

Markets in Financial Instruments Directive

Data Report 2021-13

Data available from 2008-01-01 to 2017-12-30

Metadata ID: 1.0

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Abstract

We describe the research dataset “Markets in Financial Instruments Directive” using a structured metadata schema.¹⁾ This document consists of three sections. In the first section, we describe the general properties of the dataset as a whole, such as its scope and coverage as well as the methods of data collection and data appraisal. The second section looks at the variable level, providing an overview of the variables and a table with details on each variable.

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¹ The metadata scheme is derived from the “Data Documentation Initiative” (DDI, <http://www.ddialliance.org>).

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1 Dataset description

1.1 Overview and identification

The “Markets in Financial Instruments Directive” (MiFID) dataset contains information on transactions in a wide range of securities traded by a wide range of market participants from 2008-01-01 to 2017-12-30. For each transaction, the reporting agents provide information on

- all parties involved,
- the type of transaction,
- the traded security, and
- the specific terms of the transaction, such as trade date and time, volume, prices and others.

In total, the dataset contains more than 7 billion records, up to 8.5 million per day. Each record contains the information on a specific transaction provided by a single reporting agent. Thus, the beforementioned numbers overstate the true number of transactions since many transactions are reported by more than one reporting agent, e.g. by seller and buyer.

The German Federal Financial Supervisory Authority (BaFin) collects this dataset in order to supervise securities trading. Amongst others, the reported transactions are used to detect market manipulation and insider trading.

1.2 Dataset scope and coverage

Legal framework

The data collection ended on 2017-12-30. Therefore, the relevant legislation is no longer in force.

The MiFID dataset is collected on the basis of the former section 9 of the Securities Trading Act (Gesetz über den Wertpapierhandel, 2014). The specific reporting requirements are defined in the Securities Trading Reporting Regulation (Verordnung über die Meldepflichten beim Handel mit Wertpapieren und Derivaten, 2008).

Reporting Agents

The former section 9 of the Securities Trading Act (Gesetz über den Wertpapierhandel, 2014) defines the set of reporting agents. These are:

- Investment services enterprises and branches within the meaning of section 53b of the Banking Act (Gesetz über das Kreditwesen, 2007).
- Domestic central counterparties within the meaning of section 1 (31) of the Banking Act (Gesetz über das Kreditwesen, 2007) with respect to transactions concluded by them
- Undertakings domiciled in a country which is not a member state of the European Union or a signatory to the Agreement on the European Economic Area and authorised to trade on

- a German stock exchange with respect to transactions in financial instruments concluded by them on that German stock exchange
- Undertakings domiciled in another member state of the European Union or a signatory to the Agreement on the European Economic Area and authorised to trade on a German stock exchange, but only with respect to transactions in financial instruments concluded by them on that German stock exchange where these financial instruments are neither admitted to trading on an organised market nor included in the regulated market of a German stock exchange.

Unit of analysis

Transactions in financial instruments. Please note that a single transaction may be recorded several times as there may exist reporting obligations for more than one participating entity per transaction.

Time periods

The data is available from 2008-01-01 - 2017-12-31.

Geographic coverage

The geographic coverage follows from the financial instruments for which transactions are reported. The dataset contains transactions in all financial instruments which are admitted to trading at German stock exchanges in any market segment.

Universe

Section 9 of the Securities Trading Act (Gesetz über den Wertpapierhandel, 2014) defines the transactions to be reported:

- Any transaction in financial instruments which are admitted to trading at an organised market or are included in the regulated market (regulierter Markt) or the regulated unofficial market (Freiverkehr) of a German stock exchange.
- The purchase or sale of securities subscription rights, if these securities are to be traded on an organised market or on the regulated unofficial market.
- Transactions in shares and warrants in respect of which an application for admission to trading on an organised market or on the regulated unofficial market or for inclusion in the regulated market or the regulated unofficial market has been made or publicly announced.

Historical changes

During the period of time covered by this dataset, the specific reporting requirements defined in the Securities Trading Reporting Regulation (Verordnung über die Meldepflichten beim Handel mit

Wertpapieren und Derivaten, 2008) remained unchanged.

1.3 Data collection

Data collection mode

The reporting format is laid out in section 12 of the Regulation on the Reporting Requirements Relating to Trades in Securities and Derivatives (Verordnung über die Meldepflichten beim Handel mit Wertpapieren und Derivaten, 2008). Reports were transmitted electronically to the BaFin for further processing.

Collection frequency

Daily, but the data contains information on the exact trade time.

1.4 Data appraisal

Quality checks

The following checks are conducted during the data production process. However, this does not imply that all these conditions are actually met. In many cases, these rules identify problems, but it is no longer possible to actually fix the problems.

#	Description
1	'BGNR' must be of type 'integer64'.
2	All values of 'BGNR' must be unique.
3	'BGNR' must be complete.
4	'HANDELSTAG' must be of type 'Date'.
5	'HANDELSTAG' must be complete.
6	'HANDELSZEIT' must be of type 'POSIXct'.
7	'HANDELSZEIT' must be complete.
8	'MP_anon' must be of type 'character'.
9	'MP_anon' must be complete.
10	'KD_anon' must be of type 'character'.
11	'MK_anon' must be of type 'character'.
12	'KT_anon' must be of type 'character'.
13	'ZW1_anon' must be of type 'character'.
14	'ZW2_anon' must be of type 'character'.
15	'G_ART' must be of type 'factor'.
16	Values of 'G_ART' must be elements of set {cl_G_ART}.
17	'G_ART' must be complete.
18	'NOSTROB' must be of type 'factor'.
19	Values of 'NOSTROB' must be elements of set {cl_NOSTROB}.

...

- ...
- 20 'NOSTROB' must be complete.
 - 21 'NOSTROG' must be of type 'factor'.
 - 22 Values of 'NOSTROG' must be elements of set {cl_NOSTROG}.
 - 23 The evaluation of the R expression 'if (NOSTROB == "N") NOSTROG == "K"' must be TRUE.
 - 24 'NOSTROG' must be complete.
 - 25 'BOERSLICH' must be of type 'factor'.
 - 26 Values of 'BOERSLICH' must be elements of set {cl_BOERSLICH}.
 - 27 'BOERSLICH' must be complete.
 - 28 'LAND' must be of type 'factor'.
 - 29 Values of 'LAND' must be elements of set {cl_LAND}.
 - 30 'BOERSE_ART' must be of type 'character'.
 - 31 'BOERSE_ART' must be constant/unique in 'BOERSE'.
 - 32 Values of 'BOERSE_ART' must be elements of set {cl_BOERSE_ART}.
 - 33 'BOERSE' must be of type 'factor'.
 - 34 Values of 'BOERSE' must be elements of set {cl_BOERSE}.
 - 35 'DEPOT_WAEH' must be of type 'factor'.
 - 36 Values of 'DEPOT_WAEH' must be elements of set {cl_iso_4217}.
 - 37 'NOMINALE' must be of type 'numeric'.
 - 38 'LAND_WAEH' must be of type 'factor'.
 - 39 Values of 'LAND_WAEH' must be elements of set {cl_iso_4217}.
 - 40 'KURS' must be of type 'numeric'.
 - 41 'KURS' must be greater than '0'.
 - 42 'VOLUMEN' must be of type 'double'.
 - 43 The evaluation of the R expression 'if (G_ART == "K") VOLUMEN > 0 else if (G_ART == "V") VOLUMEN < 0' must be TRUE.
 - 44 The evaluation of the R expression 'if (EFFEKTENNOTIZ %in% c(1, 9) & is.na(ART_DERIVAT)) NOMINALE * KURS == abs(VOLUMEN)' must be TRUE.
 - 45 The evaluation of the R expression 'if (EFFEKTENNOTIZ == 2 & is.na(ART_DERIVAT)) NOMINALE * KURS / 100 == abs(VOLUMEN)' must be TRUE.
 - 46 The evaluation of the R expression 'if (EFFEKTENNOTIZ == 3 & is.na(ART_DERIVAT)) NOMINALE * KURS / 1000 == abs(VOLUMEN)' must be TRUE.
 - 47 The evaluation of the R expression 'if (!is.na(ART_DERIVAT) & PREISMULTI > 0) KURS * PREISMULTI * NOMINALE == abs(VOLUMEN)' must be TRUE.
 - 48 'VALUTA' must be of type 'Date'.
 - 49 'VALUTA' must be greater than or equal to 'HANDELSTAG'.
 - 50 'AUFGABE' must be of type 'factor'.
 - 51 Values of 'AUFGABE' must be elements of set {cl_AUFGABE}.
 - 52 'ABRUF_MK' must be of type 'factor'.
 - 53 Values of 'ABRUF_MK' must be elements of set {cl_ABRUF_MK}.
 - 54 'ISIN' must be of type 'character'.
 - 55 'ISIN' must contain valid ISIN's.
 - 56 'INSTRUMENT' must be of type 'character'.
 - 57 The evaluation of the R expression 'INSTRUMENT == ISIN | INSTRUMENT == WKN' must be TRUE.
 - 58 'NUM_ART_KNZ' must be of type 'factor'.
- ...

- ...
- 59 Values of 'NUM_ART_KNZ' must be elements of set {cl_NUM_ART_KNZ}.
 - 60 'WKN' must be of type 'character'.
 - 61 'WKN' must be constant/unique in 'INSTRUMENT'.
 - 62 'WP_ART' must be of type 'factor'.
 - 63 Values of 'WP_ART' must be elements of set {cl_iso_10962}.
 - 64 'EFFEKTENNOTIZ' must be of type 'factor'.
 - 65 Values of 'EFFEKTENNOTIZ' must be elements of set {cl_notation}.
 - 66 'DERIVAT_ART' must be of type 'factor'.
 - 67 Values of 'DERIVAT_ART' must be elements of set {cl_DERIVAT_ART}.
 - 68 The evaluation of the R expression 'if (NUM_ART_KNZ == "XP") !is.na(DERIVAT_ART)' must be TRUE.
 - 69 'UNDERLY_ART' must be of type 'factor'.
 - 70 Values of 'UNDERLY_ART' must be elements of set {cl_UNDERLY_ART}.
 - 71 'UNDERLY' must be of type 'character'.
 - 72 'BASISPR_ART' must be of type 'factor'.
 - 73 Values of 'BASISPR_ART' must be elements of set {cl_notation}.
 - 74 'BASISPR' must be of type 'numeric'.
 - 75 The evaluation of the R expression 'if (DERIVAT_ART %in% c("C", "P")) !is.na(BASISPR)' must be TRUE.
 - 76 'BASISPR_WAEH' must be of type 'factor'.
 - 77 Values of 'BASISPR_WAEH' must be elements of set {cl_iso_4217}.
 - 78 'PREISMULTI' must be of type 'numeric'.
 - 79 'PREISMULTI' must be greater than or equal to '0'.
 - 80 'DERIVAT_FAELLIG' must be of type 'Date'.
 - 81 'DERIVAT_FAELLIG' must be greater than or equal to 'HANDELSTAG'.
 - 82 'AII_PRODUKT_CODE' must be of type 'character'.
 - 83 'AKT_KNZ' must be of type 'factor'.
 - 84 Values of 'AKT_KNZ' must be elements of set {cl_AKT_KNZ}.
 - 85 'BGNR_REF_TRANSFORMATION' must be of type 'integer64'.
 - 86 'FEHLERST' must be of type 'factor'.
 - 87 Values of 'FEHLERST' must be elements of set {cl_FEHLERST}.
 - 88 'GNR_UR' must be of type 'character'.
 - 89 'MIFID_KNZ' must be of type 'character'.
 - 90 'SATZART' must be of type 'factor'.
 - 91 Values of 'SATZART' must be elements of set {cl_SATZART}.
 - 92 'STORNO_ORG' must be of type 'factor'.
 - 93 Values of 'STORNO_ORG' must be elements of set {cl_STORNO_ORG}.
-

Some rules contain the phrase "The evaluation of the R expression ...". An *R expression* is a piece of code that can be evaluated using the statistical programming language R (R Core Team, 2020).

Data editing

- Anonymization

- Cleaning of evident reporting errors

1.5 Data accessibility

Research proposal conditions

A research proposal is checked for feasibility of the research project given the research data, i.e. the suitability of the data to answer the research questions raised by the proposal. The research project must be of public interest, that is without commercial goals.

Institutional access conditions

The researcher must be affiliated with a research institution that clearly has a scientific, noncommercial agenda.

Contact

Deutsche Bundesbank, Research Data and Service Centre (RDSC)
E-mail: fdsz-data@bundesbank.de
Homepage: <https://www.bundesbank.de/rdsc>

Deposit requirements

The researcher must sign a confidentiality agreement and a special contract between Deutsche Bundesbank and the research institution has to be set up. The RDSC must be informed about every document that is made available to the public that contains information derived from the provided data.

Citation requirements

For any study or other document which is made available to the public and contains information derived from the provided data, the researcher is obliged to properly cite the data source as:

Cagala, T., M. Gomolka, M. Krüger, K. Sachs (2021). Markets in Financial Instruments Directive (MiFID), Data Report 2021-13 – Metadata ID 1.0. Deutsche Bundesbank, Research Data and Service Centre.

Identifiers

The dataset contains six variables identifying entities that need to be protected in terms of confidentiality:

1. **MP_anon** (reporting agent)
2. **KD_anon** (customer)
3. **MK_anon** (broker)
4. **KT_anon** (counterparty)
5. **ZW1_anon** (first intermediary)
6. **ZW2_anon** (second intermediary)

Therefore, it is necessary to retain all these variables when working with the data. Otherwise, it is not possible to conduct a proper output control.

Size

The full dataset contains more than 7.3 billion observations which are split up into 3622 daily chunks. Accordingly, the full dataset is much larger than RAM on the machines which are available at the RDSC.

This means that a research project is only feasible if it requires only a small subset from the full dataset.

This also means that researchers need to be skilled in working with very large datasets. Otherwise, data preparation and analyses will run for a very long time.

2 Description of variables

2.1 Overview of variables

Name	Label
BGNR	Record ID
HANDELSTAG	Trade date
HANDELSZEIT	Trade date and time
MP_anon	Reporting agent
KD_anon	Customer
MK_anon	Broker
KT_anon	Counterparty
ZW1_anon	First intermediary
ZW2_anon	Second intermediary
G_ART	Buy / sell
NOSTROB	Own holdings
NOSTROG	Proprietary or customer transaction
BOERSLICH	Stock exchange price
LAND	Country of the transaction
BOERSE_ART	Type of trading venue
BOERSE	Trading venue
DEPOT_WAEH	Currency of the securities account
NOMINALE	Nominal value
LAND_WAEH	Transaction currency
KURS	Transaction price
VOLUMEN	Transaction volume
VALUTA	Value date
AUFGABE	Name-to-follow transaction
ABRUF_MK	Additional broker information
ISIN	International Securities Identification Number
INSTRUMENT	Traded security
NUM_ART_KNZ	Country of origin of the security
WKN	Securities identification number
WP_ART	CFI code
EFFEKTENNOTIZ	Quotation
DERIVAT_ART	Type of derivative
UNDERLY_ART	Underlying origin
UNDERLY	Underlying
BASISPR_ART	Option price quotation
BASISPR	Option price
BASISPR_WAEH	Option price currency
PREISMULTI	Price multiplier
DERIVAT_FAELLIG	Derivative maturity date
AII_PRODUKT_CODE	All code
AKT_KNZ	Update status
BGNR_REF_TRANSFORMATION	Original extttBGNR
FEHLERST	Error status

Name	Label
GNR_UR	Original transaction number
MIFID_KNZ	MiFID conformity
SATZART	Record type
STORNO_ORG	Cancellation status

2.2 Details of variables

BGNR: Record ID

Notes	Random ID identifying a record in the dataset.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	integer64
Percent NA	0.0

HANDELSTAG: Trade date

Notes	In ISO 8601 format (YYYY-MM-DD).
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	date
Percent NA	0.0

HANDELSZEIT: Trade date and time

Notes	In ISO 8601 format (YYYY-MM-DD hh:mm:ss).
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	datetime
Percent NA	0.0

MP_anon: Reporting agent

Notes	Random ID identifying the reporting agent.
Available from – to	2008-01-01 – 2017-12-30
Identifier	yes
Type	character
Percent NA	0.0

KD_anon: Customer

Notes	Random ID identifying the customer.
Available from – to	2008-01-01 – 2017-12-30

Identifier	yes
Type	character
Percent NA	22.7

MK_anon: Broker

Notes	Random ID identifying the broker.
Available from – to	2008-01-01 – 2017-12-30
Identifier	yes
Type	character
Percent NA	96.4

KT_anon: Counterparty

Notes	Random ID identifying the counterparty.
Available from – to	2008-01-01 – 2017-12-30
Identifier	yes
Type	character
Percent NA	77.7

ZW1_anon: First intermediary

Notes	Random ID identifying the first intermediary.
Available from – to	2008-01-01 – 2017-12-30
Identifier	yes
Type	character
Percent NA	99.1

ZW2_anon: Second intermediary

Notes	Random ID identifying the second intermediary.
Available from – to	2008-01-01 – 2017-12-30
Identifier	yes
Type	character
Percent NA	100.0

G_ART: Buy / sell

Notes	Indicates wheter a transaction was a buy or a sell.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.0

NOSTROB: Own holdings

Notes	Indicates whether a transaction was bought into / sold from own holdings.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.0

NOSTROG: Proprietary or customer transaction

Notes	Tags a transaction as proprietary or customer-oriented.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.0

BOERSLICH: Stock exchange price

Notes	Indicates whether the price of the transaction is a stock exchange price.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	73.4

LAND: Country of the transaction

Notes	Two-digit ISO 3166 code of the country where the transaction was conducted.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.6

BOERSE_ART: Type of trading venue

Notes	Indicates the type of trading venue of the transaction.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	character
Percent NA	0.3

BOERSE: Trading venue

Notes	Depending on BOERSE_ART , either the ISO 10383 code of the stock exchange, the BIC code or "XOFF" for OTC transactions.
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Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.2

DEPOT_WAEH: Currency of the securities account

Notes	The currency of NOMINALE . Either an ISO 4217 currency code, "XXX" for pieces (stocks), "XXK" for contracts (derivatives), or "XXP" for points (derivatives).
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.0

NOMINALE: Nominal value

Notes	The nominal value of the transaction. The currency of this value is given in EFFEKTENNOTIZ .
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	numeric
Percent NA	0.0

LAND_WAEH: Transaction currency

Notes	The currency of KURS as ISO 4217 code.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.0

KURS: Transaction price

Notes	The price of the transaction denoted in LAND_WAEH . This is not necessarily the settlement currency (which is not reported in this dataset).
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	numeric
Percent NA	0.0

VOLUMEN: Transaction volume

Notes	The volume of the transaction.
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Available from – to 2008-01-01 – 2017-12-30
Identifier no
Type double
Percent NA 0.0

VALUTA: Value date

Notes In ISO 8601 format (YYYY-MM-DD).
Available from – to 2008-01-01 – 2017-12-30
Identifier no
Type date
Percent NA 3.6

AUFGABE: Name-to-follow transaction

Notes Indicates whether the transaction is a name-to-follow transaction.
Available from – to 2008-01-01 – 2017-12-30
Identifier no
Type factor
Percent NA 58.8

ABRUF_MK: Additional broker information

Notes Additional information on broker mediated transactions.
Available from – to 2008-01-01 – 2017-12-30
Identifier no
Type factor
Percent NA 62.7

ISIN: International Securities Identification Number

Available from – to 2008-01-01 – 2017-12-30
Identifier no
Type character
Percent NA 50.8

INSTRUMENT: Traded security

Notes Either **ISIN** or **WKN**.
Available from – to 2008-01-01 – 2017-12-30
Identifier no
Type character
Percent NA 0.0

NUM_ART_KNZ: Country of origin of the security

Notes	ISO 3166 code of the securities country of origin. "XP" for derivatives which are identified via WKN .
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	47.7

WKN: Securities identification number

Notes	The security can be identified either by ISIN or by WKN . If neither ISIN nor WKN exist, there is no reporting obligation for this security.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	character
Percent NA	47.9

WP_ART: CFI code

Notes	Classification of financial instruments according to ISO 10962.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.1

EFFEKTENNOTIZ: Quotation

Notes	Indicates the security's type of quotation.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	22.9

DERIVAT_ART: Type of derivative

Notes	Indicates whether a derivative is a call option, a put option or a future.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	48.9

UNDERLY_ART: Underlying origin

Notes	ISO 3166 code of the UNDERLY 's country of origin.
Available from – to	2008-01-01 – 2017-12-30

Identifier	no
Type	factor
Percent NA	98.0

UNDERLY: Underlying

Notes	The ISIN or WKN identifying the underlying.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	character
Percent NA	50.4

BASISPR_ART: Option price quotation

Notes	Indicates the type of quotation of BASISPR .
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	94.5

BASISPR: Option price

Notes	Price of call or put option.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	numeric
Percent NA	0.0

BASISPR_WAEH: Option price currency

Notes	Indicates the currency of BASISPR as ISO 4217 code.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	94.6

PREISMULTI: Price multiplier

Notes	Applies to derivatives only and indicates the quantity specified in the contract.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	numeric
Percent NA	0.0

DERIVAT_FAELLIG: Derivative maturity date

Notes	The derivative's maturity date in ISO 8601 format (YYYY-MM-DD).
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	date
Percent NA	48.9

AII_PRODUKT_CODE: All code

Notes	Alternative Instrument Identifier code. It is constructed from the following elements: <ol style="list-style-type: none"> 1. Ultimate Underlying ISIN – this is the ISIN of the ultimate equity or bond instrument underlying the derivative. For example, if the derivative is an option on a future on a share (if exists), this is the ISIN of the share. 2. Underlying Instrument type – this is the type of the immediate underlying instrument. It is proposed to use the first letter of the CFI code for this purpose. 3. Derivative type – this is the classification of the OTC derivative instrument defined in this chapter. In the example above, this would be an option. 4. Put/call identifier – in case of an option. 5. Price multiplier. 6. Strike price. 7. Expiration date.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	character
Percent NA	49.1

AKT_KNZ: Update status

Notes	Indicates the update status of a transaction.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.0

BGNR_REF_TRANSFORMATION: Original extttBGNR

Notes	References the original extttBGNR in case of a transformed record.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	integer64
Percent NA	99.5

FEHLERST: Error status

Notes	Indicates if the record contains errors.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.0

GNR_UR: Original transaction number

Notes	The original transaction number from Deutsche Börse AG.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	character
Percent NA	48.2

MIFID_KNZ: MiFID conformity

Notes	Indicates whether the record is MiFID conform.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	character
Percent NA	65.6

SATZART: Record type

Notes	Indicates the record type.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.0

STORNO_ORG: Cancellation status

Notes	Indicates the cancellation status of the record.
Available from – to	2008-01-01 – 2017-12-30
Identifier	no
Type	factor
Percent NA	0.0

References

Gesetz über das Kreditwesen. (2007, December 28). Valid until 2008-08-21. Retrieved April 13, 2021, from <https://www.buzer.de/gesetz/962/al10026-0.htm>

Gesetz über den Wertpapierhandel. (2014, January 1). Valid until 2018-01-02. Retrieved April 13, 2021, from <https://www.buzer.de/gesetz/1262/al42421-0.htm>

R Core Team. (2020). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. Retrieved from <https://www.R-project.org/>

Verordnung über die Meldepflichten beim Handel mit Wertpapieren und Derivaten. (2008, January 1). Valid until 2018-01-02. Retrieved April 13, 2021, from <https://www.buzer.de/gesetz/733/index.htm>

A Codelists

Please note that this appendix contains only codelists with less than 50 items. All codelists (especially those with more than 50 items) are available as comma separated values upon request.

A.1 ABRUF_MK

Code	Label
D	Cancellation
E	Deletion of a name-to-follow transaction
F	Information about cancellation of a transaction between brokers
L	Compulsory name-to-follow transaction/compulsory passing on of a name-to-follow transaction (counterentry with counterparty = bank)
R	Cancellation: compulsory name-to-follow transaction/compulsory passing on of a name-to-follow transaction (counterentry with counterparty = bank)
A	Adjustment
N	Nothing

A.2 AKT_KNZ

Code	Label
A	Transaction was already reported earlier
N	No update

A.3 AUFGABE

Code	Label
0	No name-to-follow transaction
1	Name-to-follow transaction
3	Closing of a name-to-follow transaction
4	Passing on of a name-to-follow transaction

A.4 BASISPR_ART

Code	Label
1	Pieces
2	Percent
3	Per thousand
4	Points
9	Other

A.5 BOERSE_ART

Code	Label
C	MIC or XOFF
F	BIC

A.6 BOERSLICH

Code	Label
J	Stock exchange price
N	No stock exchange price

A.7 DERIVAT_ART

Code	Label
C	Call option
P	Put option
F	Future

A.8 EFFEKTENNOTIZ

Code	Label
1	Pieces
2	Percent
3	Per thousand
4	Points
9	Other

A.9 FEHLERST

Code	Label
0	No error
1	Contains errors, but exportable
2	Contains errors, which lead to exclusion from TREM-export
3	severe errors - Junk

A.10 G_ART

Code	Label
K	Buy
V	Sell

A.11 NOSTROB

Code	Label
J	Affects own holdings
N	Does not affect own holdings

A.12 NOSTROG

Code	Label
K	Non-proprietary trading
E	Proprietary trading

A.13 SATZART

Code	Label
O	Original record
S	Cancellation record
N	New record (= Update)

A.14 STORNO_ORG

Code	Label
A	Cancelled original or cancellation with referenced original
B	Cancellation without original
0	Default