positive" or "negative". Frequently, the analysts request and analyze additional information with the assignment of the "watch" status. The review of a rating during a watch period does not necessarily lead to an up- or downgrade of the rating. Ratings can also be upgraded or downgraded without a preceding "Watch" qualification.

(Group) = The analysts had access to consolidated accounts on which to base their analysis of the annual financial statement. Such ratings do not cover every company of the Group but only the parent company whose name is preceding the word "Group".

Restricted = A rating is subject to certain restrictions, perhaps because certain documents were only available in draft versions or because the composition of a given portfolio had not yet been finalized. Restrictions indicate that the rating will only be valid under the provision that certain conditions will be fulfilled in the future. Restrictions are documented in the rating report. Restricted ratings cannot be used for regulatory purposes and are treated as pre-ratings, valid at the reporting date, and awarded without the additional outlook.

(P) = qualifies the rating of structured finance instruments to indicate that a preliminary rating has been performed by request of the client. Preliminary ratings are generally based on information (such as market and portfolio data) that is not yet final and subject to changes until the cut-off day. The final rating of a rating object may therefore differ from a preliminary rating that was performed at an earlier stage.

2.5 Public and Private Ratings

Creditreform Rating performs private ratings and ratings which are available for public disclosure. This distinction originates in the "EU Rating Regulation" (Regulation EC no. 1060/2009 of the European Parliament and of the Council from 16 September 2009 on credit rating agencies).

The results of public ratings are disclosed to the general public and/or investors for regulatory purposes. Creditreform Rating displays the ratings of companies or financial instruments that are traded on the capital markets on its home page. The ratings of financial instruments that are not traded publicly on the capital market and that are only subscribed by a group of investors, conversely, are not published on the Creditreform home page. CRA makes these reports known only to the client and to the supervisory authority (ESMA).

Public ratings, provided they have not been paid for by the investors, will be published by ESMA (European Securities and Markets Authority) on a dedicated online platform. Ratings that have been directly paid for by investors or that have been commissioned by special-purpose vehicles (which are considered to belong to the “circle of investors”) can be used for regulatory purposes but will not be published or displayed on the ESMA website.

Private ratings are confidential and not designed to be made known to subscribers. They cannot be used for regulatory purposes. The client is free, however, to make these ratings available to selected third parties provided they sign a pledge of strict confidentiality. If the intention is to issue a bond and/or to let investors use the rating for regulatory purposes, the client will need to commission a public rating.

2.6 Principles and Processes for Unsolicited Ratings

I. General

CRA distinguishes between solicited and unsolicited ratings. The definition of an *unsolicited rating* is essentially based on the CRA definition of a *solicited rating*, taking into account the relevant regulatory provisions. Creditreform Rating defines *unsolicited ratings* pursuant to the legal definitions of Article 3 No. 1 letters (i) and (x) of the EU Regulation on Credit Rating Agencies (EU Regulation No. 1060/2009) and the ESMA clarifications of the official document “Q&A – ESMA/2015/1877”. Unsolicited ratings have not been requested directly by the issuer or an affiliated third party, and no contract exists between CRA and the issuer. Whether or not the issuer has provided information is not relevant for the classification of unsolicited ratings. CRA may perform unsolicited ratings in order to provide investors with a better (more transparent) view of the capital markets or to compile a database of reference values for solicited ratings.

Unsolicited ratings are performed on the basis of the published rating methodologies. They essentially apply the same analytic processes and are based on the same principles. Creditworthiness or credit quality of the rating object will be assessed on the basis of public information. Private information of the type that is often provided by the clients of solicited ratings is normally not available, and no rating interviews are commonly performed. CRA evaluates the data quality (reliability and relevance) of the available public information, ensuring that a reliable assessment of the rating object can be performed. It may be the case that the information available in the unsolicited rating process is considered less extensive than the information of a solicited rating. If so, then this will be reflected by the process of establishing the final rating, which is why the score of a unsolicited rating may differ from the score of a solicited rating.

Unsolicited ratings are not routinely accompanied by a Rating Report, but CRA reserves the right of issuing one. Unsolicited ratings can be either public or private. This decision is at the discretion of CRA. The results of the rating are submitted to the company or issuer under review without a charge. The results of unsolicited public ratings are published in the form of a press release and displayed on the CRA home page for the benefit of interested third parties. CRA identifies unsolicited ratings as such.

Ratings are categorized in compliance with the requirements of Article 10 Clause 5 of the EU Regulation on Credit Rating Agencies. In the Rating Summary and the Rating Reports, solicited and unsolicited ratings are distinguished by the colour in which the rating grades are printed. CRA will also make clear in the Rating Report and the Rating Summary whether or not the company under review (or any affiliated entity) cooperated in and contributed to the rating process and whether or not CRA was provided with access to the accounts, members of the senior management or any internal documents of the company under review or any affiliated entity.

II. Policy: “Private and Public Unsolicited Ratings”

1. Basic distinctions

CRA performs private as well as public unsolicited ratings. Our key criteria to differentiate between private and public unsolicited ratings follow the recommendations of the ESMA guidelines “ESMA/2013/720” and are largely identical with the distinction criteria that CRA applies to solicited ratings.

2. Converting private unsolicited ratings into public unsolicited ratings

CRA reserves the right to perform any unsolicited rating as a private rating. The decision of whether or not to convert a private unsolicited rating into a public unsolicited rating shall be made in the sole discretion of CRA and in consideration of the following criteria:

- a) the unsolicited private rating is – in the view of CRA – a rating that complies with certain qualitative and formal requirements of the EU Regulation on Credit Rating Agencies. The decision of how to categorize any individual rating shall be made by the analysts in the Rating Committee.
- b) if the criteria that have been described under a) have been met and CRA decides to classify the rating as public, the rating in question will be published (ESMA guidelines 2013/720). Publication will occur on the CRA website and comply with the relevant provisions of the EU Regulation on Credit Rating Agencies (for example: display of the rating grade in a colour that differs from the colour of rating grades in solicited ratings; disclosure of the level of cooperation received from the entity under review through the use of additional symbols).
- c) if the criteria that have been described under a) and b) have been met and CRA has changed the status of the rating to “public”, all provisions of the EU Regulation on Credit Rating Agencies shall apply to this unsolicited rating that are legally relevant for solicited ratings.

III

III. Changing the status of solicited and unsolicited ratings

1. From unsolicited to solicited

In principle, public unsolicited ratings that have been performed by CRA remain valid until they are amended or withdrawn. The validity of such ratings can be suspended if their status is changed to solicited. It is irrelevant for the purposes of this change of status whether or not the request to perform a rating has been issued by the entity under review or by a third party (such as an investor).

2. From solicited to unsolicited

CRA reserves the right to display a solicited rating on its website if the term of the rating has expired and no follow-up rating has been commissioned. CRA shall act in this way under certain circumstances if a solicited rating has been withdrawn by the client.

2.7 Publication

Private ratings are submitted only to the client who is subsequently entitled to make the rating available to a limited number of investors. These investors must be obliged to treat the contents of the rating with strict confidentiality. Private ratings are not published.

Public ratings are published by CRA and (under certain circumstances) by ESMA, unless they have been paid for by investors. In such an event, the ratings shall not be published. CRA classifies ratings of financial instruments as public ratings and will therefore publish them only when the underlying financial instrument has actually been issued.

If a CRA Rating Committee has issued a public rating, this rating will be submitted to the company under review (in compliance with regulatory requirements) at least one full working day before the date of release, giving this company the opportunity of reviewing the rating's contents.

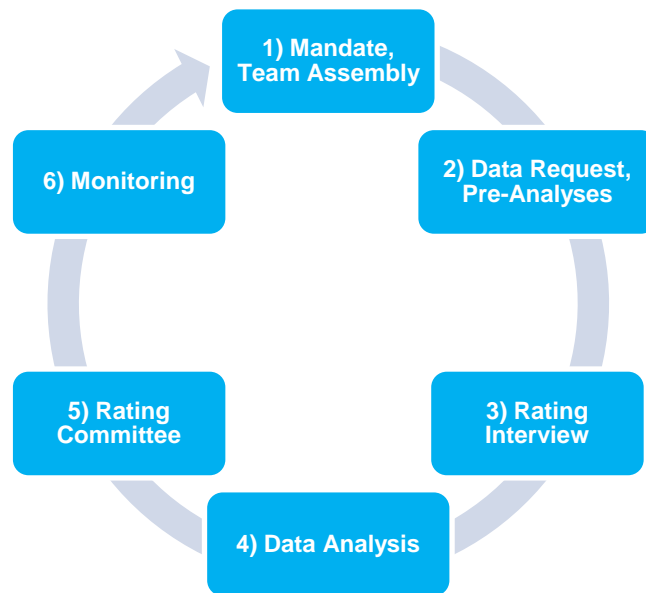
2.8 Period of Validity

In principle, ratings are valid until being withdrawn by CRA. Such a withdrawal may occur for example if information required to uphold the rating is no longer available or because no more monitoring is performed, the contractually agreed monitoring period having expired. Once a rating has been withdrawn, the rating object is identified as "not rated" (NR).

3 Fundamental Elements and Principles

3.1 The Rating Process

All CRA ratings – regardless of the rating object’s nature – follow the same sequence of process steps (see Figure 1).



i. Rating Mandate and the Assembly of the Rating Team

Solicited ratings are requested by the companies/issuers under review or affiliated third parties. They can be of a public or private nature. Unsolicited ratings have not been requested by either the rating object or affiliated third parties (see 2.6).

CRA ratings are performed by teams of at least two analysts. Analysts are selected on the basis of each assignment’s specific profile of required qualifications. The client will be free to approach and contact the rating team throughout the rating process and the subsequent monitoring period.

ii. Data Request and Preliminary Analysis

Data requests (in terms of the volume and nature of the required data) vary according to the specific rating object and may include information about the planned use of the proceeds, the downstream asset structure, any collateral provided (for an issue) and copies of contracts, transaction documents and legal opinions. The rating analysts generally compile a customized catalogue of questions for the rating object which is then translated into a data request that covers all rating-relevant areas of the analysis and that may be used as a structural framework for the rating interview.

The preliminary analysis focuses on the commercial viability of the business model and the collection of information about the economic and legal environment. The documents that have been submitted by the client and data about the rating object’s industry and markets are analysed in this light.

Depending on the volume of data and documents that have been submitted, it is possible that only sample-based plausibility checks will be performed to verify the quality and consistency of the information. All data received by the Rating Agency will be treated with the strictest confidentiality.

iii. Rating Interview

The rating interview is designed to provide context and additional background for the information that has been submitted and may involve the company or issuer under review, the manager, arrangers, and other parties that are involved in the transaction.

The rating interview is also a central element of any solicited corporate rating. It mainly serves to gain insight into qualitative factors that are relevant for an assessment of the company's long-term sustainability. Following a presentation of the company, interviews will be conducted with top-level and second-tier executives. Topics generally include the current economic and financial situation of the company, corporate strategies, product range and pricing policies. Depending on the corporate structure and the importance of individual divisions, it is possible to visit additional operating sites in addition to the corporate HQ. The number and the individual length of the interviews will depend on the size and the complexity of the company under review.

Issue ratings primarily focus on the creditworthiness of the originator or manager, investment strategies, the parties and agents involved, track records or historical performances and an assessment of the tools and capacities required for an effective portfolio management. Attention may also be dedicated to the quality of the collateral provided, based on an assessment of rules and regulations or contracts of financial instruments. This is specifically important for risk assessments of complex and multi-stage transactions.

iv. Data Analysis

The available information is evaluated and analysed in compliance with the rating methodology that has been developed for the applicable group of rating objects (see 2.3).

v. Rating Committee

The analysts will then distill the results of the qualitative and quantitative analyses into a recommendation for a corporate or issue rating. This recommendation will be submitted – together with all relevant documents – to a Rating Committee, the final instance of the rating process. Only a Rating Committee is authorized to issue and amend ratings. It is responsible for upholding the objectivity of the rating process and its results and guarantees the consistency of the technical and formal quality of the ratings

vi. *Continuous Monitoring and Follow-Up Rating*

Once a rating has been released, it will generally remain valid until the monitoring period is completed. During this period, the team of analysts continues to monitor all relevant developments to ensure that the rating is valid. For this purpose, the analysts continue to liaise with the client (if this is a solicited rating) and to request additional data for further evaluations. If any significant events or developments occur during the monitoring period that may adversely or positively affect the economic or financial strength of the company or the credit quality of the issue under review, the original rating may be adjusted. Unsolicited ratings, too, may be adjusted if significant events or developments appear to exert a major impact on the economic or financial strength of the company or the credit quality of the issue under review.

Once the monitoring period has expired, a follow-up rating will generally have to be performed to provide a valid rating. If steps have been taken to change the factors that are relevant for an assessment of the company's creditworthiness, the rating score may then be adjusted accordingly.

3.2 Principles of the Rating Process

The actions of Creditreform Rating AG and its analysts are guided by the CRA Code of Conduct, the different CRA rating methodologies and the following principles:

- i. The ratings provided by CRA are influenced neither by the existence or the type and duration of any business relationship nor by the identities of the client / the issuer or of current or potential creditors.
- ii. Any rating performed by Creditreform Rating AG is subject to the "Verhaltenskodex der Creditreform Rating AG" ("The Creditreform Rating AG Code of Conduct") which has been published on the web pages of Creditreform Rating AG. Ratings must also be performed in accordance with the individually relevant rating methodologies. In its Code of Conduct, Creditreform Rating AG commits itself to establishing its independent and objective opinion about the sustainability, the risks and the opportunities of the rating object under review, systematically and with due diligence as per the day on which the rating is issued.
- iii. Future events are uncertain, and forecasts are necessarily based on assessments and assumptions. Ratings are therefore no statements of fact, but forward-looking opinions. Creditreform Rating AG does not assume any liability or issue any guarantee, tacitly or expressly, for the accuracy, completeness and up-to-date nature of any ratings, opinions or information provided by Creditreform Rating in any form or manner. For this reason, Creditreform Rating AG cannot be held liable for the consequences of decisions that have been made on the basis of any of its ratings. Neither should these ratings be construed as recommendations for investors, buyers or sellers. They should only be used by market participants (entrepreneurs, bankers,

investors etc.) as one factor among others when making corporate or investment decisions. Ratings are not meant to be used as substitutes for own research, inquiries and assessments.

- iv. CRA is aware of the risk that its ratings may turn into (positive as well as negative) “self-fulfilling prophecies”. Both the rating object and the creditors can benefit from ratings and their amendments or suffer disadvantages. As a point of principle, however, CRA will not refrain from forming its own opinions about rating objects and – provided the rating in question is a public rating – from publishing these opinions in compliance with the applicable regulatory requirements. CRA shall perform the rating process with due diligence, delaying, if necessary, the passing of a final assessment until such time when it can be guaranteed that this assessment will be informed by all data that CRA and its analysts have deemed relevant.
- v. In reference to iv., CRA and its analysts shall ensure – in the interest of an up-to-date rating and the interests of the capital markets – that initial or follow-up rating processes as well as monitoring processes will not be affected by incomplete, inaccurate and inconsistent data or by their delayed, obstructive or erratic provision by the issuer and other sources of information. CRA will take appropriate steps to remove all obstacles of a swift and timely completion of the rating process, an impending adjustment or amendment of a rating or a quick verification of a rating’s validity under changed circumstances. CRA and its analysts will, if necessary, determine an appropriate period – if possible in a constructive agreement with the company/issuer or the suppliers of the required information – in which the documents or data that had been announced by the suppliers of information or requested by CRA need to be submitted. If the suppliers of the information in question fail to deliver the data within the specified period, CRA shall reserve the right to determine or adjust a rating on the basis of the existing data (that may provide an incomplete picture from the issuer’s point of view) or to suspend the rating altogether. Any data or documents that are submitted to the CRA analysts appointed to perform the rating after 1700 hrs local time (MEZ) shall be deemed to have been delivered on the following CRA business day (which starts at 0800 hrs MEZ). For the scrutiny and assessment of such data and documents, the analysts shall be given a period of appropriate length that reflects the volume and complexity of the information, but that shall have a duration of at least 24 hours (counting from the time of receipt).
- vi. Out of principle, CRA issues and adjusts ratings regardless of their repercussions for issuers and companies, their owners, representatives and creditors. This also applies to possible consequences for any stakeholder’s access to capital resources and markets, financing costs, consequences of incurred liabilities and commitments or the development of asset / share values and the liquidity (tradability) of debt instruments.
- vii. CRA assumes that the documents and information made available by the client are complete and accurate and that any copies provided represent the full and unchanged contents of the original

documents. Creditreform Rating AG assumes no responsibility for the true and fair representation of the original information.

- viii. If the client wishes to receive his rating before the completion of the full rating process (i.e. before all information that has been deemed to be relevant has been fully analysed), CRA can issue a “restricted” rating, based on all information that has so far been made available. Such restricted ratings may reflect the higher level of risk and uncertainty.
- ix. Any version of a rating document (mainly Rating Certificates and/or Rating Reports, Summaries or Monitoring Updates) shall only be binding if it is the latest version of the document in question. The latest version of all published documents can be found on the CRA website. References to earlier versions or their incorporation into updated versions are possible. In general, only the German version of any rating document shall be binding, unless otherwise specified in the Rating Report. Foreign-language versions are non-binding translations, unless otherwise specified in the Rating Report. If only a version in a foreign language (other than German) exists, this will be specified in the Rating Report. In such an event, this foreign-language version would automatically become the binding version. The Rating Report will also list all versions that belong to the Report (specifying their language) and indicate whether or not these versions are binding or non-binding.
- x. CRA analysts do not provide any rating assessments of a rating object prior to the decision by the Rating Committee. Any preliminary indications for a (positive or negative) rating or for a certain development of the assessment that may have been perceived by the (representatives of the) rating object prior to the decision by the Rating Committee, for example on the basis of the course or contents of a rating interview, are neither binding nor relevant for CRA and its Rating Committee. Ratings are exclusively and conclusively determined, adjusted or suspended by the CRA Rating Committee which shall act objectively and independently at all times.

3.3 Evaluation of Data and Data Analyses

Creditreform Rating analysts are adequately qualified to perform their tasks, having frequently acquired additional qualifications – as a Chartered Financial Analyst (CFA), Certified Credit Analyst (CCrA) or Certified Real Estate Analyst (CREA), for example – following the completion of a university degree in economics or a related subject. Analysts are, however, not auditors or lawyers. They do not audit either annual financial statements or corporate accounting systems. In many cases, their work is based and further builds on the accomplishments of capital market lawyers or auditors and their audited annual financial statements. Analysts have the task of forming an informed opinion of their own about the sustainability of a company or the quality of a financial instrument on the basis of data and documents that have been provided and of complementary interviews. Analysts will typically provide a forecast: an informed view of future events. It is, however, in the nature of future events that they are uncertain, and so are any opinions on how they will unfold. Investors should not exclusively rely on ratings and always

form independent opinions, based on their own analyses and research of a large variety of sources. Ratings equally provide no insurance against the possible default of an issuer or a financial instrument.

3.3.1 Data Quality

Solicited ratings are based on internal information that has been provided by the company under review (for example during interviews of top executives or other managers) as well as on publicly available data. CRA examines whether or not the sources of this information can be deemed reliable. Information that is relevant for an assessment of creditworthiness or credit quality is subjected to plausibility checks that are based on internal and external reference values.

3.3.2 Blind Pool Ratings

Specific problems emerge from the assessment of new structured finance products that have not yet built an asset portfolio at the time of the rating (“blind pool”). In such a case, Creditreform Rating bases its analysis on an assessment of the underlying investment criteria, following the principle that the reliability of the analytic process increases in proportion to the precision of the criteria’s definitions.

If initial investments have already been made or if an investment pipeline exists, CRA will confirm compliance with the stated investment criteria through random plausibility checks. It may also be possible to perform a track record analysis, based on similar products of the same initiator. Blind pools do not necessarily cause a downgrade of the rating, since ratings are determined by our assessment of how the investment under review will perform and how its risk and reward profile will develop. Neither does the blind pool character of an investment indicate that the rating must be restricted. Rating restrictions are exclusively imposed by the Rating Committee in close coordination with the analysts themselves.

3.3.3 Scenario Analyses and Sensitivity Analyses

On the basis of the information that has been acquired during the rating process, CRA proceeds to create best case, base case and worst case scenarios that are subsequently exposed to various levels of stress. These scenario-based tests serve to establish the impact of different stress parameters on the creditworthiness or credit quality of the rating object. The qualitative analysis is complemented by sensitivity analyses of specific input factors to examine how stable the rating is likely to be when only certain parameters are changing. These additional analyses allow the analysts to assess the effects of uncertainty and risk on their rating connected with individual input parameters.

3.4 Ratings and Professional Advice

As a point of principle, Creditreform Rating does not provide rating clients with any type of business consultancy services.

The rating of structured products (structured bonds or structured finance instruments) can be highly model-driven. Ratings of these structured products may require CRA to provide the investors, initiators or originators with detailed explanations of the model, the methodology and the scenarios of its analyses

and/or to go through scenarios that have been previously supplied by them. Creditreform Rating supports this process by presenting the results it has generated through its analyses, but refrains from issuing recommendations of how to design financial instruments. Such analyses can also address the question of how ratings may be affected by changes in the product design (such as modifications of the product structure, credit enhancements or product-specific portfolios). Under certain circumstances, Creditreform Rating may develop dedicated tools to allow the aforementioned group of clients to perform such analyses on their own.

3.5 Rating-Related Services

Creditreform Rating AG also provides the following rating-related services.

3.5.1 Pre-Sale Analyses

Pre-sale analyses are not ratings as defined by the EU Rating Regulation. They are typically conducted for issues of structured products and are based on an analysis of preliminary data. They therefore forecast what the result would be if the structure and quality of the actual data – that will be submitted at a later stage – were to match the structure and quality of the preliminary data. Under a pre-sale analysis, the initiator can define a target rating and find out which credit enhancements may be required to reach this objective. CRA supports this process within the framework of its rating analyses and establishes, based on its methods, what credit enhancements may be needed for certain target ratings. Creditreform Rating, however, issues neither recommendations for certain enhancements nor guarantees that certain ratings will be obtained. The results of pre-sale analyses are not monitored for any changes and are not updated. A pre-sale analysis may eventually be replaced by a rating.

3.5.2 Pre-Ratings

Creditreform Rating AG pre-ratings provide an initial assessment of roughly where on the rating scale the rating object might be placed if a full rating were to be performed. Pre-ratings are not binding, since they are not preceded by a full rating process. The results of the pre-rating are presented in the form of a short report. A full external rating of Creditreform Rating AG can produce a different result.