

# Database

**Atoti Market Risk** 

5.1

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#### **Database**

This section provides the database definitions in the Atoti Market Risk.

Here are a few points to note about the database descriptions:

- The documentation mentions some constraints, for example NOT NULL and UNIQUE KEY. These constraints may not be enforced by all databases and may be difficult to enforce when using views. However, the Atoti Market Risk will assume that the data satisfies these constraints and may behave unpredictably if they are not satisfied.
- The documentation includes the joins used between the tables/views. These are provided for informational purposes, though they may optionally be used to construct keys and indices to help maintain data integrity and improve performance.

Each cube in the Atoti Market Risk uses a star schema with many-to-one joins radiating out from a base table. The base tables are as follows:

Cube	Base Table
PnL Cube	PNL
Sensitivities Cube	TRADE_SENSITIVITIES
VaR-ES Cube	TRADEPNLS

Additionally, there are "isolated" tables that are not part of the star schema but are still used in the Cubes.

#### Global Database Definition

This section describes tables that are common to all cubes, such as FX rates and trade booking.

#### **FX Rates**

The FX rates are stored in the FXRATES table.

### Trade Booking

The TRADE ATTRIBUTES table contains data relative to the trades.

The multi-level book organizational hierarchy and desk descriptions are in the BOOK HIERARCHY table, which is indexed by BOOK and AS OF DATE.



NOTE

The BOOK HIERARCHY table is populated from the BOOK PARENT CHILD table.

#### Legal Entities

The multi-level legal entity organizational hierarchy is in the LEGAL ENTITY HIERARCHY table, which is indexed by LEGAL ENTITY and AS OF DATE.



#### NOTE

The LEGAL ENTITY HIERARCHY table is populated from the LEGAL ENTITY PARENT CHILD

#### Counterparties

The multi-level counterparty organizational hierarchy is in the COUNTERPARTY HIERARCHY table, which is indexed by COUNTERPARTY\_ID and AS\_OF\_DATE.



#### NOTE

The COUNTERPARTY\_HIERARCHY table is populated from the COUNTERPARTY PARENT CHILD table.

The COUNTERPARTIES table indexed by COUNTERPARTY ID and AS OF DATE contains additional data for counterparties.

#### Risk Factor Catalogue

The RISK\_FACTORS\_CATALOGUE table indexed by RISK\_FACTOR\_ID and AS\_OF\_DATE table contains additional data for risk factors.

#### Countries

The COUNTRIES table indexed by COUNTRY\_CODE and AS\_OF\_DATE contains additional data for countries.

### Quantile and Rounding Method Descriptions

The QUANTILES table contains the definitions used for quantile computations (e.g.: 'EXCLUSIVE', 'EQUAL WEIGHTS', 'CENTERED') for VaR and ES. The ROUNDING METHODS table contains the descriptions of the methods used for rounding when computing VaR and ES.

### Scenario Descriptions

The SCENARIOS table contains the VaR and ES scenario descriptions.

#### Market Data Sets

The MARKET DATA SETS table is used to provide available market data sets.

#### Market Shifts

The MARKET\_SHIFTS and MARKET\_SHIFTS\_VECTOR tables is used to store market shifts.

## **BOOK\_HIERARCHY**

The BOOK HIERARCHY table contains the multi-level book organizational structure.



The content of this table is populated from the content of the BOOK\_PARENT\_CHILD table.

Column Name	Type	Not Null	Cube Field	Default Value	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
BOOK	STRING	У		N/A	Leaf node of the book hierarchy. This matches the last nonDATAMEMBER_ node in levels 1 - 15.
BOOK_HIERARCHY_LEVEL1	STRING	У	Level 1	N/A	Node at level 1 of the book hierarchy.
BOOK_HIERARCHY_LEVEL2	STRING	У	Level 2	N/A	Node at level 2 of the book hierarchy.
BOOK_HIERARCHY_LEVEL3	STRING	У	Level 3	N/A	Node at level 3 of the book hierarchy.
BOOK_HIERARCHY_LEVEL4	STRING	У	Level 4	N/A	Node at level 4 of the book hierarchy.
BOOK_HIERARCHY_LEVEL5	STRING	У	Level 5	N/A	Node at level 5 of the book hierarchy.
BOOK_HIERARCHY_LEVEL6	STRING	У	Level 7	N/A	Node at level 6 of the book hierarchy.
BOOK_HIERARCHY_LEVEL7	STRING	У	Level 6	N/A	Node at level 7 of the book hierarchy.
BOOK_HIERARCHY_LEVEL8	STRING	У	Level 8	N/A	Node at level 8 of the book hierarchy.
BOOK_HIERARCHY_LEVEL9	STRING	У	Level 9	N/A	Node at level 9 of the book hierarchy.
BOOK_HIERARCHY_LEVEL10	STRING	У	Level 10	N/A	Node at level 10 of the book hierarchy.

Column Name	Type	Not Null	Cube Field	Default Value	Description
BOOK_HIERARCHY_LEVEL11	STRING	У	Level 11	N/A	Node at level 11 of the book hierarchy.
BOOK_HIERARCHY_LEVEL12	STRING	У	Level 12	N/A	Node at level 12 of the book hierarchy.
BOOK_HIERARCHY_LEVEL13	STRING	У	Level 13	N/A	Node at level 13 of the book hierarchy.
BOOK_HIERARCHY_LEVEL14	STRING	У	Level 14	N/A	Node at level 14 of the book hierarchy.
BOOK_HIERARCHY_LEVEL15	STRING	У	Level 15	N/A	Node at level 15 of the book hierarchy.
DESK	STRING	У	[Booking]. [Desks]	N/A	The desk to which the book belongs. This will match one of the nonDATAMEMBER_ nodes in levels 1 - 15.
CATEGORY	STRING	У		N/A	Optional category for the node (and all descendant nodes).

Columns	
AS_OF_DATE	
BOOK	

### Incoming Joins

Source Table	Source Columns	Target Columns
TRADE_ATTRIBUTES	AS_OF_DATE BOOK	AS_OF_DATE BOOK

# Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### **BOOK\_PARENT\_CHILD**

The BOOK\_PARENT\_CHILD table contains the parent/child relationships used to build the book hierarchy.



The BOOK HIERARCHY table is populated from the BOOK PARENT CHILD table.

Column Name	Type	Not Null	Cube Field	Default Value	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
CHILD	STRING	У			Name of the node in the Book/Desk hierarchy.
PARENT	STRING				Name of the parent node (or null if there is no parent).
DESK	STRING				Set to "Y" to identify this node as a desk, otherwise left empty.
CATEGORY	STRING				Optional category for the node and all descendant nodes. Placeholder.

#### Unique Key

Columns	
AS_OF_DATE	
CHILD	

#### Joins

There is a self-join on the BOOK\_PARENT\_CHILD table - see database creation script for details.

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### **COUNTERPARTIES**

The COUNTERPARTIES table contains data for counterparties.

Column Name	Type	Not Null	Default Value	Cube Field	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
COUNTERPARTY_ID	STRING	У	N/A	[Counterparties].[CounterpartyIds]	Counterparty identifier. Used as a foreign key when counterparty is referenced.
COUNTERPARTY_NAME	STRING	У	N/A	[Counterparties]. [CounterpartyNames]	Full counterparty name.
RATING	STRING	У	N/A	[Counterparties]. [CounterpartyRatings]	Rating of the counterparty.
SECTOR	STRING	У	N/A	[Counterparties]. [CounterpartySectors]	Sector of the counterparty.
COUNTRY_OF_ADDRESS	STRING	У	N/A	[Counterparties]. [CounterpartyCountriesOfAddress]	Country where the counterparty is located, in the form of a unique three- letter country identifier code.
COUNTRY_OF_RISK	STRING	У	N/A	[Counterparties]. [CounterpartyCountriesOfRisk]	Country the risk of counterparty can be attributed to, in the form of a unique three-letter country identi

Unique Key

#### Columns

AS\_OF\_DATE

COUNTERPARTY\_ID

#### Incoming Joins

Source Table	Source Columns	Target Columns
TRADE_ATTRIBUTES	AS_OF_DATE COUNTERPARTY_ID	AS_OF_DATE COUNTERPARTY_ID

#### **Outgoing Joins**

Target Table	Source Columns	Target Columns
COUNTRIES	AS_OF_DATE COUNTRY_OF_ADDRESS	AS_OF_DATE COUNTRY_CODE
COUNTRIES	AS_OF_DATE COUNTRY_OF_RISK	AS_OF_DATE COUNTRY_CODE

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### COUNTERPARTY\_HIERARCHY

The COUNTERPARTY HIERARCHY table contains the multi-level counterparty organizational structure.



Note: The content of this table is populated from the content of the COUNTERPARTY PARENT CHILD table.

Column Name Typ	Not Null	Default Value Description
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Column Name	Type	Not Null	Cube Field	Default Value	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
COUNTERPARTY_ID	STRING	У	[Counterparties]. [CounterpartyIds]	N/A	Leaf node of the book hierarchy. This matches the last non- _DATAMEMBER_ node in levels 1 - 15.
COUNTERPARTY_HIERARCHY_LEVEL1	STRING	У	Level 1	N/A	Node at level 1 of the counterparty hierarchy.
COUNTERPARTY_HIERARCHY_LEVEL2	STRING	У	Level 2	N/A	Node at level 2 of the counterparty hierarchy.
COUNTERPARTY_HIERARCHY_LEVEL3	STRING	У	Level 3	N/A	Node at level 3 of the counterparty hierarchy.
COUNTERPARTY_HIERARCHY_LEVEL4	STRING	У	Level 4	N/A	Node at level 4 of the counterparty hierarchy.
COUNTERPARTY_HIERARCHY_LEVEL5	STRING	У	Level 5	N/A	Node at level 5 of the counterparty hierarchy.
COUNTERPARTY_HIERARCHY_LEVEL6	STRING	У	Level 6	N/A	Node at level 6 of the counterparty hierarchy.
COUNTERPARTY_HIERARCHY_LEVEL7	STRING	У	Level 7	N/A	Node at level 7 of the counterparty hierarchy.

Column Name	Type	Not Null	Cube Field	Default Value	Description
COUNTERPARTY_HIERARCHY_LEVEL8	STRING	У	Level 8	N/A	Node at level 8 of the counterparty hierarchy.
COUNTERPARTY_HIERARCHY_LEVEL9	STRING	У	Level 9	N/A	Node at level 9 of the counterparty hierarchy.
COUNTERPARTY_HIERARCHY_LEVEL10	STRING	У	Level 10	N/A	Node at level 10 of the counterparty hierarchy.

Columns	
AS_OF_DATE	
COUNTERPARTY_ID	

#### Incoming Joins

Source Table	Source Columns	Target Columns
TRADE_ATTRIBUTES	AS_OF_DATE COUNTERPARTY_ID	AS_OF_DATE COUNTERPARTY_ID

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

## COUNTERPARTY\_PARENT\_CHILD

The COUNTERPARTY\_PARENT\_CHILD table contains the parent/child relationships used to build the counterparty hierarchy.



The COUNTERPARTY\_HIERARCHY table is populated from the COUNTERPARTY\_PARENT\_CHILD table.

Column Name	Type	Not Null	Cube Field	Default Value	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
CHILD	STRING	У			Identifier of the node in the Counterparty hierarchy.
PARENT	STRING				Identifier of the parent node (or null if there is no parent).

### Unique Key

Columns	
AS_OF_DATE	
CHILD	

#### **Joins**

There is a self-join on the COUNTERPARTY\_PARENT\_CHILD table - see database creation script for details.

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

#### **COUNTRIES**

The COUNTRIES table contains description data for countries.

Column Name	Type	Not Null	Cube Field	Default Value	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
COUNTRY_CODE	STRING	У		N/A	Unique three-letter country identifier code.

Column Name	Type	Not Null	Cube Field	Default Value	Description
COUNTRY	STRING	У		N/A	The name of the country.
LATITUDE	DOUBLE	У		N/A	The latitude of the country in the decimal degrees format.
LONGITUDE	DOUBLE	У		N/A	The longitude of the country in the decimal degrees format.
REGION	STRING	У		N/A	The region in which the country is located.
SUB_REGION	STRING	У		N/A	The sub-region in which the country is located.

Columns
AS_OF_DATE
COUNTRY_CODE

#### Incoming Joins

Source Table	Source Columns	Target Columns
COUNTERPARTIES	AS_OF_DATE COUNTRY_OF_ADDRESS	AS_OF_DATE COUNTRY_CODE
COUNTERPARTIES	AS_OF_DATE COUNTRY_OF_RISK	AS_OF_DATE COUNTRY_CODE

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### **FXRATES**

The FXRATES table contains all the FX Rates. It is an isolated table and not part of any cube facts. FX Rates are looked up via the default implementation of IFXRates API.

Column Name	Type	Not Null	Default Value	Description
AS_OF_DATE	DATE	У		Timestamp (at close of business) for the data.
MARKET_DATA_SET	STRING	У	N/A	String defining the market data set.
BASE_CCY	STRING	У	N/A	The left side of the currency pair.
COUNTER_CCY	STRING	У	N/A	The right side of the currency pair.
TERM	STRING	У	N/A	The term of the rate.
FX_RATE	DOUBLE	У	1.0	Forex rate between the two currencies.
RISK_FACTOR_ID	STRING		N/A	Risk factor id used to compute FX risk

Columns	
AS_OF_DATE	
MARKET_DATA_SET	
BASE_CCY	
COUNTER_CCY	
TERM	

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### LEGAL\_ENTITY\_HIERARCHY

The LEGAL\_ENTITY\_HIERARCHY table contains the multi-level legal entity organizational structure.



NOTE

The content of this table is populated from the content of the LEGAL ENTITY PARENT CHILD table.

Column Name	Type	Not Null	Cube Field	Default Value	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
LEGAL_ENTITY	STRING	У	[Organization]. [Legal Entities]	N/A	Leaf node of the book hierarchy. This matches the last non- _DATAMEMBER_ node in levels 1 - 15.
LEGAL_ENTITY_HIERARCHY_LEVEL1	STRING	У	Level 1	N/A	Node at level 1 of the legal entity hierarchy.
LEGAL_ENTITY_HIERARCHY_LEVEL2	STRING	У	Level 2	N/A	Node at level 2 of the legal entity hierarchy.
LEGAL_ENTITY_HIERARCHY_LEVEL3	STRING	У	Level 3	N/A	Node at level 3 of the legal entity hierarchy.
LEGAL_ENTITY_HIERARCHY_LEVEL4	STRING	У	Level 4	N/A	Node at level 4 of the legal entity hierarchy.
LEGAL_ENTITY_HIERARCHY_LEVEL5	STRING	У	Level 5	N/A	Node at level 5 of the legal entity hierarchy.

#### Columns

AS\_OF\_DATE

LEGAL\_ENTITY

## Incoming Joins

Source Table	Source Columns	Target Columns
TRADE_ATTRIBUTES	AS_OF_DATE LEGAL_ENTITY	AS_OF_DATE LEGAL_ENTITY

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### LEGAL\_ENTITY\_PARENT\_CHILD

The LEGAL ENTITY PARENT CHILD table contains the parent/child relationships used to build the legal entity hierarchy.



NOTE

The LEGAL ENTITY HIERARCHY table is populated from the LEGAL ENTITY PARENT CHILD

Column Name	Type	Not Null	Cube Field	Default Value	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
CHILD	STRING	У			Identifier of the node in the Legal Entity hierarchy.
PARENT	STRING				Identifier of the parent node (or null if there is no parent).

#### Unique Key

Columns	
AS_OF_DATE	
CHILD	

#### Joins

There is a self-join on the LEGAL ENTITY HIERARCHY table - see database creation script for details.

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields,

and that a value needs to be explicitly set for non-nullable fields.

### MARKET\_DATA\_SETS

The MARKET\_DATA\_SETS table is used to provide available market data sets.

Column Name	Type	Not Null	Default Value	Description
AS_OF_DATE	DATE	У		Timestamp (at close of business) for the data.
MARKET_DATA_SET	STRING	У	N/A	String defining the market data set, for example "Trader marks" or "Official EOD".

#### Unique Key

Columns	
AS_OF_DATE	
MARKET_DATA_SET	

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### **MARKET\_SHIFTS**

The MARKET\_SHIFTS table contains some of the attributes for market shifts for the Taylor VaR calculations and FX shifts for FX risk computation. It is an isolated table and not part of any cube facts. The market shift vectors are present in the MARKET\_SHIFTS\_VECTOR table.

Column Name	Type	Not Null	Default Value	Description
AS_OF_DATE	DATE	У		Timestamp (at close of business) for the data.
RISK_FACTOR_ID	STRING	У	N/A	The internal risk factor/bucket identifier: instrument, curve, vol surface/cube identifier.
SCENARIO_SET	STRING	У	N/A	Name of the set of scenarios. Example: "Historical", "Stress".
TENOR	STRING	У	N/A	Tenor label, such as 3M, 5Y, and so on, if applicable.

Column Name	Type	Not Null	Default Value	Description
MATURITY	STRING	У	N/A	Maturity label, such as 3M, 5Y, and so on, if applicable.
MONEYNESS	STRING	У	N/A	Moneyness label, if applicable.

Columns
AS_OF_DATE
RISK_FACTOR_ID
SCENARIO_SET
TENOR
MATURITY
MONEYNESS

#### Incoming Joins

Source Table	Source Columns	Target Columns
MARKET_SHIFTS_VECTOR	AS_OF_DATE RISK_FACTOR_ID SCENARIO_SET TENOR MATURITY MONEYNESS	AS_OF_DATE RISK_FACTOR_ID SCENARIO_SET TENOR MATURITY MONEYNESS

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### MARKET\_SHIFTS\_VECTOR

The MARKET\_SHIFTS\_VECTOR table contains the market shifts vector for the Taylor VaR calculations and FX shifts for FX risk computation.

Column Name	Type	Not Null	Default Value	Description
VECTOR_INDEX	INT	У		Index in the market shift vector.
AS_OF_DATE	DATE	У		Timestamp (at close of business) for the data.
RISK_FACTOR_ID	STRING	У	N/A	The internal risk factor/bucket identifier: instrument, curve, vol surface/cube identifier.
SCENARIO_SET	STRING	У	N/A	Name of the set of scenarios. Example: "Historical", "Stress".
TENOR	STRING	У	N/A	Tenor label, such as 3M, 5Y, and so on, if applicable.
MATURITY	STRING	У	N/A	Maturity label, such as 3M, 5Y, and so on, if applicable.
MONEYNESS	STRING	У	N/A	Moneyness label, if applicable.
VALUES	DOUBLE	У		Market shift value corresponding to the index.

Columns
VECTOR_INDEX
AS_OF_DATE
RISK_FACTOR_ID
SCENARIO_SET
TENOR
MATURITY
MONEYNESS

# Outgoing Joins

Target Table	Source Columns	Target Columns	
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Target Table	Source Columns	Target Columns
MARKET_SHIFTS	AS_OF_DATE RISK_FACTOR_ID SCENARIO_SET TENOR MATURITY MONEYNESS	AS_OF_DATE RISK_FACTOR_ID SCENARIO_SET TENOR MATURITY MONEYNESS

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

#### **QUANTILES**

The QUANTILES table contains the definitions used for quantile computations (e.g.: 'EXCLUSIVE', 'EQUAL\_WEIGHTS', 'CENTERED') for VaR and ES.

Column Name	Type	Not Null	Cube Field	Default Value	Description
QUANTILE_NAME	STRING	У		N/A	Indicates the quantile used to round VaR values.
QUANTILE	STRING	У	[Quantiles]. [Quantiles]	N/A	Non-technical name for the quantile.

### Unique Key

#### Columns

QUANTILE NAME

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### RISK\_FACTORS\_CATALOGUE

The RISK FACTORS CATALOGUE table contains enrichment data for risk factors.

Column Name	Type	Not Null	Cube Field	Default Value <sup>1</sup>	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
RISK_FACTOR_ID	STRING	У	[Risk].[Risk Factors]	N/A	Internal risk factor/bucket identifier: instrument, curve, vol surface/cube identifier.
RISK_CLASS	STRING	У	[Risk].[Risk Classes]	N/A	Risk factor's asset class: "Interest rate", "Credit spread", "Foreign exchange", "Equity", "Commodity", "Hybrid".
QUALIFIER	STRING	У	[Risk].[Qualifiers]	N/A	Identifier of a risk factor's set.
RISK_FACTOR_TYPE	STRING	У	[Risk]. [RiskFactorTypes]	N/A	Type of underlying risk factor.
RISK_FACTOR_CCY	STRING	У	[Risk]. [RiskFactorCurrencies]	N/A	Three-letter ISO currency code that represents the currency of the risk factor.
CURVE_TYPE	STRING	У	[Risk].[CurveTypes]	N/A	Only populated if the risk class is a rates curve, otherwise left blank. Specifies the type of the curve. For example, "Interest rate", "Tenor basis" or "Inflation".

#### Columns

AS\_OF\_DATE

RISK\_FACTOR\_ID

## Incoming Joins

Source Table	Source Columns	Target Columns
TRADEPNLS	AS_OF_DATE RISK_FACTOR	AS_OF_DATE RISK_FACTOR_ID
PNL	AS_OF_DATE RISK_FACTOR_ID	AS_OF_DATE RISK_FACTOR_ID
TRADE_SENSITIVITIES_VECTOR	AS_OF_DATE RISK_FACTOR_ID	AS_OF_DATE RISK_FACTOR_ID
TRADE_SENSITIVITIES_VECTOR	AS_OF_DATE RISK_FACTOR_ID2	AS_OF_DATE RISK_FACTOR_ID

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

# **ROUNDING\_METHODS**

The ROUNDING\_METHODS table contains the descriptions of the methods used for rounding when computing VaR and ES.

Column Name	Type	Not Null	Cube Field	Default Value <sup>1</sup>	Description
METHOD_NAME	STRING	У		N/A	Rounding method for VaR estimation. Example: 'CEIL', 'FLOOR', 'ROUND', 'ROUND_EVEN' or 'WEIGHTED'
METHOD	STRING	У	[Rounding]. [RoundingMethods]	N/A	Non technical name for rounding method.

### Unique Key

#### Columns

METHOD NAME

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields,

and that a value needs to be explicitly set for non-nullable fields.

#### **SCENARIOS**

The SCENARIOS table contains the VaR and ES scenario descriptions.

Column Name	Type	Not Null	Cube Field	Default Value <sup>1</sup>	Description
AS_OF_DATE	DATE	У			Indicates the date of the file.
INDEX	INT	У		0	The pointer to the Scenario's position in the PnL[] vector. Values range from 0 to the total number of scenarios in the given scenario set. Note: The index must start at 0 for each ScenarioSet.
SCENARIO	STRING	У	[Risk]. [Scenario Sets]	N/A	Non technical name for rounding method.
SCENARIO_SET	STRING	У	[Risk]. [Scenarios]	N/A	The name of the scenario for that Index. For historical scenarios, this could be the date. For stress simulations, it could be the name of the particular event.

### Unique Key

Columns
AS_OF_DATE
INDEX
SCENARIO
SCENARIO_SET

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### SIGN\_OFF\_DIGEST\_STORE

The SIGN\_OFF\_DIGEST\_STORE table contains data representing the definition of cube-level adjustments. This file is generated when data is exported after the sign-off process or a sign-off

process instance is completed. It is an isolated table and not part of any cube facts.

Column Name	Type	Not Null	Cube Field	Default Value	Description
ID	STRING	У		N/A	Execution ID of the adjustment.
MANDATE_ID	STRING	У		N/A	The name of the task for which the adjustment was created.
AS_OF_DATE	DATE	У		N/A	The as-of date for which the adjustment was created
PIVOT_ID	STRING	У		N/A	The name of the cube for which the adjustment was created
DIGEST	STRING	У		N/A	The string representing the location digest.  A digest is a string representation of the form: dimensionName @hierarchyName =   dimensionName @hierarchyName = in which hierarchies whose path is "AllMember" are excluded. Example: "Book@Bookings=AllMember\BookA  Trader=AllMember\John"
CURRENCY	STRING	У			The currency used to express the value of the adjustment.
MEASURE	STRING	У		N/A	The name of the measure to adjust.
VALUE	STRING	У		N/A	The value used to override the measure value.

### Unique Key

Columns
ID
MANDATE_ID
AS_OF_DATE

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

# TRADE\_ATTRIBUTES

The TRADE\_ATTRIBUTES table contains the fields describing attributes of the trades.

Column Name	Type	Not Null	Cube Field	Default Value	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
TRADE_KEY	STRING	У		N/A	Unique Trade (or Position) ID.
воок	STRING	У	[Booking].[Books]	N/A	The book to map the trade to (must match the node in the Book Hierarchy).
LEGAL_ENTITY	STRING	У	[Organization].[Legal Entities]	N/A	Legal Entity to map the trade to (must match the node in the Legal Entity Hierarchy).
COUNTERPARTY_ID	STRING	У	[Counterparties]. [CounterpartyIds]	N/A	Counterparty to map the trade to (must match the node in the Counterparty Hierarchy).
NOTIONAL	DOUBLE				Notional of the trade/position.
NOTIONAL_CCY	STRING	У	[TradeAttributes]. [NotionalCurrencies]	N/A	Currency of the notional trade.
TRADER	STRING	У	[TradeAttributes]. [Traders]	N/A	Trader who performed the trade.
SALES	STRING	У	[TradeAttributes]. [Sales]	N/A	Salesperson who performed the sale of the trade (if applicable).
INSTRUMENT_CLASS	STRING	У	[Instruments]. [InstrumentClasses]	N/A	Highest level of instrument classification.
INSTRUMENT_TYPE	STRING	У	[Instruments]. [InstrumentTypes]	N/A	Main instrument classification.

Column Name	Type	Not Null	Cube Field	Default Value	Description
INSTRUMENT_SUB_TYPE	STRING	У	[Instruments]. [InstrumentTypes]. [InstrumentSubeType]	N/A	Sub-level of instrument classification.
TRADE_DATE	STRING	У	[TradeAttributes]. [TradeDates]	N/A	Date of the execution of the trade.
MATURITY_DATE	STRING	У	[TradeAttributes]. [MaturityDates]	N/A	Maturity date of the trade.
					Defines on what basis to include the VaR of this trade:
VAR_INCLUSION_TYPE	STRING	У		R	<ul><li> 'R' for repricing</li><li> 'S' for sensitivity,</li></ul>

#### Columns

AS\_OF\_DATE

TRADE\_KEY

### Incoming Joins

Source Table	Source Columns	Target Columns
TRADEPNLS	AS_OF_DATE TRADE_KEY	AS_OF_DATE TRADE_KEY
TRADE_ATTRIBUTES	AS_OF_DATE TRADE_KEY	AS_OF_DATE TRADE_KEY
TRADE_SENSITIVITIES	AS_OF_DATE TRADE_KEY	AS_OF_DATE TRADE_KEY
PNL	AS_OF_DATE TRADE_KEY	AS_OF_DATE TRADE_KEY

# Outgoing Joins

Target Table	Source Columns	Target Columns
LEGAL_ENTITY_HIERARCHY	AS_OF_DATE LEGAL_ENTITY	AS_OF_DATE LEGAL_ENTITY
COUNTERPARTY_HIERARCHY	AS_OF_DATE COUNTERPARTY_ID	AS_OF_DATE COUNTERPARTY_ID
BOOK_HIERARCHY	AS_OF_DATE BOOK	AS_OF_DATE BOOK
COUNTERPARTIES	AS_OF_DATE COUNTERPARTY_ID	AS_OF_DATE COUNTERPARTY_ID

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

#### **PnL Database Definition**

#### Profit & Loss and Product Control

Profit & Loss and Product Control data can be found in the PNL table.

#### **PNL**

The PNL table contains Profit & Loss and Product Control data.

Column Name	Type	Not Null	Default Value <sup>1</sup>	Cube Field	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
TRADE_KEY	STRING	У	N/A		The field contains the tradeID for full data, or Book#VaR Inclusion for summary data.

Column Name	Type	Not Null	Default Value	Cube Field	Description
TRADE_ID	STRING	У			If TRADE_ID comes from multiple systems, you may need to prepend source system to the ID for uniqueness.
			DATAMEMBER	[Booking]. [Trades]	In certain cases, the TRADE_ID could be for adjustment purposes. In such cases we might only have one PnL vector per Book or desk.
					The TRADE_ID should contain this information clearly (ADDON or ADJ). Example: "IR_IRSWAP_LIBOR3M", "EQ_12345677", etc.
DAILY	DOUBLE	У	0		The DTD PnL value.
MONTHLY	DOUBLE	У	0		The MTD PnL value.
YEARLY	DOUBLE	У	0		The YTD PnL value.
LIFETIME	DOUBLE	У	0		The LTD PnL value.
TYPE	STRING	У	N/A	[PnL]. [Types]	The type of PnL. Example: 'Actual PL'
PLDRIVER	STRING	У	N/A	[PnL].[PL Drivers]	Driver for the PnL value. Example: 'Market moves'
IS_FULL_REVAL	STRING	У	N/A	[PnL]. [IsFullRevals]	Indicates whether the PnL comes from a full revaluation in the risk engine.
ССУ	STRING	У	N/A	[Currencies]. [Currencies]	The currency of the PnL value.
RISK_FACTOR	STRING	У	N/A	[Risk].[Risk Factors]	The underlying risk factor (may be more than one) of the risk class.
RISK_CLASS	STRING	У	N/A	[Risk].[Risk Classes]	The risk factor's asset class

Column Name	Type	Not Null	Default Value	Cube Field	Description
BUCKET	STRING	У	N/A	[PnL]. [Buckets]	Placeholder for a set of risk factors that are grouped together by common characteristics.

Columns
AS_OF_DATE
TRADE_KEY
TYPE
RISK_FACTOR

#### **Outgoing Joins**

Target Table	Source Columns	Target Columns
TRADE_ATTRIBUTES	AS_OF_DATE TRADE_KEY	AS_OF_DATE TRADE_KEY
RISK_FACTORS_CATALOGUE	AS_OF_DATE RISK_FACTOR_ID	AS_OF_DATE RISK_FACTOR_ID

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

### **Sensitivities Database Definition**

#### Sensitivity ladder shifts

The SENSI\_LADDERS table contains the definition of sensitivity ladder shifts. The ladder shift vectors are present in the SENSI\_LADDERS\_VECTOR table.

#### Trade sensitivities

The TRADE SENSITIVITIES table contains some of the attributes of the Sensitivity data. The ladder

vectors can be found in the TRADE\_SENSITIVITIES\_VECTOR table.

### SENSI\_LADDERS

The SENSI\_LADDERS table contains the definition of sensitivity ladder shifts. The ladder shift vectors are present in the SENSI\_LADDERS\_VECTOR table.

Column Name	Type	Not Null	Cube Field	Default Value <sup>1</sup>	Description
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
RISK_CLASS	STRING	У		N/A	The risk class for which the ladder scale is defined.
SHIFT_TYPE	STRING	У		R	The type of the scale ('A' for absolute, 'R' for relative).

#### Unique Key

Columns	
AS_OF_DATE	
RISK_CLASS	

### Incoming Joins

Source Table	Source Columns	Target Columns
SENSI_LADDERS_VECTOR	AS_OF_DATE RISK_CLASS	AS_OF_DATE RISK_CLASS

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

## SENSI\_LADDERS\_VECTOR

The SENSI LADDERS VECTOR table contains the values of the sensitivity ladder shift.

Column Name	Type	Not Null	Cube Field	Default Value	Description
VECTOR_INDEX	INT	У			Index in the ladder shift vector.
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
RISK_CLASS	STRING	У		N/A	The risk class that the ladder scale is defined for.
SCALE	DOUBLE	У		0.0	The ladder shift.

Columns			
VECTOR_INDEX			
AS_OF_DATE			
RISK_CLASS			

## **Outcoming Joins**

Target Table	Source Columns	Target Columns
SENSI_LADDERS	AS_OF_DATE RISK_CLASS	AS_OF_DATE RISK_CLASS

### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

# TRADE\_SENSITIVITIES

The TRADE\_SENSITIVITIES table contains some of the attributes of the Sensitivity data. The ladder vectors can be found in the TRADE\_SENSITIVITIES\_VECTOR table.

Column Name	Type	Not Default Null Value	Cube Field	Description
AS_OF_DATE	DATE	У		Timestamp (at close of business) for the data.

Column Name	Type	Not Null	Default Value	Cube Field	Description
TRADE_KEY	STRING	У	'N/A'		The field contains the tradeID for full data or Book#VaR Inclusion for summary data.
					If TRADE_ID comes from multiple systems, you may need to prepend source system to the ID for uniqueness.
TRADE_ID	STRING	У	'DATAMEMBER'	[Booking]. [Trades]	in Certain cases, the TRADE_ID could be for adjustment purposes. In such cases we might only have one PnL vector per Book or desk.
					The TRADE_ID should contain this information clearly (ADDON or ADJ). Example: "IR_IRSWAP_LIBOR3M", "EQ_12345677", etc.
SENSITIVITY_NAME	STRING	У	'N/A'	[Sensitivities]. [Sensitivity]	The name of the sensitivity (cube measure)
RISK_CLASS	STRING	У	'N/A'	[Risk].[Risk Classes]	Risk factor's asset class: "Interest rate", "Credit spread", "Foreign exchange", "Equity", "Commodity", "Hybrid".
RISK_FACTOR_ID	STRING	У	'N/A'	[Risk].[Risk Factors]	Internal risk factor/bucket identifier: instrument, curve, vol surface/cube identifier.

Column Name	Type	Not Null	Default Value	Cube Field	Description
RISK_FACTOR_ID2	STRING	У	'N/A'	[Risk].[Risk Factors Secondary]	This field is only present in the Vanna input file. It does not exist for Delta, Gamma, Vega, or Volga inputs.  Second risk factor for the Vanna sensitivity. Example: UniCredit_Spot price
TENOR_LABELS	STRING	У	'N/A'	[Risk]. [Tenors]	The list of tenor labels, corresponding to the vertex of the risk factor, such as 3M, 5Y, and so on.
TENOR_DATES	STRING	У	'N/A'		A list of explicit tenor dates, which are used to sort tenors and to re-bucket sensitivities (if supported). Example: 2019-03-16; 2019-04-27; 2019-10-27; 2020-10-27
MATURITY_LABELS	STRING	У	'N/A'	[Risk]. [Maturities]	Name for the bucketed group.
MATURITY_DATES	STRING	У	'N/A'		A list of explicit maturity dates, which are used to sort tenors and to rebucket sensitivities (if supported).  Example: 2019-03-16; 2019-04-27; 2019-10-27; 2020-10-27

Column Name	Type	Not Null	Default Value	Cube Field	Description
MONEYNESS	STRING	У	'ATM'	[Risk]. [Moneyness]	A list of labels corresponding to different ways of stating moneyness. Supported formats: moneyness in percent, e.g. 80;100;120; delta-moneyness,e.g. 25p;ATM;25c
VALUES	DOUBLE	У	0.0		Sensitivity value.
ССУ	STRING	У	'N/A'	[Currencies]. [Currencies]	The currency of the sensitivity.
HAS_LADDER	STRING	У	'N'	[Risk]. [Ladder Availability]	Flag set to "Y" if the Ladder field is not null. Null values are interpreted as "N".

Columns
AS_OF_DATE
TRADE_KEY
SENSITIVITY_NAME
RISK_FACTOR_ID
RISK_FACTOR_ID2
TENOR_LABELS
TENOR_DATES
MATURITY_LABELS
MATURITY_DATES
MONEYNESS

## Incoming Joins

Target Table	Source Columns	Target Columns	

Target Table	Source Columns	Target Columns
TRADE_SENSITIVITIES_VECTOR	AS_OF_DATE TRADE_KEY SENSITIVITY_NAME RISK_FACTOR_ID RISK_FACTOR_ID2 TENOR_LABELS TENOR_DATES MATURITY_LABELS MATURITY_DATES MONEYNESS	AS_OF_DATE TRADE_KEY SENSITIVITY_NAME RISK_FACTOR_ID RISK_FACTOR_ID2 TENOR_LABELS TENOR_DATES MATURITY_LABELS MATURITY_DATES MONEYNESS

#### **Outgoing Joins**

Target Table	Source Columns	Target Columns
TRADE_ATTRIBUTES	AS_OF_DATE TRADE_KEY	AS_OF_DATE TRADE_KEY
RISK_FACTORS_CATALOGUE	AS_OF_DATE RISK_FACTOR_ID	AS_OF_DATE RISK_FACTOR_ID
RISK_FACTORS_CATALOGUE	AS_OF_DATE RISK_FACTOR_ID2	AS_OF_DATE RISK_FACTOR_ID

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

# TRADE\_SENSITIVITIES\_VECTOR

The TRADE\_SENSITIVITIES\_VECTOR table contains the ladder data used for calculations related to sensitivities.

Column Name	Type	Not Null	Default Value <sup>1</sup>	Cube Field	Description
VECTOR_INDEX	INT	У			Index in the ladder vector.
AS_OF_DATE	DATE	У			Timestamp (at close of business) for the data.
TRADE_KEY	STRING	У	'N/A'		The field contains the tradeID for full data or Book#VaR Inclusion for summary data.

Column Name	Type	Not Null	Default Value	Cube Field	Description
SENSITIVITY_NAME	STRING	У	'N/A'	[Sensitivities]. [Sensitivity]	The name of the sensitivity (cube measure)
RISK_CLASS	STRING	У	'N/A'	[Risk].[Risk Classes]	Risk factor's asset class: "Interest rate", "Credit spread", "Foreign exchange", "Equity", "Commodity", "Hybrid".
RISK_FACTOR_ID	STRING	У	'N/A'	[Risk].[Risk Factors]	Internal risk factor/bucket identifier: instrument, curve, vol surface/cube identifier.
RISK_FACTOR_ID2	STRING	У	'N/A'	[Risk].[Risk Factors Secondary]	This field is only present in the Vanna input file. It does not exist for Delta, Gamma, Vega, or Volga inputs.
Second risk factor for the Vanna sensitivity. Example: UniCredit_Spot price					
TENOR_LABELS	STRING	У	'N/A'	[Risk]. [Tenors]	The list of tenor labels, corresponding to the vertex of the risk factor, such as 3M, 5Y, and so on.
TENOR_DATES	STRING	У	'N/A'		A list of explicit tenor dates, which are used to sort tenors and to rebucket sensitivities (if supported). Example: 2019-03-16; 2019-04-27; 2019-10-27; 2020-10-27
MATURITY_LABELS	STRING	У	'N/A'	[Risk]. [Maturities]	Name for the bucketed group.

Column Name	Type	Not Null	Default Value	Cube Field	Description
MATURITY_DATES	STRING	У	'N/A'		A list of explicit maturity dates, which are used to sort tenors and to re-bucket sensitivities (if supported). Example: 2019-03-16; 2019-04-27; 2019-10-27; 2020-10-27
MONEYNESS	STRING	У	'ATM'	[Risk]. [Moneyness]	A list of labels corresponding to different ways of stating moneyness. Supported formats: moneyness in percent, e.g. 80;100;120; delta-moneyness,e.g. 25p;ATM ;25c
LADDER	DOUBLE	У	0.0		Ladder value.

Columns
/ECTOR_INDEX
AS_OF_DATE
TRADE_KEY
SENSITIVITY_NAME
RISK_FACTOR_ID
RISK_FACTOR_ID2
TENOR_LABELS
TENOR_DATES
MATURITY_LABELS
MATURITY_DATES
MONEYNESS

# Outgoing Joins

Target Table	Source Columns	Target Columns	

Target Table	Source Columns	Target Columns
TRADE_SENSITIVITIES	AS_OF_DATE TRADE_KEY SENSITIVITY_NAME RISK_FACTOR_ID RISK_FACTOR_ID2 TENOR_LABELS TENOR_DATES MATURITY_LABELS MONEYNESS	AS_OF_DATE TRADE_KEY SENSITIVITY_NAME RISK_FACTOR_ID RISK_FACTOR_ID2 TENOR_LABELS TENOR_DATES MATURITY_LABELS MONEYNESS

#### Table creation script

For the scripts to create and populate the table, see the online documentation.

1. If the default value is marked as empty, it means that the default value is 'null' for nullable fields, and that a value needs to be explicitly set for non-nullable fields.

#### **VaR-ES Database Definition**

#### PnL Vectors

The VaR-ES Cube Schema starts with the TRADEPNLS table, which contains the PnL data. PnL vectors are present in the TRADEPNLS\_VECTOR table.

#### **TRADEPNLS**

The TRADEPNLS table contains some of the attributes of the PnL data used as inputs for VaR and ES computations. The PnL vectors are present in the TRADEPNLS VECTOR table.

Column Name	Type	Not Null Cube Field	Description
AS_OF_DATE	DATE	У	Timestamp (at close of business) for the data.
TRADE_KEY	STRING	У	The field contains the tradeID for full data or Book#VaR Inclusion for summary data.

Column Name	Type	Not Null	Cube Field	Description
TRADE_ID	STRING	У	[Booking]. [Trades]	If Tradeld comes from multiple systems you may need to prepend source system to the ID for uniqueness. Note that in certain cases, the Tradeld could be for adjustment purposes. In such cases we might only have one PnL vector per Book or desk. The Tradeld should contain this information clearly (ADDON or ADJ). Example: "IR_IRSWAP_LIBOR3M", "EQ_12345677", etc.
SCENARIO_SET	STRING	У	[Risk].[Scenario Sets]	Name of the scenario set for the PnL vector.
CALCULATION_ID	STRING	У	[Risk]. [CalculationIds]	Name of the PnL vector calculation run. There may be several runs per AsOfDate.
RISK_FACTOR	STRING	У	[Risk].[Risk Factors]	Underlying risk factor (may be more than one) of the risk class.
RISK_CLASS	STRING	У	[Risk].[Risk Classes]	Defines the risk class that the PnL vector is computed for.
SENSITIVITY_NAME	STRING	У		Name of the sensitivity that the PnL is attributed to.
LIQUIDITY_HORIZON	INT	У	[Risk].[Liquidity Horizons]	The Liquidity Horizon in days. This field is optional.
ССУ	STRING	У	[Currencies]. [Currencies]	Currency in which the PnL values are expressed.
MTM	DOUBLE			The mark-to-market value of the trade.

Columns
S_OF_DATE
RADE_KEY
CENARIO_SET
CALCULATION_ID
ISK_FACTOR

#### Columns

LIQUIDITY\_HORIZON

### Incoming Joins

Target Table	Source Columns	Target Columns
TRADEPNLS_VECTOR	AS_OF_DATE TRADE_KEY SCENARIO_SET CALCULATION_ID RISK_FACTOR LIQUIDITY_HORIZON	AS_OF_DATE TRADE_KEY SCENARIO_SET CALCULATION_ID RISK_FACTOR LIQUIDITY_HORIZON

### **Outgoing Joins**

Target Table	Source Columns	Target Columns
TRADE_ATTRIBUTES	AS_OF_DATE TRADE_KEY	AS_OF_DATE TRADE_KEY
RISK_FACTORS_CATALOGUE	AS_OF_DATE RISK_FACTOR	AS_OF_DATE RISK_FACTOR_ID

#### Snowflake

#### Table creation

For the scripts to create and populate the table, see the online documentation.

# TRADEPNLS\_VECTOR

The TRADEPNLS\_VECTOR table contains the PnL vectors used as inputs for VaR and ES computations.

Column Name	Type	Not Null Cube Field	Description
VECTOR_INDEX	INT	У	Index in the PnL vector.
AS_OF_DATE	DATE	У	Timestamp (at close of business) for the data.
TRADE_KEY	STRING	У	The field contains the tradeID for full data or Book#VaR Inclusion for summary data.

Column Name	Type	Not Null	Cube Field	Description
SCENARIO_SET	STRING	У	[Risk].[Scenario Sets]	Name of the scenario set for the PnL vector.
CALCULATION_ID	STRING	У	[Risk]. [CalculationIds]	Name of the PnL vector calculation run. There may be several runs per AsOfDate.
RISK_FACTOR	STRING	У	[Risk].[Risk Factors]	Underlying risk factor (may be more than one) of the risk class.
LIQUIDITY_HORIZON	INT	У	[Risk].[Liquidity Horizons]	The Liquidity Horizon in days. This field is optional.
PNL_VECTOR	DOUBLE	У		PnL value corresponding to the index.

Columns
/ECTOR_INDEX
AS_OF_DATE
TRADE_KEY
SCENARIO_SET
CALCULATION_ID
RISK_FACTOR
LIQUIDITY_HORIZON

# Outgoing Joins

Target Table	Source Columns	Target Columns
TRADEPNLS	AS_OF_DATE TRADE_KEY SCENARIO_SET CALCULATION_ID RISK_FACTOR LIQUIDITY_HORIZON	AS_OF_DATE TRADE_KEY SCENARIO_SET CALCULATION_ID RISK_FACTOR LIQUIDITY_HORIZON

### Snowflake

#### Table creation

For the scripts to create and populate the table, see the online documentation.							
	_						