Package ‘fdicdata’

April 12, 2023

Type Package
Title Accessing FDIC Bank Data
Version 0.1.0
Description A system provides a set of functions for working with data from the Federal Deposit Insurance Corporation (FDIC), including retrieving financial data for FDIC-insured institutions and accessing the data taxonomy.
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Author Ugur Dar [aut, cre], Brian Pillmore [aut, cph]
Maintainer Ugur Dar <ugurdarr@gmail.com>
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cert2idrssd

Convert bank identifier from CERT to IDRSSD

Description
This function takes a bank’s CERT number as input and returns the corresponding IDRSSD number.

Usage
cert2idrssd(CERT)

Arguments
CERT
An integer specifying the CERT number of the bank.

Value
An integer specifying the IDRSSD number of the bank. Returns NULL if there is an error.

Examples
cert2idrssd(3850)

dataTaxonomy
Taxonomy Data

Description
Extracts the taxonomy information for a given name

Usage
dataTaxonomy(name)

Arguments
name
the name of the taxonomy file to extract. Available taxonomy names: "institution", "location", "history", "summary", "failure", "financial".
getFailures

Value

a data frame containing the extracted taxonomy information

getFailures

Get information on bank failures from FDIC data

Description

This function retrieves information on bank failures from the FDIC data API, using the specified fields and (optional) date range. If a date range is specified, only failures within that range will be included.

Usage

getFailures(fields, range = NULL, limit = 10000)

Arguments

fields  a character vector specifying the fields to include in the output.
NAME  The name of the failed bank
CERT  The FDIC certificate number of the failed bank
FIN  The failed bank’s unique financial institution identifier
CITYST  The city and state where the failed bank was located
FAILDATE  The date of the bank failure
FAILYR  The year of the bank failure
SAVR  Whether the failed bank was a savings and loan association
RESTYPE  The type of failed institution
RESTYPE1  A more specific classification of the failed institution
CHCLASS1  The bank’s charter class
QBFDEP  The amount of deposits held by the bank at the time of failure
QBFASSET  The total assets held by the bank at the time of failure
COST  The estimated cost to the FDIC of the bank’s failure
PSTALP  The FDIC’s estimated percentage of insured deposits paid to depositors

range  a numeric vector of length 2 specifying the start and end dates (in YYYY format) for the date range to include. If not specified, all failures will be included.

limit  an integer specifying the maximum number of results to return. Defaults to 10,000.

Value

a data frame containing the requested fields for each bank failure within the specified date range (if applicable).
getFinancials

Get financial data for a given institution

Description
This function retrieves financial data for a given institution from the FDIC API.

Usage
getFinancials(IDRSSD_or_CERT, metrics, limit = 1, IDRSSD = TRUE, range = NULL)

Arguments

- `IDRSSD_or_CERT` Numeric value indicating the IDRSSD or CERT number of the institution to retrieve data for.
- `metrics` Vector of metric names to retrieve financial data for.
- `limit` Number of records to retrieve.
- `IDRSSD` Boolean value indicating whether IDRSSD (True) or CERT number (False) is used.
- `range` Character vector contains start and end date for range. Open ended ranges can be expressed using a "*".

Value
A dataframe containing the requested financial data.

Examples

```r
getFinancials(37, metrics = c("ASSET", "DEP"), limit = 10, range = c("2015-01-01", "*"))
getFinancials(37, metrics = c("ASSET", "DEP"), limit = 10, range = c("2015-01-01", "2016-01-01"))
```
**getHistory**

*Get history of a bank by FDIC certificate number or name*

**Description**

This function retrieves the history of a bank by either its FDIC certificate number or name. The user can specify which fields to include in the output.

**Usage**

```r
getHistory(CERT_or_NAME = NULL, fields, CERT = TRUE, limit = 10000)
```

**Arguments**

- **CERT_or_NAME** Either the FDIC certificate number or the name of the bank for which to retrieve history information.
- **fields** A character vector specifying the fields to include in the output.
- **CERT** A logical value indicating whether the value in CERT_or_NAME is a FDIC certificate number (default is TRUE).
- **limit** An integer indicating the maximum number of records to retrieve (default and max is 10000).

**Value**

A data frame containing the requested history information for the specified bank.

**Examples**

```r
getHistory(CERT_or_NAME = 3850, c("INSTNAME","CERT","PCITY","PSTALP","PZIP5"))
```

---

**getInstitution**

*Retrieve institution data from FDIC API*

**Description**

This function retrieves institution data from the FDIC API based on the specified parameters.

**Usage**

```r
def getInstitution(
    name = NULL,
    IDRSSD_or_CERT = NULL,
    fields,
    IDRSSD = TRUE,
    limit = 10000
)
```

---
getInstitutionsAll

Arguments

- `name` (optional) A character string to search for in the institution name.
- `IDRSSD_or_CERT` IDRSSD or CERT of bank
- `fields` A character vector of field names to retrieve from the API.
- `IDRSSD` Default: TRUE functions uses IDRSSD, to using CERT change it FALSE
- `limit` An integer specifying the maximum number of records to retrieve. Default is 10000.

Value

A data frame containing the institution data.

References

For more information on the FDIC API, visit https://banks.data.fdic.gov/.

Examples

```r
df <- getInstitution(name = "Bank of America", fields = c("NAME", "CITY", "STATE"))
```

getInstitutionsAll  Read FDIC Institution data set

Description

This function reads the FDIC Institution data set from a URL (FDIC listing of all institutions) and returns it as a data frame.

Usage

getInstitutionsAll()

Value

A data frame containing the FDIC Institution data set

Examples

```r
#\'dontrun(dataInstitutions <- getInstitutionsAll())
```
getLocation

Get location information for a bank with a given CERT number

Description

This function retrieves location information for a bank with a given CERT number from the Federal Deposit Insurance Corporation (FDIC) database.

Usage

getLocation(CERT, fields = c("NAME", "CITY", "STNAME"), limit = 10000)

Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERT</td>
<td>A character string specifying the CERT number of the bank to retrieve location information for.</td>
</tr>
<tr>
<td>fields</td>
<td>A character vector specifying the fields to include in the output. Default is c(&quot;NAME&quot;, &quot;CITY&quot;, &quot;STNAME&quot;).</td>
</tr>
<tr>
<td>limit</td>
<td>An integer specifying the maximum number of locations to retrieve. Default is 10000.</td>
</tr>
<tr>
<td>ZIP</td>
<td>The ZIP code for the location.</td>
</tr>
<tr>
<td>UNINUM</td>
<td>A unique identifier for the location.</td>
</tr>
<tr>
<td>STNAME</td>
<td>The name of the state where the location is located.</td>
</tr>
<tr>
<td>STCNTY</td>
<td>The name of the county where the location is located.</td>
</tr>
<tr>
<td>STALP</td>
<td>The two-letter abbreviation for the state where the location is located.</td>
</tr>
<tr>
<td>SERVTYPE_DESC</td>
<td>A description of the type of service provided at the location.</td>
</tr>
<tr>
<td>SERVTYPE</td>
<td>A code indicating the type of service provided at the location.</td>
</tr>
<tr>
<td>RUNDATE</td>
<td>The date the location information was last updated.</td>
</tr>
<tr>
<td>OFFNUM</td>
<td>The number of the office associated with the location.</td>
</tr>
<tr>
<td>OFFNAME</td>
<td>The name of the office associated with the location.</td>
</tr>
<tr>
<td>NAME</td>
<td>The name of the financial institution associated with the location.</td>
</tr>
<tr>
<td>MAINOFF</td>
<td>A flag indicating whether the location is the main office for the financial institution.</td>
</tr>
<tr>
<td>MDL_STATUS_DESC</td>
<td>A description of the regulatory status of the financial institution associated with the location.</td>
</tr>
<tr>
<td>MDL_STATUS_CODE</td>
<td>A code indicating the regulatory status of the financial institution associated with the location.</td>
</tr>
<tr>
<td>LONGITUDE</td>
<td>The longitude of the location.</td>
</tr>
<tr>
<td>LATITUDE</td>
<td>The latitude of the location.</td>
</tr>
<tr>
<td>FI_UNINUM</td>
<td>A unique identifier for the financial institution associated with the location.</td>
</tr>
<tr>
<td>ESTYMD</td>
<td>The date the financial institution associated with the location was established.</td>
</tr>
</tbody>
</table>
getSummary

**CSA_NO** The Core Based Statistical Area (CBSA) number for the location.

**CSA_FLG** A flag indicating whether the location is part of a CBSA.

**CSA** The name of the CBSA associated with the location.

**COUNTY** The name of the county associated with the location.

**CITY** The name of the city associated with the location.

**CERT** The certificate number of the financial institution associated with the location.

**CBSA_NO** The CBSA number for the location.

**CBSA_MICRO_FLG** A flag indicating whether the CBSA associated with the location is a micro area.

**CBSA_METRO_NAME** The name of the metropolitan area associated with the location.

**CBSA_METRO_FLG** A flag indicating whether the location is part of a metropolitan area.

**CBSA_METRO** The code for the metropolitan area associated with the location.

**CBSA_DIV_NO** The CBSA division number for the location.

**CBSA_DIV_FLG** A flag indicating whether the location is part of a CBSA division.

**CBSA_DIV** The name of the CBSA division associated with the location.

**CBSA** The code for the CBSA associated with the location.

**BKCLASS** The bank class associated with the location.

**ADDRESS** Address of the bank.

**Value**

A data frame containing location information for the bank.

**Examples**

```r
# Get location information for a bank with CERT number 3850
getLocatin(3850)

# Get location information for a bank with CERT number 3850 and fields "NAME", "CITY", and "ZIP"
gLocatin(3850, fields = c("NAME", "CITY", "ZIP"))
```

**getSummary**

*Get Summary Data from FDIC API*

**Description**

This function retrieves summary data from the FDIC API based on given state names, a range of years, and specified fields. The returned data frame includes columns for state name, year, CB_SI, and the specified fields.
Usage

```
getSummary(states, range, fields, limit = 10000)
```

Arguments

- `states`: a character vector of state names to filter by
- `range`: a numeric vector of length two representing the beginning and ending years to filter by. If NULL, no year filtering will occur.
- `fields`: a character vector of field names to include in the output data frame
- `limit`: an integer specifying the maximum number of rows to retrieve from the API

Value

a data frame with summary data for the given states, years, and fields

Examples

```
df <- getSummary(c("West Virginia", "Delaware", "Alabama"), c(2015, 2016), c("ASSET", "INTINC"))
```

---

**getTaxonomy**

Get taxonomy file from FDIC website

Description

This function takes the name of the YAML file containing data taxonomy as an input and downloads it from the FDIC website, saving it to the local directory for later use.

Usage

```
getTaxonomy(taxonomy)
```

Arguments

- `taxonomy`: The name of the taxonomy file to download (one of "institution_properties.yaml", "location_properties.yaml", "history_properties.yaml", "summary_properties.yaml", "failure_properties.yaml", or "risview_properties.yaml")
idrssl2cert  
*Convert bank identifier from IDRSSL to CERT*

**Description**
This function takes a bank’s IDRSSL number as input and returns the corresponding CERT number.

**Usage**
```
idrssl2cert(IDRSSL)
```

**Arguments**
| IDRSSL | An integer specifying the IDRSSL number of the bank. |

**Value**
An integer specifying the CERT number of the bank. Returns NULL if there is an error.

**Examples**
```
idrssl2cert(37)
```

states2URL  
*Converts a vector of state names to a URL compatible format*

**Description**
This function takes a vector of state names and converts it to a format that is compatible with URLs. The resulting string can be used as a filter for APIs or other web requests.

**Usage**
```
states2URL(vec)
```

**Arguments**
| vec | A vector of state names to be converted to URL-compatible format |

**Value**
A string containing the state names in URL-compatible format
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