



Cash Flow 2.35 1.95 1.62 1.35 1.19 0.86 0.63 0.53 0.42 0.34
 Earnings 1.87 1.56 1.25 1.10 1.00 0.71 0.52 0.43 0.34 0.29
 Dividends 0.26 0.21 0.17 0.16 0.13 0.07 0.06 0.05 0.04 0.03
 Payout Ratio 1.33 1.29 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25
 Prices:High 88.18 88.04 88.00 84.00 81.50 79.13 76.75 74.38 72.00 69.62

Moody's Ultimate Recovery Database

Specs:

Technical Specifications

Product Overview

Moody's Ultimate Recovery Database (URD) helps investors estimate loss given default based on the capital and debt structure of a given issuer. Moody's designed URD for sophisticated clients who would like to take advantage of Moody's unique wealth of data to validate and develop their own LGD models.

Moody's began assembling the data underlying URD to provide additional granularity to its ratings, disaggregating speculative grade ratings into probability of default and loss given default in keeping with Basel II guidelines. Through analysis of the recovery data in the URD, Moody's identified certain trends in recovery that are somewhat counter-intuitive and formulated its methodology to take into account these intricacies. Clients have expressed interest in seeing the data underlying Moody's LGD initiative.

URD responds to these requests by providing the detailed data underlying Moody's LGD methodology in a user-friendly database.

File Specifications

In the following pages are the table layouts for the Ultimate Recovery Database

The database will be updated on a monthly basis and will be available on www.moody.com. You will need to be entitled to access the data and download the Microsoft Access database. If you do not have a Moody.com username and password, please contact us at DefaultResearch@moody.com

List of Tables

Table Name	Table Purpose	Key
Class	Stores descriptive details of each class in the data set	Cl_id
Class Instrument	Stores recovery information for instruments according to their class	cli_id
Event	Stores the details of the events associated with each obligor	Ev_id
Instrument	Stores information on individual instruments	In_id
Obligor	Stores information on individual obligors	Ob_id

List Name	List Purpose
Rates LIBOR	Reference: LIBOR Rates
Rates Prime	Reference: Prime Rates
Rates Treasury	Reference: Treasury Rates
SIC Codes	Reference: Standard Industry Codes

Fields contained in the Ultimate Recovery Database but not listed here have been intentionally omitted, as they represent functionality rather than data and are of no consequence to our clients.

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Moody's Investors Service

Technical Specifications - continued

TABLE: **Class**
PURPOSE: **Stores descriptive details of each class in the data set**

Field	Field Name	Data Type	Field Definition
cl_id	Class ID	Autonumber	Unique identifier for each class
cl_eventid	Event ID	Number	Event ID
cl_classtag	Creditor Class Tag	Text	Class grouping from the bankruptcy documents as assigned by the court. In the cases of distressed exchanges or other types of restructurings, debt is classified in a similar fashion to that of a bankruptcy court
cl_classname	Class name	Text	Title of each class of defaulted debt claims. These are tied to the Creditor Class Tag
cl_totalclassdebt	Total Debt of Class	Number	Total debt of class
cl_partoflargerclassvalue	Value for Part of Larger Class	Number	If the instrument is part of a larger class, indicates the value of that part
cl_settlementdesc	Settlement Description	Memo	Analyst's notes on how the settlement was handled
cl_classcomments	Class Comments	Memo	Analyst's notes on the class
cl_useTradingPrice	Use Trading Price	Yes/No	Indicates whether the trading price is the preferred method
cl_useSettlement	Use Settlement	Yes/No	Indicates whether the settlement method is the preferred method
cl_useLiquidity	Use Liquidity	Yes/No	Indicates whether the liquidity method is the preferred method
cl_preferredmethod	Preferred Method	Text	Text description of the preferred method: trading price, settlement, or liquidity
cl_listcomment	List Comments	Memo	Analyst's comments on the list
cl_estimatedclaims	Estimated Claims	Number	If the class is part of a larger class, this field is used to estimate the claims against this class
cl_calculate_trade	Calculate Trade?	Yes/No	Field used to determine what will be recalculated on the class screen
cl_calculate_settle	Calculate Settlement?	Yes/No	Field used to determine what will be recalculated on the class screen
cl_calculate_liquid	Calculate Liquidity?	Yes/No	Field used to determine what will be recalculated on the class screen

TABLE: **Class Instrument**
PURPOSE: **Stores recovery information for instruments according to their class**

Field	Field Name	Data Type	Field Definition
cli_id	Instrument ID	AutoNumber	Unique Identifier for each instrument
cli_classid	Class ID	Number	Unique Identifier for each class
cli_type	Instrument Type	Text	Instrument type classification (i.e. Term Loan, Senior Secured bonds)
cli_settlemethod	Settlement Method	Text	Settlement Method Instruments
cli_settlevalue	Settlement Value	Number	Settlement Value
cli_settleamount	Settlement Amount	Number	Settlement Amount
cli_settleshareprice	Settlement Share Price	Number	Settlement Share Price
cli_settlepercentnomval	Settlement Percent Nominal Value	Number	Settlement Percent Nominal Value
cli_settlesharetradedate	Settlement Share Trade Date	Date/Time	Settlement Share Trade Date
cli_settlebondprice	Settlement Bond Price	Number	Settlement Bond Price
cli_settlebondtradedate	Settlement Bond Trade Date	Date/Time	Settlement Bond Trade Date
cli_liquidmethod	Liquidity Method	Text	Liquidity Method
cli_liquidvalue	Liquidity Value	Number	Liquidity Value
cli_liquidamount	Liquidity Amount	Number	Liquidity Amount
cli_liquidshareprice	Liquidity Share Price	Number	Liquidity Share Price
cli_liquidpercentnomval	Liquidity Percent Nominal Value	Number	Liquidity Percent Nominal Value
cli_liquidsharetradedate	Liquidity Share Trade Date	Date/Time	Liquidity Share Trade Date
cli_liquidbondprice	Liquidity Bond Price	Number	Liquidity Bond Price
cli_liquidbondtradedate	Liquidity Bond Trade Date	Date/Time	Liquidity Bond Trade Date
cli_settlepercentdisval	Settlement Percent Discount Value	Number	Settlement Percent Discount Value
cli_liquidpercentdisval	Liquidity Percent Discount Value	Number	Liquidity Percent Discount Value
cli_source	Source	Text	Source

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Technical Specifications - continued

TABLE: Event
PURPOSE: Stores the details of the events associated with each obligor

Field	Field Name	Data Type	Field Definition
ev_id	Event ID	AutoNumber	Unique identifier for each event.
ev_obligorid	Obligor ID	Number	Unique identifier for each obligor
ev_defaulteventdesc	Default Description	Text	Description of default
ev_emergencedate	Emergence Date	Date/Time	The date the obligor emerged from bankruptcy or completed its exchange or restructuring.
ev_obligordefaultdate	Obligor Default Date	Date/Time	Date the obligor filed a petition for Chapter 11 or Chapter 7. In a non-bankruptcy scenario, this is the date of the exchange or the date that the restructuring is completed.
ev_defaulttype	Default Type	Text	Defaults are categorized into one of four types: bankruptcy, distressed exchange, default and cure, and other restructuring.
ev_defaultreason	Default Reason	Text	Reason for default
ev_prepack	Pre-pack bankruptcy	Yes/No	Is this a Pre-packaged bankruptcy?
ev_totaldebt	Issuer Total Debt	Number	Total defaulted debt for each default obligor. Note: may be different if obligor has multiple defaults.
ev_comment	Event Comment	Memo	Event Comment
ev_outcome	Outcome	Text	Outcome of the event, can be liquidated, emerged, or acquired.

TABLE: Instrument Table
PURPOSE: Stores information on individual instruments

Field	Field Name	Data Type	Field Definition
in_id	Instrument ID	AutoNumber	Unique Identifier for each instrument
in_classid	Class ID	Number	Unique Identifier for each class
in_instrumentdesc	Description of Instrument	Text	The descriptive name of each instrument as it appears in SEC filings, pricing sources and news articles
in_instrumenttype	Instrument Type	Text	Instrument type classification (i.e. Term Loan, Senior Secured bonds)
in_defaultdate	Default Date	Date/Time	The date and instrument was in payment default. Moody's defines "default" as a missed principal or interest payment or as a distressed exchange scenario.
in_lastdatecashpaid	Last Date of Cash Paid	Date/Time	The last date prior to default that principal or interest was paid on the instrument. For discount instruments, this date is set at the date of instrument default.
in_originationdate	Origination Date	Date/Time	Origination Date of Instrument
in_maturitydate	Maturity Date	Date/Time	Maturity Date of Instrument
in_originalamount	Original Amount	Number	Original or face amount of each instrument
in_principaldefaultamount	Principal Default Amount	Number	Amount outstanding of each instrument at time of default
in_originalproceedsamount	Original Proceeds Amount	Number	Original Proceeds Amount
in_accretedamount	Accreted Amount	Number	Accreted Amount
in_amountexchanged	Amount Exchanged	Number	Amount Exchanged
in_interestbaserate	Interest Base Rate Type	Text	Interest Base Rate Type
in_valueoverbaserate	Value Over Base Rate	Number	Value Over Base Rate
in_interestfrequency	Interest Frequency	Text	Interest Frequency
in_interestpaymentdates	Interest Payment Dates	Text	Interest Payment Dates
in_effectiveinterestrate	Effective Interest Rate	Number	The sum of the interest rate index, taken at last date of cash paid, and the spread over the index
in_collateraltype	Collateral Type	Text	Collateral is grouped into 16 collateral types (i.e. "All Assets", "Second Line", "Unsecured")

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Technical Specifications - continued

TABLE: Instrument Table (continued)
PURPOSE: Stores information on individual instruments

Field	Field Name	Data Type	Field Definition
in_collateraldesc	Collateral Description	Memo	Collateral Description
in_collateralrank	Collateral Rank	Number	The instruments in each event are ranked in relation to each other based on the structure prior to default taking into consideration collateral and instrument type
in_holdingcompany	Holding Company	Yes/No	Holding Company
in_CUSIP	CUSIP	Text	Unique instrument identifier
in_tradingprice30day	30-Day Trading Price	Number	30-Day Trading Price
in_tradingprice30daydate	Date of 30-Day Trading Price	Date/Time	Date of 30-Day Trading Price
in_tradingprice30daysource	Source of 30-Day Trading Price	Text	Source of 30-Day Trading Price
in_tradingpriceemergence	Emergence Trading Price	Number	Emergence Trading Price
in_tradingpriceemergencedate	Date of Emergence Trading Price	Date/Time	Date of Emergence Trading Price
in_tradingpriceemergencesource	Source of Emergence Trading price	Text	Source of Emergence Trading price
in_debtabove	Debt Above	Number	The total of all defaulted debt that is contractually senior to the current instrument
in_debtbelow	Debt Below	Number	The total of all defaulted debt that is contractually subordinate to the current instrument
in_debtcurrent	Debt in Current Rank	Number	The amount of debt that is neither senior nor subordinate to the current instrument
in_percentabove	Percent of Debt Above	Number	The percentage of debt which is contractually senior to the current instrument. Percent of debt above is derived by taking the principal above (\$) and dividing it by the total issuer debt
in_percentbelow	Percent of Debt Below	Number	The percentage of debt which is contractually subordinated to the current instrument. Debt below percentage is derived by taking the principal debt below (\$) and dividing it by the total issuer debt
in_percentcurrent	Percent of Debt in Current Rank	Number	Percent of Debt in Current Rank
in_nominalsettlementtotal	Nominal Settlement Total ¹	Number	The sum value of the settlement instruments received for each defaulted instrument, taken at or close to emergence, divided by the total principal defaulted amount of the class, reflected as a percentage of the principal amount at default
in_nominalliquiditytotal	Nominal Liquidity Total ¹	Number	The sum value of the settlement instruments received for each defaulted instrument, using the value at the time of the liquidity event for each instrument, such as the maturity of the instrument, the call of the instrument, or a subsequent default, divided by the total principal amount of the class, reflected as a percentage of the principal amount at default
in_nominaltradingprice	Nominal Trading Price Total ¹	Number	The average trading price of the defaulted instrument post emergence taken as a percentage of par.
in_discountsettlementtotal	Discount Settlement Total ²	Number	The nominal settlement recovery amount discounted back from each settlement instrument's trading date to the last date cash paid of the individual defaulted instruments, using the defaulted instrument's effective interest rate
in_discountliquiditytotal	Discount Liquidity Total ²	Number	The nominal liquidity recovery total discounted back from each settlement instrument's trading date to the last date cash paid of the individual defaulted instruments, using the defaulted instrument's effective interest rate.

¹"Nominal Recoveries" are the recoveries as analyzed and are not discounted or otherwise reduced. Recoveries are displayed as a percentage of the principal amount at default.

²"Discounted Recoveries" are the nominal recoveries discounted at each instrument's prepetition interest rate. The timeframe for the discounting depends on the methodology employed. Recoveries are displayed as a percentage of the principal amount at default.

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Technical Specifications - continued

TABLE: Instrument Table (continued)
PURPOSE: Stores information on individual instruments

Field	Field Name	Data Type	Field Definition
in_discounttradingprice	Discount Trading Price Total ²	Number	The trading price nominal recovery value discounted from the trading date to the instrument's last date cash paid using the effective interest rate of the pre-defaulted instrument
in_comment	Comments	Memo	Comments
in_listcomment	List Comments	Memo	List Comments
in_didnotdefault	Defaulted?	Yes/No	Indicates whether the instrument defaulted and determines if we calculate the effective rate. There are cases, most often in distressed exchanges or restructurings where only some of the instruments will default
in_treatment	Treatment	Memo	Verbal description of how the class was treated in default. This field gives the summary of what occurred and how the recovery is derived.
in_discount_ind	Discount Instrument Recalculation?	Yes/No	Determines if the instrument is a discount instrument.
in_flag_trade	Trading Price Recalculation?	Yes/No	Determines if the trading price nominal and discount values need to be recalculated
in_flag_settle_nom	Settlement Nominal Recalculation?	Yes/No	Determines if the settlement discount values needs to be recalculated.
in_flag_settle_dis	Settlement Discount Recalculation?	Yes/No	Determines if the settlement nominal values need to be recalculated.
in_flag_liquid_nom	Liquidity Nominal Recalculation?	Yes/No	Determines if the liquidity nominal values need to be recalculated
in_flag_liquid_dis	Liquidity Discount Recalculation?	Yes/No	Determines if the liquidity discount values need to be recalculated
in_moodysdebtid	Moody's Debt ID	Text	Unique identifier for Moody's debts

² "Discounted Recoveries" are the nominal recoveries discounted at each instrument's prepetition interest rate. The timeframe for the discounting depends on the methodology employed. Recoveries are displayed as a percentage of the principal amount at default.

TABLE: Obligor
PURPOSE: Stores information on individual obligors

Field	Field Name	Data Type	Field Definition
ob_id	Obligor ID	AutoNumber	Unique identifier for each obligor
ob_name	Name	Text	Obligor Name
ob_siccode	SIC Code	Number	U.S. Standard Industry Code
ob_industrydesc	Business Description	Memo	Business Description- background on companies role in industry.
ob_bloombergtickerid	Bloomberg Ticker ID	Text	Bloomberg Ticker ID
ob_moodysinternalid	Moody's Internal Identifier	Text	Moody's Internal Identifier
ob_moodysindustrygrp	Moody's Industry Group	Text	Moody's divides companies into 20 peer groups representing industry classifications. These are linked with the Moody's Company ID.
ob_cusip	CUSIP	Text	CUSIP
ob_comment	Comment Field	Memo	Comment Field
ob_listcomment	Obligor List Comment Field	Memo	Obligor List Comment Field
ob_eventlistcomments	Event List Comments	Memo	Comments on the events list tab on the obligor screen
ob_sicdesc	SIC Code Description	Text	Description of the SIC code

