

Midroog Rating Scales and Definitions^{1,2}

December 2020

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¹ The definitions are based on Moody's definitions, adjusted to the Israeli market. A change in Moody's definitions may lead to change in Midroog's definitions.

² For main changes to this document compared to the publication in March 2018, please see addendum 1.

Preface

This document presents the rating scales used at Midroog as well as various definitions related to ratings. The purpose of this document is to create transparency in respect to the rating definitions and to present them as clearly and simply as possible. The scales came into force on September 1st, 2015³. This publication of the definitions does not change the existing ratings.

In addition to credit ratings, this document includes symbols and definitions for ancillary services, and relative scores for other services and assets, that are not credit ratings.

Long-Term Rating Scales

Long-term ratings are assigned to issuers or obligations or financial instruments with an original maturity of one year or more and reflect the creditworthiness of the issuer relative to other local issuers.

The creditworthiness of an issuer or issue relates to Expected Loss that can be represented as the multiple of the probability of default and Loss Given Default. In its ratings, Midroog aspires to reflect the Expected Loss by a (relative) ordinal ranking, meaning, the Expected Loss at lower ratings will be greater than the Expected Loss at higher ratings. Creditworthiness as defined above is addressed throughout the entire Midroog rating scale⁴.

However, when rating a corporate finance and financial institutions, Midroog does not quantitatively measure the *probability of default* for the purpose of assessing Expected Loss, rather, it assesses the issuer's ability to meet its obligations relative to other rated issuers using qualitative credit risk analysis by the usual parameters listed in the rating methodologies, which in Midroog's opinion reflect the issuer's ability to meet its obligations.

Also, in ratings of corporate finance and financial institutions issuers or issue, Midroog factors in – when rating various financial instruments – their specific characteristics that could influence the level of the *Expected Loss in the event of default*⁵, even though it does not make a quantitative measurement of Loss Given Default, unless there was a default event. In order to reflect the differential in Expected Loss (in cases where we think that consequent to the financial instrument's characteristics, the Expected Loss will be higher relative to Expected Loss without these characteristics), the financial instrument's rating may differ from the issuer rating, as defined below.

³ The conversion key to the scales used before September 2015 and the current scales are added as addendum 2 to this report.

⁴ Ratings of certain financial instruments such as various types of subordinate debts, which are determined relative to the issuer rating, may factor in the level of the issuer's credit risk, as reflected in the issuer's rating, in order to determine the rating gap with the issuer's rating. Usually, the lower the level of the rating, the greater the rating gap because of decreased uncertainty about the debt structure and loss given default. Elaboration of the considerations taken into account when rating various types of financial instruments, including the level of the issuer rating, appears in the relevant rating methodologies.

⁵ Characteristics such as the security's degree of seniority, support/collateral, and the instrument's various terms may affect the rating, based on the considerations set forth in the relevant rating methodologies.

In certain hybrid ratings where there is no definition of default, or the definition is not identical to investor expectations of periodic payment, the rating reflects the probability of default and the expected loss in the event of default (for definitions of impaired debt, read below in this document).

According to the meaning of Expected Loss underlying Midroog's credit ratings, ratings of debt instruments or issuers in default and impaired securities (according to the definitions of default and impaired debt herein below) reflect the recovery rate as a central element, since the probability of default is certain or material.

For more information on long-term ratings given to liabilities in default or impaired debts, see the Definitions hereinbelow.

Also, obligations⁶ or financial instruments to which Midroog relates in its ratings⁷ are obligations or financial instruments that require defined payment that may change consequent to a standard source of variation (such as: variable interest and/or linkage to the CPI) by the defined payment date, irrespective of the ability to enforce them. Midroog's ratings do not relate to non-standard sources of variation regarding the obligation principal (such as: linkage to an equities index), except if in the initial rating report, another explanation is provided.⁸

⁶ In the case of impaired debt, a loss could be created even though the issuer meets the contractual obligation. See the definition of impaired debt below.

⁷ For issuer ratings, see the definition below. In certain cases, creditworthiness relates to a third party in addition to or in the stead of the issuer. For example: Credit linked notes or guaranteed instruments.

⁸ Midroog does not classify the various types of non-standard sources of variation, because the types of characteristics of financial instruments is unlimited. Examples of such sources include: various indices, equity value and cash flow, prepayment penalties and a payment obligation not defined at the onset of the transaction. For further details on the types of hybrid instruments we rate, see the methodology report on Midroog's website, www.midroog.co.il.

Additional Symbols

Structured Finance Ratings

Like Moody's definitions, Midroog differentiates between structured finance ratings and all other ratings (such as corporate ratings, ratings of financial institutions, government related issuers) by adding the indicator (sf) to structured finance ratings. The purpose of adding the modifier is to eliminate any presumption that structured finance ratings and other ratings at the same rating level will behave the same, and to clarify that the risk characteristics of these securities may differ. However, through implementing its rating methodologies, Midroog aspires to achieve similarity in the behavior of structured finance and other ratings in the long run⁹. For more details on using the (sf) indicator, see the document "The (sf) indicator in structured finance ratings" on Midroog's website at www.midroog.co.il.

Provisional Ratings

Midroog assigns provisional ratings to issuers or financial instruments, when the assignment of rating is subject to the fulfillment of contingencies that could affect the rating. Examples of such contingencies are final documents or the fulfillment of conditions, when the rating is sensitive to changes to the final conditions. When no such contingencies exist, a rating can also be set based on documents that are not final. Upon fulfillment of the contingencies and/or the circumstances, the symbol (P)¹⁰ will be removed from the rating.

Withdrawing a Rating

When Midroog no longer rates an obligation or a financial instrument on which it had previously maintained a rating, the obligation or financial instrument will be marked with the letters WR (withdrawn).

⁹ Structured financing ratings are based on the expected loss of the financial instrument and may be subject to the constraint that the final rating of the transaction may not be more than a certain number of notches (typically three to five rating ranks) above the rating that would have been assigned based solely on the probability of default. Among the considerations influencing the notching are the rating level, the seasoning of the transaction, and the level of uncertainty in estimating the expected loss and probability of default shall be taken into account.

¹⁰ Provisional

Local Long-Term Rating Scale

Aaa.il	Issuers or issues rated Aaa.il are those that, in Midroog judgment, have highest creditworthiness relative to other local issuers.
Aa.il	Issuers or issues rated Aa.il are those that, in Midroog judgment, have very strong creditworthiness relative to other local issuers.
A.il	Issuers or issues rated A.il are those that, in Midroog judgment, have relatively high creditworthiness relative to other local issuers.
Baa.il	Issuers or issues rated Baa.il are those that, in Midroog judgment, have relatively moderate credit risk relative to other local issuers, and could involve certain speculative characteristics.
Ba.il	Issuers or issues rated Ba.il are those that, in Midroog judgment, have relatively weak creditworthiness relative to other local issuers, and involve speculative characteristics.
B.il	Issuers or issues rated B.il are those that, in Midroog judgment, have relatively very weak creditworthiness relative to other local issuers, and involve significant speculative characteristics.
Caa.il	Issuers or issues rated Caa.il are those that, in Midroog judgment, have extremely weak creditworthiness relative to other local issuers, and involve very significant speculative characteristics.
Ca.il	Issuers or issues rated Ca.il are those that, in Midroog judgment, have extremely weak creditworthiness and very near default, with some prospect of recovery of principal and interest.
C.il	Issuers or issues rated C are those that, in Midroog judgment, have the weakest creditworthiness and are usually in a situation of default, with little prospect of recovery of principal and interest.

Note: Midroog appends numeric modifiers 1, 2, and 3 to each rating category from Aa.il to Caa.il. The modifier '1' indicates that the obligation ranks in the higher end of its rating category, which is denoted by letters. The modifier '2' indicates that it ranks in the middle of its rating category and the modifier '3' indicates that the obligation ranks in the lower end of that category, denoted by letters.

Note: For more information on long-term ratings assigned to obligations in default or to impaired debt, see the definitions below in this publication.

Additionally, a (hyb) modifier is added to all ratings of hybrid securities issued by banks and insurers. By their terms, hybrid securities allow for the omission of scheduled dividends, interest, or principal payments, which could potentially result in impairment¹¹ if such an omission occurs. Hybrid securities may also be subject to contractually allowable write-downs of principal. A long-term rating with a (hyb) indicator reflects the relative credit risk associated with that security. For more information on using the (hyb) indicator, see the document "The (hyb) indicator in rating financial instruments of banks and insurance companies" on Midroog's website at www.midroog.co.il.

¹¹ For a definition of impaired debt, see below in this publication.

Local Short-Term Rating Scale

P-1.il	Issuers rated Prime-1.il are, in Midroog judgment, have very good ability to repay short-term obligations relative to other local issuers.
P-2.il	Issuers rated Prime-2.il are, in Midroog judgment, have good ability to repay short-term obligations relative to other local issuers.
P-3.il	Issuers rated Prime-3.il are, in Midroog judgment, have moderate ability to repay short-term obligations relative to other local issuers.
NP.il	Issuers rated Not Prime.il do not belong in any of the Prime categories.

Linkage between the Long-Term and Short-Term Rating Scales

The following table shows the long-term ratings consistent with short-term ratings, when such long-term ratings exist¹².

<u>Long Term Rating</u>	<u>Short Term Rating</u>
Aaa.il	} Prime-1.il
Aa1.il	
Aa2.il	
Aa3.il	
A1.il	
A2.il	
A3.il	} Prime-2.il
Baa1.il	
Baa2.il	
Baa3.il	} Prime-3.il
Ba1.il,Ba2.il,Ba3.il	
B1.il,B2.il,B3.il	
Caa1.il,Caa2.il,Caa3.il	} Not Prime
Ca.il	
C.il	

¹² Structured finance short-term ratings are usually based on the short-term rating of a liquidity provider for the transaction or an assessment of cash flows available to repay the rated obligation.

Types of Obligations and Issuers Rated on the Long-Term and Short-Term Scales

Long-Term and Short-Term Obligations

Midroog assigns ratings to long-term obligations and to short-term obligations. Long-term ratings are assigned to issuers or obligations or to financial instruments with an original maturity of a year or more and reflect creditworthiness relative to other local issuers. Short-term ratings are assigned to issuers or obligations or to financial instruments with original maturity up to a year and reflect the issuer's ability to repay short-term obligations relative to other domestic issuers. The creditworthiness derived from the long-term rating and its implications for the issuer's ability to meet its short-term obligations and explanations of these definitions are set forth in full in the short-term rating methodology "Short-term ratings" published on Midroog's website.

Bank Deposit Ratings

Bank deposit ratings are Midroog's assessment of a bank's ability to repay deposits. In long-term deposit ratings, the assessment also reflects the expected loss given default.

Credit Default Swap Ratings

CDS ratings assess the risk associated with the obligations that a credit protection provider has with respect to credit events under the terms of the transaction. The ratings do not address potential losses resulting from early termination of the transaction, nor market risks associated with the transaction.

Insurance Financial Strength Rating

An Insurance Financial Strength Rating is Midroog's assessment of an insurer's ability to fulfill its obligations to policy holders. The rating also reflects the expected loss given default.

Issuer Ratings

An issuer rating is Midroog's assessment of the issuer's ability to repay its senior, unsecured obligations. Issuer ratings include external support that is expected to apply to all the issuer's senior unsecured obligations, such as: explicit support arising from guarantees for all senior unsecured obligations and/or implied support arising from joint default analysis (JDA of banks and government-related issuers). An issuer rating does not include support such as guarantees that apply only to a specific senior unsecured obligation, as opposed to all.

Other Types of Ratings

Managed Index Linked Certificate (MILC) Ratings

A MILC rating is Midroog's assessment of a company's ability to repay obligations to investors in MILCs, according to the obligations in the prospectus¹³ and decisions by the company's board of directors. Midroog's rating is based on quantitative-statistical, qualitative and legal parameters, and reflects Midroog's assessment of the risk that at the end of a trading day, the company will not have sufficient assets to redeem all the MILCs to the index value (or the specific assets, as applicable) net of management fees (and net of conversion fees, as applicable). To remove any doubt, the rating does not assess the returns on the MILC resulting from change in the relevant index. The symbol MILC, indicating that the rating is of a MILC, will be added to the regular rating symbol.

Managed Index Linked Certificate Rating Scale

Aaa^{MILC}	Obligations rated Aaa ^{MILC} are those that, in Midroog judgment, have the highest repayment ability relative to other local obligations.
Aa^{MILC}	Obligations rated Aa ^{MILC} are those that, in Midroog judgment, have very high repayment ability relative to other local obligations.
A^{MILC}	Obligations rated A ^{MILC} are those that, in Midroog judgment, have relatively high repayment ability relative to other local obligations.
Baa^{MILC}	Obligations rated Baa ^{MILC} are those that, in Midroog judgment, have relatively moderate repayment ability relative to other local obligations, and could have certain speculative characteristics.
Ba^{MILC}	Obligations rated Ba ^{MILC} are those that, in Midroog judgment, have relatively weak repayment ability relative to other local obligations, and have speculative characteristics.
B^{MILC}	Obligations rated B ^{MILC} are those that, in Midroog judgment, have very weak repayment ability relative to other local obligations, and have significant speculative characteristics.
Caa^{MILC}	Obligations rated Caa ^{MILC} are those that, in Midroog judgement, have the weakest repayment ability relative to other local obligations, and have very significant speculative characteristics.
Ca^{MILC}	Obligations rated Ca ^{MILC} are those that, in Midroog judgement, have extremely weak repayment ability and are very near default, with some prospect of repaying obligations.
C^{MILC}	Obligations rated C ^{MILC} are those that, in Midroog judgment, have the weakest repayment ability and are usually in default, with little prospect of repaying obligations.

Note: Midroog appends numeric modifiers 1, 2, and 3 to each rating category from Aa^{MILC} to Caa^{MILC}. The modifier '1' indicates that the obligation ranks in the higher end of its rating category, which is denoted by letters. The modifier '2' indicates that it ranks in the middle of its rating category and the modifier '3' indicates that the obligation ranks in the lower end of that category, denoted by letters.

¹³ If the MILC has a prospectus, and in the absence of one, according to other transaction papers such as trust deed and so forth.

Index Linked Certificate (ILC) Notes Ratings

Rating notes is based, *inter alia*, on the structure of the transaction and the credit risks of the financial institution issuing the asset underlying the obligation. The rating reflects Midroog's assessment of the company's ability to assure note holders of repayment of principal and interest (as applicable) on time and at the conditions set in the transaction documents. The rating does not reflect the risk to the principal invested or to returns due to change in the market of the underlying asset, reflecting market risks. The symbol ILC, relating to a bond/obligation linked to a specific index, including interest rates and currency rates, will be added to the regular rating scale.

Index Linked Certificate (ILC) Notes Rating Scale

Aaa^{ILC}	Notes rated Aaa ^{ILC} are those that, in Midroog judgment, have the highest repayment ability relative to other local obligations.
Aa^{ILC}	Notes rated Aa ^{ILC} are those that, in Midroog judgment, have very high repayment ability relative to other local obligations.
A^{ILC}	Notes rated A ^{ILC} are those that, in Midroog judgment, have relatively high repayment ability relative to other local obligations.
Baa^{ILC}	Notes rated Baa ^{ILC} are those that, in Midroog judgment, have relatively moderate repayment ability relative to other local obligations, and could have certain speculative characteristics.
Ba^{ILC}	Notes rated Ba ^{ILC} are those that, in Midroog judgment, have relatively weak repayment ability relative to other local obligations, and have speculative characteristics.
B^{ILC}	Notes rated B ^{ILC} are those that, in Midroog judgment, have very weak repayment ability relative to other local obligations, and have significant speculative characteristics.
Caa^{ILC}	Notes rated Caa ^{ILC} are those that, in Midroog judgment, have the weakest repayment ability relative to other local obligations, and have very significant speculative characteristics.
Ca^{ILC}	Notes rated Ca ^{ILC} are those that, in Midroog judgment, have extremely weak repayment ability and are very near default, with some prospect of repaying interest and principal.
C^{ILC}	Notes rated C ^{ILC} are those that, in Midroog judgment, have the weakest repayment ability and are usually in default, with little prospect of repaying interest and principal.

Note: Midroog appends numeric modifiers 1, 2, and 3 to each rating category from Aa^{ILC} to Caa^{ILC}. The modifier '1' indicates that the obligation ranks in the higher end of its rating category, which is denoted by letters. The modifier '2' indicates that it ranks in the middle of its rating category and the modifier '3' indicates that the obligation ranks in the lower end of that category, denoted by letters.

Indicative Ratings

Point-in-time opinion of the potential credit rating of an issuer, or debt issuance at some future date. Indicative ratings are assigned by the credit rating committee but do not constitute traditional credit ratings, and further assessment and/or information is required in order to determine an ordinary credit rating. An indicative rating is unmonitored and is usually confidential, being intended for the internal purposes of the commissioner of the rating, not for publication. The title of the document containing the indicative rating shall note that it is an indicative rating. Indicative ratings are applicable to issuers or financial instruments that are not publicly rated by Midroog at the time the indicative rating was given.

Relative Scores for Other Assets and Services

Investment Manager Quality (MQ) Assessments

An MQ assessment is Midroog's assessment of the manner in which an investments management company is managed and operates. In this assessment, Midroog examines the position of the company in the sector, the quality of the operational and financial management infrastructure of the management company, the operational and managerial influences involved in trading services, asset management services, risk control and risk management, the quality of the performance by the various investments, and also, the abilities of the management company to manage the risks to which it itself is exposed and the risks to which the investors or savers are exposed.

Investment Manager Quality (MQ) Assessments Rating Scale

MQ1.il	The quality of the rated entity is assessed to be very high, based on weighting management abilities and business stability, compared with other local entities.
MQ2.il	The quality of the rated entity is assessed to be high, based on weighting management abilities and business stability, compared with other local entities.
MQ3.il	The quality of the rated entity is assessed to be moderate, based on weighting management abilities and business stability, compared with other local entities.
MQ4.il	The quality of the rated entity is assessed to be adequate, based on weighting management abilities and business stability, compared with other local entities.
MQ5.il	The quality of the rated entity is assessed to be weak, based on weighting management abilities and business stability, compared with other local entities.

Money Market Funds and Bond Funds Ratings – (mf)

When rating money market funds (including deposit and loan funds - "*kapam*") and bond funds, the fund's credit profile, stability profile and the quality of the fund manager, from the perspective of risk management and operational management, are examined. To remove any doubt, the rating does not examine returns/losses on the fund's assets or fluctuations in the value of its assets.

Money Market Funds (mf) rating scale

Aaa.il-mf	Money market funds and bond funds rated Aaa.il-mf are those that, in Midroog judgment, have very good ability to provide liquidity while preserving capital, relative to other local money market funds and bond funds.
Aa.il-mf	Money market funds and bond funds rated Aa.il-mf are those that, in Midroog judgment, have good ability to provide liquidity while preserving capital, relative to other local money market funds and bond funds.
A.il-mf	Money market funds and bond funds rated A.il-mf are those that, in Midroog judgment, have moderate ability to provide liquidity while preserving capital, relative to other local money market funds and bond funds.
Baa.il-mf	Money market funds and bond funds rated Baa.il-mf are those that, in Midroog judgment, have borderline ability to provide liquidity while preserving capital, relative to other local money market funds and bond funds.
B.il-mf	Money market funds and bond funds rated B.il-mf are those that, in Midroog judgment, cannot provide liquidity and have borderline ability to preserve capital, relative to other local money market funds and bond funds.
C.il-mf	Money market funds and bond funds rated C.il-mf are those that, in Midroog judgment, cannot provide liquidity or preserve capital, relative to other local money market funds and bond funds.

System for rating tracking funds and ETFs

A system for rating tracking funds and ETFs (hereinafter: "funds") was developed as a joint venture with Pradicta and is intended to provide users with ratings for funds of this type. The funds' rating is based, inter alia, on calculating the standard deviation of the series of differences between the relevant index and the funds' NAV. Estimating the accrued difference between the funds' performance and changes in the index, estimating the funds' performance while maintaining a risk profile identical to the index risk, comparing the funds' performance relative to the peer group of funds that track the identical index for comparison, estimating the volatility of the tracked index and the intraday volatility.

'Red flags' system for tracking funds and ETFs

The "red flags" system was developed as a joint venture with Praedicta and is intended to check and alert upon defined events in the tracking funds and ETFs. This is another layer in the funds' rating system, described above, which was developed in order to constitute further examination of extraordinary events in addition to the ranking produced by weighting the parameters described above. In this framework, various qualitative and quantitative aspects are examined.

Rating provident funds and training funds

Rating the performance of provident funds and training funds based on quantitative data, such as: the Sharpe risk-free index, balance of assets, liquidity index, alpha index, rate of risky assets, accrual/withdrawals and management fees.

Ancillary Services

Rating Assessment Service

Point-in-time opinion of the potential credit rating, or of the potential impact on an existing credit rating, given a concrete hypothetical scenario (one or more) provided to Midroog by the commissioner of the rating. Rating assessments based on the hypothetical scenarios are carried out by the rating committee, but do not constitute traditional credit ratings, and further assessment and/or information is required in order to determine a traditional credit rating. Rating assessments are unmonitored and are usually confidential, being intended for the internal purposes of the commissioner of the rating, not for publication. The title of the document containing the rating assessment shall note that it is a rating assessment. Should a credit rating be determined – at the client's order - following materialization of the scenario, the rating may differ from the rating assessment.

A scenario is (1) a transaction/project and/or debt issuance that materially alters the issuer's current state (including acquisitions, disposals, share buybacks, listings, initial public offerings, and material restructuring) or (2) an initial transaction/project and/or debt issuance; or a transaction/project or debt including a material change in the overall size of the debt being contemplated.

Rating Forecasts

A forecast that Midroog delivers to a client or a potential client regarding the rating symbol it is expected to determine for the client or for a financial instrument, including a letter, symbol, or forecast regarding such rating (including a range of rating symbols), given in any way whatsoever. To remove any doubt, it is hereby clarified that if the rating forecast is delivered to the client as part of a rating process, the rating forecast shall not be defined as a separate service. However, although the rating forecast by its definition above is not an ordinary credit rating, Midroog shall report the collation of data received in respect to rating forecasts in its annual report, as set forth in the regulations¹⁴ regulating credit rating companies regarding preliminary ratings.

Servicer Quality (SQ) Assessments

An SQ Assessment is Midroog's assessment of a servicer's ability to prevent losses and maximize recoveries given default in securitization transactions. The performance of the servicer is tested separately from the credit quality of the assets it handles. The assessment takes into account operational and financial stability and the servicer's ability to respond to changing situations in the market. The assessment is based on management characteristics, financial profile, controls and procedures, and strategy. Note that as of the writing of this document, Midroog carries out SQ assessments as part of the process of rating certain financial instruments.

¹⁴ Regulations Regulating the Activity of Credit Rating Companies 5774-2014.

Originator Assessments (OA)

Originator assessments are Midroog's assessments of the strength of originators' procedures as they affect defaults and losses in structured finance transactions. Midroog's assessment takes into account the originator's abilities and stability. Assessments of originators are intended to isolate the influences of the originator's procedures on the performance of loans from external influences, such as the macroeconomic environment, and the abilities of the servicer. Note that as of the writing of this document, Midroog carries out OA assessments as part of the process of rating certain financial instruments.

Assessments Used in Ratings

Assessments used in ratings do not constitute credit ratings. These assessments are marked with various symbols that distinguish them from credit ratings. The manner in which these assessments are used is described in the relevant rating methodologies in which they are used.

Credit Estimates

A credit estimate is an unpublished estimate of the credit quality of a given obligation. The estimate is for a point in time, does not constitute a credit rating and is not set by the rating committee. The rating assigned by the rating committee may significantly differ from the credit estimate. Also, credit estimates are unmonitored, but may be updated from time to time. Credit estimates are usually based on public information or third-party information, without the issuer taking part in the process. Credit estimates usually serve as input for ordinary credit ratings. Credit estimates are expressed along a numeric scale from 1 to 21 according to the alphanumeric rating scale for long-term debt.

Baseline Credit Assessment (BCA)

BCAs are Midroog's assessment of the stand-alone financial strength of an issuer, absent external support from an affiliated company¹⁵ or the state.

The BCA represents an assessment of the likelihood of an issuer requiring external support in order to avoid default of one or more of its obligations, or the likelihood of the default absent such support. The BCA does not address the expected loss in the event that external support is not provided.

Contractual relations and routine subsidies from the government or from an affiliated company are included in the BCA and are therefore considered internal in respect to the issuer's financial strength. Extraordinary support is unique to the issuer and is meant to avoid default by the issuer.

The BCA is denoted by lower-case letters in an alphanumeric rating scale, in keeping with the alphanumeric long-term rating scale.

¹⁵ An affiliated company includes parent company, other affiliated corporation, and material investors (usually owning 20% or more of the voting rights) or states, including local, regional or national government.

Baseline Credit Assessment rating scale

aaa.il	Issuers and issues assessed at aaa.il are those that, in Midroog judgment, have the highest internal or independent financial strength, relative to other local issuers, absent any possibility of external support from an affiliate or the government.
aa.il	Issuers and issues assessed at aa.il are those that, in Midroog judgment, have very high internal or independent financial strength, relative to other local issuers, absent any possibility of external support from an affiliate or the government.
a.il	Issuers and issues assessed at a.il are those that, in Midroog judgment, have relatively high internal or independent financial strength, relative to other local issuers, absent any possibility of external support from an affiliate or the government.
baa.il	Issuers and issues assessed at baa.il are those that, in Midroog judgment, have moderate internal or independent financial strength, relative to other local issuers, absent any possibility of external support from an affiliate or the government, and may have certain speculative characteristics.
ba.il	Issuers and issues assessed at ba.il are those that, in Midroog judgment, have relatively weak internal or independent financial strength, relative to other local issuers, absent any possibility of external support from an affiliate or the government, and have speculative characteristics.
b.il	Issuers and issues assessed at b.il are those that, in Midroog judgment, have very weak internal or independent financial strength, relative to other local issuers, absent any possibility of external support from an affiliate or the government, and have significant speculative characteristics.
caa.il	Issuers and issues assessed at caa.il are those that, in Midroog judgment, have extremely weak internal or independent financial strength, relative to other local issuers, absent any possibility of external support from an affiliate or the government, and have very speculative characteristics.
ca.il	Issuers and issues assessed at ca.il are those that, in Midroog judgment, have extremely weak internal or independent financial strength, relative to other local issuers, absent any possibility of external support from an affiliate or the government, and are very near default, with some prospect of recovery of principal and interest.
c.il	Issuers and issues assessed at c.il are those that, in Midroog judgment, have the weakest internal or independent financial strength, relative to other local issuers, absent any possibility of external support from an affiliate or the government, and are usually in default, with little prospects of recovery of principal and interest.

Note: Midroog appends numeric modifiers 1, 2, and 3 to each rating category from aa.il to caa.il. The modifier '1' indicates that the debenture ranks in the higher end of its rating category, which is denoted by letters. The modifier '2' indicates that it ranks in the middle of its rating category and the modifier '3' indicates that the debenture ranks in the lower end of that category, denoted by letters.

Other definitions

Rating outlook

A rating outlook is Midroog's assessment of the likely rating direction over the medium term. Rating outlooks fall into four categories: positive, stable, negative or developing. Rating outlooks can be set at the level of the issuer or the obligation. The modifier "m" (multiple) is added when different obligations of the same issuer have different outlooks. The rationale for the differential in rating outlooks in these cases shall be explained in the rating reports. Cases where no outlook is set are indicated by the modifier NOO (no outlook).

A stable outlook reflects low expectations of a rating change over the medium term. A positive, negative or developing outlook reflects a higher likelihood of change over the medium term. When assigning the outlook, the rating committee is indicating its belief that the creditworthiness of the issuer is consistent with the relevant rating level at that point in time. For statistics on changes in ratings in the periods after the outlook is set, see [rating performance reports](#) on the Midroog website.

Credit review

When a rating is placed under credit review, its rating may change in the near term. A rating review may be carried out to upgrade a rating – credit review with positive implications, downgrade it – credit review with negative implications and in certain cases, with uncertain direction – credit review with direction uncertain. The review may end with an upgrade, downgrade or reaffirmation.

Ratings are placed on credit review when a rating action is required in the near term, but more information or further analysis are required in order to reach any decision on changing the rating, or the magnitude of the change. For statistics on changes in ratings in the periods after placement on credit review, see [rating performance reports](#) on the Midroog website.

Definition of default

Midroog's definitions for default apply only to debt or debt-like obligations (such as CDS). Three events constitute a debt default:

- 1) A missed or delayed disbursement of a contractually-obligated interest or principal payment (excluding missed payments cured within a contractually allowed grace period)¹⁶.
- 2) A court filing in respect to default by the issuer, such as: bankruptcy filing, temporary bankruptcy, receivership or Chapter 11. Those events are likely to cause a miss or delay in expected future debt service payments.

¹⁶ In certain structured finance transactions, nonpayment may cause losses, even if the payments are not contractually obligatory. Midroog therefore defines, in structured finance instruments, that a default event occurred if a material interest payment failed to be made during 12 months or more or if a security suffered a material principal loss (or writedown). If an interest or principal gap as said is later reduced to below materiality threshold of 0.5% of the security's original balance, then the default was cured.

3) A debt arrangement or restructuring proposal, whereby a) an obligor offers bondholders new bonds or securities with new terms, whose terms have been redefined, or a package of securities, cash or assets that amount to a diminished financial obligation relative to the original obligation and b) the arrangement has the effect of allowing the obligor to avoid a default.

Midroog includes debt arrangement and restructuring proposals in our definition of default in order to capture credit events whereby issuers effectively fail to meet their debt service obligations but do not actually file for bankruptcy or miss an interest or principal payment. Midroog employs fundamental analysis in assessing the likelihood of future default and considers various indicators in assessing loss relative to the original promise, which may include the yield to maturity of the debt being exchanged.

The definition of default does not include so-called "technical defaults", such as violations of leverage or coverage ratios, unless the obligor fails to cure the violation and fails to honor the resulting debt acceleration which may be required. In the case of structured finance securities, technical defaults, such as breach of overcollateralization tests or certain violations defined in legal documentation, temporary missed interest (less than 12 months) payment on a security whose terms allow for the deferral of such payments (together with corresponding interest) until the final maturity date, do not constitute defaults. For the purpose of defining default, also excluded are payments owed on long-term obligations which are missed due to purely technical or administrative errors which are 1) not related to the ability or willingness to make the payments and 2) are cured in very short order (typically, 1-2 business days following discovery of the error).

Also, under some circumstances, missed contractually-obligated payments could be excluded if nonpayment resulted from a legal dispute over the validity of the contracts.

Definition of Impaired Debt

A security is impaired when investors receive (or expect to receive, with near certainty) less value than would be expected if the obligor were not experiencing financial distress or was otherwise prevented from making payments by a third party, even if the financing documents or trust deed do not allow the investors to act against the obligor in such events, such as resorting to legal proceedings, such as bankruptcy filing, and so on.

Midroog's definitions for impairment are based on Moody's definitions, relating to debt or debt-like instruments (such as CDS), preferred stock and other hybrid securities. A security is deemed to be impaired if:

- 1) The events that meet the definition of default did occur;
- 2) Contractually-allowable payment omissions of scheduled dividends, interest or principal payments, preferred stock, or other hybrid instruments.

3) Write-downs or arrangement (or restructuring of impaired debt)¹⁷, preferred stock or other hybrid instruments due to financial distress whereby (a) the principal promised to an investor is reduced according to the terms of the security or (b) the obligor offers holders new securities or securities whose terms have been redefined or a new package of securities, cash or assets, in order to avoid a contractually-allowable payment omission as described in 2) above.

4) Downgrades to Ca.il or C.il, signaling the near-certain expectation of significant losses.

The definition of a security as impaired may change over time if it migrates from impaired to cured (e.g., if initially deferred cumulative preferred dividends are ultimately paid in full) and could also change back again to impaired.

Excluded from impairment events are 1) missed payments due to purely technical or administrative errors which are not related to the ability or willingness to make the payment and 2) are cured in very short order (typically, 1-2 business days).

Long-Term Credit Ratings for Defaulted or Impaired Securities¹⁸

When a debt instrument becomes impaired or defaults or is very likely to become impaired or to default, the rating will reflect our expectations for recovery of principal and interest, as well as the uncertainty around that expectation, as summarized in the table below. For this purpose, Midroog relies on Moody's approximate recovery rates rate table, without having carried out any adjustment whatsoever to the local market. It bears stressing that this table relates to the recovery rates of securities in default or impaired securities, or when is expected at a highly likely to become impaired or to default.

Midroog's use of the recovery table when determining ratings is designed to lead, consistently and reliably, insofar as is possible in Midroog's opinion, to a (relative) ordinal rating of creditworthiness – when debt in default has a high expected recovery rate, it is rated higher than debt in default with a low expected recovery rate. It is important to note that the recovery table is not based on a statistical correlation between recovery rates to a given rating level, but represents a ranking of rating levels in compliance with the defined ranges of recovery rates, and the ceiling of rating acceptable to us for debt in default.

¹⁷ Impaired debt arrangements are similar to debt arrangements that are part of the definition of default, but impaired debt arrangements are meant to avoid an impairment event, not a default event.

¹⁸ For elaboration on the use of the recovery rate table, see the methodology report on rating financial instruments and issuers in default and impaired financial instruments.

It must be stressed that the recovery table helps us *map the rating level* according to the recovery rate assessed by Midroog, and according to the level of certainty associated with it, but not vice versa: in other words, the recovery table does not serve to map the recovery rate for a predetermined rating level (meaning, the table is read from left to right). For instance: for an expected recovery rate of 40% to 50%, the appropriate rating is Ca.il, but that does not mean that the assessed recovery rate of 40% to 50% is characteristic only of Ca.il ratings¹⁹.

Given the usual high level of uncertainty around recovery rate expectations, the table uses approximate expected recovery rates and is intended to present rough guidance rather than a rigid map.

Expected recovery rate (Midroog definitions based on Moody's definitions) ²⁰	Structured finance rating	Fundamental rating
99% to 100%	B1.il(sf)*	B1.il*
97%-99%	B2.il(sf)*	B2.il*
95%-97%	B3.il(sf)*	B3.il*
90%-95%	Caa1.il(sf)	Caa1.il
80%-90%	Caa2.il(sf)	Caa2.il
65%-80%	Caa3.il(sf)	Caa3.il
35%-65%	Ca.il(sf)	Ca.il
Less than 35%	C.il(sf)	C.il

* For instruments in the B.il group, the uncertainty around expected recovery rates should be low. For example, if the probability that the recovery rate be less than 90% is not negligible (for instance, over 10%), it would generally be rated lower than the B.il group.

Also, under unusual circumstances, the above table may not apply, for example, a security in default where the default is likely to be fully cured over the short-term but remain very risky over a longer horizon might be rated much lower than suggested by this table. Another example could be very low-risk ratings that experience temporary default events, which might be rated much higher than B1.il²¹. Under relatively rare circumstances, structured finance transactions may incur a one-time, small principal write-down (considerably less than 1%) that is not expected to recur (e.g., additional administrative costs that constitute a loss for investors).

¹⁹ Moreover, as said in the definition of the long-term rating scale above, in corporate finance ratings or ratings of financial institutions, Midroog does not make use of a quantitative estimate of the recovery rate when the financial instrument is not in default or impaired debt or is not expected to enter a state of default or to become impaired debt, at a high level of certainty.

²⁰ Change in Moody's definitions may lead to change in Midroog's definitions.

²¹ Payments missed for operational or technical reasons may not be classified as default events. Also, in structured finance transactions, interest and/or principal payments may be delayed beyond the relevant grace period due to a temporary delay in recovery or an operational problem. In such cases, Midroog may consider the potential increase in expected loss should interest not be paid on the delayed payment and may rate the security higher than B1.il.

Rating methodologies (Assessment methods)

Rating methodologies describe the analytical framework Midroog rating committees use to assign credit ratings. They set out the main parameters that in Midroog's opinion are key to assessing the creditworthiness of issuers in a certain sector. The methodologies do not constitute exhaustive treatments of all parameters reflected in Midroog ratings, but list key quantitative and qualitative considerations used in determining ratings. In order to create transparency in respect to the Midroog's analytical approach in setting ratings, all methodologies are published on Midroog's website.

Methodologies relating to corporates and financial institutions usually make use of rating matrices. A rating matrix is a rating tool that incorporates the main parameters for assigning ratings. It is a summary that does not necessarily contain every rating consideration. The weight for each parameter represents an approximation of their importance for rating decisions. In this context, it bears noting that the actual importance of each factor may vary significantly depending on the circumstances of the issuer and the environment in which it operates. The rating committee applies its own judgment in determining the importance of the rating factors and their examination, for example, the use of forecasts versus past performance. As a consequence of these considerations, assigned ratings may be different than indicated by the ratings matrix.

Methodologies governing structured finance ratings usually make use of rating model/s. A structured finance ratings model is a rating tool that includes the main parameters considered to estimate the distribution of losses for the collateral assets, or to determine the effect on the credit risk of different tranches of bonds depending on expected cash flow from the underlying assets, capital structure, and reserve funds. While methodologies contain fixed values for key parameters to be applied to all issuers in a sector, rating committee employs judgment in determining model inputs, and rating committee considerations may be different than model-indicated outputs.

While most methodologies relate to a particular sector or types of transactions, there are also cross-sector methodologies that have implications for a number of sectors, such as: short-term ratings.

Key Rating Assumptions

Methodologies may (but need not) contain separately identifiable key rating assumptions.

Key rating assumptions are the fixed inputs or range of values described in rating methodologies, such as mathematical or correlation assumptions relevant to an entire sector or certain sectors, or common to multiple credit rating methodologies, and which are part of the considerations of rating committee when assigning ratings. Key rating assumptions are subject to the same governance process as the methodology to which they relate, including the need for changes to be approved by the credit policy committee within Midroog.

By nature, key rating assumptions are relatively timeless inputs to the rating process, and because they seek to bring a degree of stability, consistency and transparency to something that may in practice be uncertain, they are intended to be reasonably resilient to change. They may change over time in response to long-term structural changes or as more is learned about long-run mutual relationships between risk factors, but they would be very unlikely to change as a result of a short-run change in economic or financial market conditions.

Decisions or considerations at the rating committee regarding the implications of prevailing credit risk characteristics within a particular sector or country are not key rating assumptions, even where those judgments affect a large number of credit ratings. Moreover, rating committees may consider and decide, from time to time, how to use certain key rating assumptions when assigning a rating, in order to reflect prevailing credit conditions in a certain sector or country (for example to apply higher or lower correlation assumptions, based on the credit risk characteristics of a certain sector or country). Such judgments would not be deemed to change key rating assumptions, since they were not intended to be applied consistently and systematically across most (if not all) debt instruments covered by the relevant methodology.

Macro-economic or financial market projections which are by definition specific to a particular point in time are not key rating assumptions.

For **Structured Finance Credit Rating Methodologies**, key rating assumptions are generally assumptions that underlie the methodology— values assigned to parameters which influence the analysis of a prototypical transaction broadly across the relevant sector. For example:

- Sector correlation assumptions;
- Loss severity expected for the sector;
- Loss rates that serve a proxy for the collateral performance.

Inputs to the rating of structured finance transactions that result from decisions or considerations by rating committee, or which reflect analytical deliberations, and that are not key rating assumptions, include, for example:

- Rating considerations resulting from credit risk of third parties to the transaction (guarantors, servicers, banks, swap providers). These credit risks are reflected in the credit rating of the third party or the credit estimate.
- Changes in collateral asset risk expectations brought on by changes in the economic environment.

In methodologies relating to **corporate finance and financial institutions**, key rating assumptions are intrinsically rare (because the character of the analysis includes less quantitative parameters) and where they do exist, they may be structurally embedded in the rating methodology. Therefore, notation of key rating assumptions for the subject in the rating methodology is practically meaningless, as change in the key rating assumptions in the rating will usually lead to corresponding change in the rating methodology. Following are examples of embedded key rating assumptions structured into the rating methodology:

- The assumption that leverage and financial flexibility are strong drivers and appropriate factors to include in rating methodologies.
- The assumption of strong interdependence between bank and government credit strength.
- The assumption that legal priority of claim affects average recovery on different classes of debt sufficiently to warrant higher or lower ratings for different classes of debt.
- The assumption that the State of Israel is risk free for the purposes of rating on the local scale (for example, at ratings of Aaa.il by virtue of government guarantee or if the GRI model is used).

Key rating assumptions that are considered to be distinct from methodology (though they would be listed therein):

- Loss severity in different sectors.
- Default rates when used as a proxy for the state's ability to support the banking system.

Inputs to the rating process that result from judgments or considerations of the rating committee, or reflect analytical deliberations that are not key rating assumptions include, for example:

- The rating considerations arising from credit risk introduced by third parties (guarantors, other support providers, affiliates). These credit risks are reflected in the credit rating of the third party, or credit estimate.
- The government ability to support the banking system.
- These inputs may include underlying assumptions that do constitute key rating assumptions.

Special Comments

From time to time, Midroog issues special comments relating to particular industries or particular types of issuers. The special comments are not methodological either in content or in intent and do not modify the analytical approach described in rating methodologies. Rather, special comments are generally intended (1) publicize Midroog's views on issuer-specific concerns or developments (Issuer Comment), (2) to describe macroeconomic or sector trends and note the direction of their influence on the ratings (Sector Comment), such as changing demand in an industry, regulatory changes, including new legislation, (3) to explain certain rating processes to help investors better understand how Midroog's rating is assigned, including explaining how the impact of specific trends are taken into account.

Benchmark parameters used in rating models

Midroog aspires to reflect expected credit losses in an ordinal (relative) scale, i.e., that the expected loss at low ratings will be higher than the expected loss at high ratings, in contrast to measuring specific default and loss rates. Accordingly, ratings are assessments of relative credit risk, not cardinal risk assessments.

However, for the purpose of setting a rating for certain financial instruments, Midroog uses models and tools that link between default and loss rates and ratings, in order to use the models' output and tools in the rating process. For that purpose, Midroog relies on default and EL rates that Moody's sets. These parameters are defined by rating group and time span. By using a set of benchmark parameters, rating models are more likely to provide consistency with respect to the estimation of relative risk across rating levels and investment horizons and can be more easily compared to one another. While Moody's probabilities tables bore some degree of relationship to corporate default and loss experience at the time they were created, that relationship has varied over time, and Moody's continuing use of the Idealized Rates for modeling purposes does not depend on the strength of that relationship over any particular time horizon. The default and loss rates tables, together with other tools and certain assumptions, have a combined influence on the models' output. Also, while cardinal measures are input into the models, the rating performances themselves are tested using measures detailed in the rating performance reports.²²

When we perceive changes in risk that necessitate changes in our credit analysis, this is effected by revision of the data and sometimes in certain assumptions rather than changing the benchmark parameters. This approach enables us to make adjustments that only affect the particular sectors and asset classes we expect will experience significant changes in risk at a given time.

Expected Default and Loss Tables

In the process of determining ratings for certain issuers and financial instruments (such as financial instruments in structured finance and issuers government related issuers), Midroog may use benchmark default and expected loss probabilities. For this purpose, Midroog relies on [Moody's Idealized Probabilities of Default and Moody's Idealized Expected Losses tables](#)²³, without any adjustment to the domestic market. These tables are based on global historic data and incorporate various adjustments.

The tables can be used into two ways: (1) to suggest benchmark expected default and loss rates for modelling the credit risk of a collateral assets or the risk that a rated- counterparty will fail to perform a role, and (2) to associate different modelled expected loss rates with different benchmark ratings. Please consult Midroog's credit rating methodologies for details.

Report date: December 9, 2020

²² For rating performance reports, see Midroog's website.

²³ For the tables, see the Midroog website.

Addendum 1: Main changes to this document compared to the publication on March 2018

- Adding clarification that the document includes symbols and definitions of ancillary services and assigning a relative score to other services and assets.
- In the long-term rating section, explanation of the types of instruments Midroog rates.
- Further explanation of situations in which a rating is denoted provisional.
- In the definition of insurers' financial strength, the text regarding the rating's application regarding specific obligations not rated by Midroog was deleted.
- A clarification was added to the issuer rating definition, about situations in which the issuer rating isn't relevant.
- In the ETFs rating scale, the word "traded" was deleted and a footnote added about the transaction documents.
- In the MQ scale, explanation of the arguments "+" and "-" was deleted throughout the scale.
- In the money market ratings scale, the initials were revised from "MMF" to "mf".
- Definitions of the following services were added in the chapter "Relative score for other services and assets": a system to rate tracking funds and ETFs, a 'red flags' system for tracking funds and ETFs, rating provident funds and training funds. Also, the description of 'red flags' system was revised. These services are also published on Midroog's website and are reported in the annual report.
- Another example was added to the type of scenarios addressed in the framework of rating assessment service, to include a rating assessment service for an initial transaction/project and/or debt issuance.
- The definition of default was revised to include structured finance instruments even if payment is not contractually required as detailed in footnote 16: "In certain structured finance transactions, nonpayment may cause losses, even if the payments are not contractually obligatory. Midroog therefore defines, in structured finance instruments, that a default event occurred if a material interest payment failed to be made during 12 months or more or if a security suffered a material principal loss (or writedown). If an interest or principal gap as said is later reduced to below materiality threshold of 0.5% of the security's original balance, then the default was cured." instead of the definition of events of the type as impaired debt in Section 2 of the impaired debt definition.
- Deletion of the examples of Section 3 of the default definition.
- Deletion of the term debt in the definition of impaired debt when relating to failure to pay or restructuring of instruments in which nonpayment does not constitute default (sections 2 and 3 of the definition of impaired debt).
- Deletion of the mention of reduced obligation in Section 3(b) in the definition of impaired debt.
- Deletion of the mention of primary and secondary rating methodologies in the definition of "rating methodology".
- Changing the wording of the "special reports" section.
- Adding mention of "Benchmark parameters used in rating models".
- Adding examples of how to use "Default and Expected Loss tables".
- Proofreading and design corrections.

Addendum 2: Conversion key between rating scales, before the change in September 2015 to the current rating scales

Long term scale	
Before the change	After the change
Aaa	Aaa.il
Aa1	Aa1.il
Aa2	Aa2.il
Aa3	Aa3.il
A1	A1.il
A2	A2.il
A3	A3.il
Baa1	Baa1.il
Baa2	Baa2.il
Baa3	Baa3.il
Ba1	Ba1.il
Ba2	Ba2.il
Ba3	Ba3.il
B1	B1.il
B2	B2.il
B3	B3.il
Caa1	Caa1.il
Caa2	Caa2.il
Caa3	Caa3.il
Ca	Ca.il
C	C.il

Short term scale	
Before the change	After the change
P-1	P-1.il
P-2	P-2.il
P-3	P-3.il
Not Prime	NP.il

(BCA)Baseline Credit Assessment**Before the change After the change**

Aaa	aaa.il
Aa1	aa1.il
Aa2	aa2.il
Aa3	aa3.il
A1	a1.il
A2	a2.il
A3	a3.il
Baa1	baa1.il
Baa2	baa2.il
Baa3	baa3.il
Ba1	ba1.il
Ba2	ba2.il
Ba3	ba3.il
B1	b1.il
B2	b2.il
B3	b3.il
Caa1	caa1.il
Caa2	caa2.il
Caa3	caa3.il
Ca	ca.il
C	c.il

Investment Manager Quality (MQ)**Before the change After the change**

MQ1	MQ1.il
MQ2	MQ2.il
MQ3	MQ3.il
MQ4	MQ4.il
MQ5	MQ5.il

Money Market Funds and Bond Funds**Before the change After the change**

Aaa-mf	Aaa.il-mf
Aa-mf	Aa.il-mf
A-mf	A.il-mf
Baa-mf	Baa.il-mf
B-mf	B.il-mf
C-mf	C.il-mf

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