

Package: BRVM (via r-universe)

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Type Package
Title Retrieve Historical Data of Companies Listed on the 'BRVM' Stock Exchange
Version 5.3.2
Description Provide real-time access to data from the Regional Securities Exchange SA, commonly known as the 'BRVM' stock exchange. The goal is to facilitate data access for users of the R programming language. The package includes a variety of data that can be accessed by calling functions.
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\$.african_market-method
<i>Method for accessing slots with \$</i>

Description

Allows access to slots using the \$ notation, similar to S3.

Usage

```
## S4 method for signature 'african_market'
x$name
```

Arguments

- x An object of class african_market.
- name The name of the slot.

african_market	<i>Constructor for the 'african_market' S4 class</i>
----------------	--

Description

Creates an object of class `african_market`, which stores metadata and financial data related to an African stock market. This includes basic identifiers, official URLs, and structured data frames for indexes, shares, and bonds.

Usage

```
african_market(
  Market_short_name,
  Market_full_name,
  Official_url,
  Market_url,
  Market_data_url,
  List,
  ListShares,
  ListIndexes,
  ListBonds,
  Indexes,
  Shares,
  Bonds,
  Ticker_full_name
)

## S4 method for signature
## 'character,
##   character,
##   character,
##   character,
##   character,
##   character,
##   character,
##   character,
##   character,
##   data.frame,
##   data.frame,
##   data.frame,
##   character'
african_market(
  Market_short_name = "",
  Market_full_name = "",
  Official_url = "",
  Market_url = "",
  Market_data_url = "",
```

```

List = "",
ListShares = "",
ListIndexes = "",
ListBonds = "",
Indexes = data.frame(),
Shares = data.frame(),
Bonds = data.frame(),
Ticker_full_name = ""
)

```

Arguments

Market_short_name	A character string for the abbreviated name of the market (e.g. "BRVM").
Market_full_name	A character string for the full name of the market (e.g. "Bourse Régionale des Valeurs Mobilières").
Official_url	A character string for the official website of the market.
Market_url	A character string for the general URL of the market.
Market_data_url	A character string for the URL to access detailed market data.
List	A character string describing the types of lists available (e.g. "Shares, Indexes, Bonds").
ListShares	A character string or URL pointing to the list of shares.
ListIndexes	A character string or URL pointing to the list of indexes.
ListBonds	A character string or URL pointing to the list of bonds.
Indexes	A data frame containing information on market indexes.
Shares	A data frame containing information on market shares.
Bonds	A data frame containing information on market bonds.
Ticker_full_name	A character string for the full name associated with a ticker symbol.

Details

This constructor initializes an S4 object of class `african_market`, which is useful for storing structured data and metadata for African financial markets. It can serve as the backbone for functions that fetch, analyze, and visualize market data.

Value

An object of class `african_market`.
 A new S4 object of class 'african_market'.

See Also

[setClass, african_market](#)

african_market-class	<i>African Market Class</i>
----------------------	-----------------------------

Description

An S4 class designed to represent and store structured information about African financial markets, including metadata, trading instruments, and market data sources.

Value

An object of class african_market.

Slots

Market_short_name A short abbreviation of the market name (e.g. "BRVM").

Market_full_name The full name of the market (e.g. "Bourse Régionale des Valeurs Mobilières").

Official_url The official website of the market.

Market_url A general URL for accessing market information.

Market_data_url A URL pointing to detailed market data.

List A string summarizing available lists of instruments.

ListShares A string or URL referencing the list of shares.

ListIndexes A string or URL referencing the list of indexes.

ListBonds A string or URL referencing the list of bonds.

Indexes A data frame containing index-level information.

Shares A data frame containing share-level information.

Bonds A data frame containing bond-level information.

Ticker_full_name The full name corresponding to a ticker symbol.

Author(s)

Koffi Frederic SESSIE

Olabiya Aurel Geoffroy ODJO

BRVM_bySector

*BRVM By Sector***Description**

This function will take in the name of sector(s) and returns data for companies belonging to that/those sector(s)

Usage

```
BRVM_bySector(.sectors = "ALL")

## S4 method for signature 'character'
BRVM_bySector(.sectors = "ALL")
```

Arguments

`.sectors` A vector of sectors you wish to have returned.

Details

This function will take in a vector of sectors provided by the end user and return a tibble.

Value

A tibble

Author(s)

Koffi Frederic SESSIE
 Olabiyi Aurel Geoffroy ODJO
 Oudouss Diakite Abdoul
 Steven P. Sanderson II, MPH

See Also

Other Data Retrieval: [BRVM_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_get\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#)

Examples

```
library(stringr)
library(rlang)
library(xml2)
library(rvest)
library(dplyr)

sectors <- c("Industriels", "Administration", "Public service", "AUtr", "SeRVICES FINANCIERS",
```

```
      "distribution", 25)
BRVM_bySector(.sectors = sectors)
BRVM_bySector(.sectors = "All")
BRVM_bySector(.sectors = c("Other", "Agriculture"))
```

BRVM_cap*BRVM Capitalization*

Description

It receives no argument and returns informations about BRVM capitalization

Usage

```
BRVM_cap()
```

Value

A tibble

Author(s)

Koffi Frederic SESSIE

Olabiya Aurel Geoffroy ODJO

See Also

<https://www.brvm.org/en/capitalisations/0>

Other Data Retrieval: [BRVM_bySector\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_get\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#)

Other BRVM: [BRVM_company_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_company_url\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#), [normality_test\(\)](#), [stationarity_test\(\)](#)

Examples

```
BRVM_cap()
```

BRVM_company_cap	<i>BRVM companies capitalization value - To get the capitalization value data of all companies listed on BRVM stock exchange</i>
------------------	--

Description

This function will get the capitalization value data of all companies listed on the BVRM exchange. The function takes no parameter

Usage

```
BRVM_company_cap()
```

Value

A tibble

Author(s)

Koffi Frederic SESSIE

See Also

Other BRVM: [BRVM_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_company_url\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#), [normality_test\(\)](#), [stationarity_test\(\)](#)

Examples

```
BRVM_company_cap()
```

BRVM_company_info	<i>BRVM Get info about a ticker (Beta, RSI, Closing, Valorisation, etc.)</i>
-------------------	--

Description

Retrieves detailed financial information (RSI, Beta, closing price, etc.) for a company or index listed on the BRVM stock exchange. The input is automatically converted to upper case.

Usage

```
BRVM_company_info(ticker = "ALL")

## S4 method for signature 'character'
BRVM_company_info(ticker = "ALL")
```

Arguments

ticker The ticker of a company or index listed on the BRVM

Value

A tibble containing indicators and values for the given ticker(s)

Author(s)

Koffi Frederic SESSIE

Olabiya Aurel Geoffroy ODJO

See Also

<https://www.sikafinance.com>

Examples

```
BRVM_company_info("BOAS")
BRVM_company_info("BoaM")
BRVM_company_info("BRVMAG")
BRVM_company_info("ALL INDEXES")
BRVM_company_info("ALL SHARES")
BRVM_company_info("ALL")
```

BRVM_company_rank	<i>BRVM Company Ranking by Daily Performance</i>
-------------------	--

Description

Retrieves daily trading data for all companies listed on the Bourse Régionale des Valeurs Mobilières (BRVM) and ranks them according to their percentage change in share price.

This function returns companies rank from the BRVM Bourse exchange according to their daily change (variation).

Usage

```
BRVM_company_rank(object)

## S4 method for signature 'missing'
BRVM_company_rank(object)
```

Arguments

object No need to give an argument.

Details

The function scrapes the official BRVM website to collect trading information such as traded volume, previous price, opening price, closing price, and daily percent change. After cleaning and converting numeric fields, companies are ranked in descending order of percentage change, making it easy to identify the day's top gainers and losers.

This function will get the rank of the companies listed on the BVRM exchange through the Rich Bourse site. The function takes no parameter

Value

A tibble containing the following columns:

- `ticker` – The stock ticker symbol.
- `company_name` – The name of the company.
- `percent_change` – The daily percentage change.
- `rank` – The company's position in the ranking (1 = highest increase).

"tbl_df" "tbl" "data.frame"

Author(s)

Koffi Frederic SESSIE

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Oudouss Diakite Abdoul

Steven P. Sanderson II, MPH

See Also

<https://www.brvm.org/en/cours-actions/0>

Other Data Retrieval: [BRVM_bySector\(\)](#), [BRVM_cap\(\)](#), [BRVM_get\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#)

Other BRVM: [BRVM_cap\(\)](#), [BRVM_company_cap\(\)](#), [BRVM_company_url\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#), [normality_test\(\)](#), [stationarity_test\(\)](#)

Examples

```
library(dplyr)
library(rvest)
BRVM_company_rank()
comp.rank <- BRVM_company_rank()
comp.rank<-comp.rank%>%
dplyr::arrange(desc(percent_change))
comp.rank
```

BRVM_company_url	<i>BRVM company url</i>
------------------	-------------------------

Description

It receives the ticker name and return an URL

Usage

```
BRVM_company_url(ticker = "ALL")

## S4 method for signature 'character'
BRVM_company_url(ticker = "ALL")
```

Arguments

 ticker is the name of the Ticker

Value

URLs

Author(s)

Koffi Frederic SESSIE
Olabiyi Aurel Geoffroy ODJO

See Also

Other BRVM: [BRVM_cap\(\)](#), [BRVM_company_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#), [normality_test\(\)](#), [stationarity_test\(\)](#)

Examples

```
## Not run:
  BRVM_company_url("ALL")

## End(Not run)
```

BRVM_direction

*BRVM Rank***Description**

This function will take in 'Up' or 'Down' and returns respectively n results for the top or flop ranking of the BRVM tickers.

Usage

```
BRVM_direction(.up_or_down = "Up", N = 10)
```

```
## S4 method for signature 'character,numeric'
BRVM_direction(.up_or_down = "Up", N = 10)
```

Arguments

`.up_or_down` This is a character string set to "Up" It can either be 'Up' or 'Down'.

`N` An integer specifying the number of companies to return. Default is 10.

Details

This function will get any n results for the top or flop ranking of the BRVM tickers.

Value

A tibble

Author(s)

Koffi Frederic SESSIE
 Olabiyi Aurel Geoffroy ODJO
 Oudouss Diakite Abdoul
 Steven P. Sanderson II, MPH

Examples

```
BRVM_direction("Up", 10)
BRVM_direction("Down", 5)
```

BRVM_get

*Get historical data for BRVM securities***Description**

This function retrieves historical price and volume data for one or more securities listed on the BRVM (Bourse Regionale des Valeurs Mobilières) market.

Usage

```
BRVM_get(
  ticker = "ALL",
  Period = "daily",
  from = Sys.Date() - 89,
  to = Sys.Date(),
  output_format = c("by_col", "by_row")
)

## S4 method for signature 'character'
BRVM_get(
  ticker = "ALL",
  Period = "daily",
  from = Sys.Date() - 89,
  to = Sys.Date(),
  output_format = c("by_col", "by_row")
)
```

Arguments

ticker	A character vector specifying the tickers of the securities to retrieve. The ticker names are case-insensitive. Special values include: • "ALL": Retrieves data for all securities (shares and indexes). • "ALL SHARES": Retrieves data for all shares. • "ALL INDEXES": Retrieves data for all indexes. • A vector of specific ticker symbols, e.g., c("ECOC", "SGBCI").
Period	An integer or character string specifying the data aggregation period. Valid values are: • 0 or "daily" (default): Daily data. • 7 or "weekly": Weekly data. • 30 or "monthly": Monthly data. • 91 or "quarterly": Quarterly data. • 365 or "yearly": Yearly data.
from	A date object or a character string representing the start date of the data period. The function expects a format like "YYYY-MM-DD". Defaults to 90 days before the current date.

to	A date object or a character string representing the end date of the data period. The function expects a format like "YYYY-MM-DD". Defaults to the current date.
output_format	A character string indicating the desired output structure. Must be one of "by_col" (default) or "by_row".

Details

This function will get data of the companies listed on the BVRM exchange through the sikafinance site. The function takes in a single parameter of `ticker`. The function will auto-format the tickers you input into all upper case by using `toupper()`. The function allows you to specify a single ticker or a vector of tickers. It also provides shortcuts for retrieving data for all securities ("ALL"), all shares ("ALL SHARES"), or all indexes ("ALL INDEXES").

The data is retrieved from a remote server, and the function handles the pagination of requests to ensure that long time periods can be fetched without errors. It also includes error handling for internet connection issues and invalid date parameters.

The output can be formatted in two ways:

- "by_col": Returns a single data frame with a `Ticker` column that identifies each security's data. This is the default format.
- "by_row": Returns a single data frame where each security's data (Open, High, Low, Close, Volume) is arranged in separate columns, with the ticker name as a prefix (e.g., `TICKER.Open`). This format is suitable for direct use in time series analysis where each column represents a different series.

A progress bar is displayed in the console to show the download progress for each ticker.

Value

A data frame containing the historical data for the specified tickers. The columns of the data frame are `Date`, `Open`, `High`, `Low`, `Close`, `Volume`, and optionally `Ticker` if `output_format` is "by_col". If no data is available for a given ticker in the specified date range, a message is printed to the console, and that ticker is not included in the output.

Author(s)

Koffi Frederic SESSIE

Olabiya Aurel Geoffroy ODJO

See Also

`BRVM_tickers()`

<https://www.sikafinance.com/>

Other Data Retrieval: `BRVM_bySector()`, `BRVM_cap()`, `BRVM_company_rank()`, `BRVM_plot()`, `BRVM_rank()`, `BRVM_stock_market()`, `company_sector()`

Examples

```
## Not run:

library(lubridate)
library(rlang)
library(httr2)
library(dplyr)
library(stringr)
# Get daily data for a single ticker
daily_data <- BRVM_get("SGBCI", from = "2023-01-01", to = "2023-03-31")

# Get monthly data for multiple tickers, with a single column per ticker
monthly_data <- BRVM_get(ticker = c("ECOC", "SGBCI"), Period = "monthly", output_format = "by_row")

# Get weekly data for all indexes for the last year
all_indexes_weekly <- BRVM_get("ALL INDEXES", Period = "weekly", from = Sys.Date() - 365)

## End(Not run)
```

BRVM_plot

*BRVM Plot***Description**

Generates an interactive chart for one or several BRVM-listed tickers. This function retrieves historical market data for the specified ticker(s) and produces an interactive price and volume chart using highcharter.

Usage

```
BRVM_plot(
  object = "ALL INDEXES",
  from = Sys.Date() - 89,
  to = Sys.Date() - 1,
  up.col = "darkgreen",
  down.col = "red",
  ...
)

## S4 method for signature 'character'
BRVM_plot(
  object = "ALL INDEXES",
  from = Sys.Date() - 89,
  to = Sys.Date() - 1,
  up.col = "darkgreen",
  down.col = "red"
)
```

```
## S4 method for signature 'data.frame'
BRVM_plot(object, ticker.name = NULL, up.col = "darkgreen", down.col = "red")
```

Arguments

object	Either a character vector specifying one or more ticker symbols, or a <code>data.frame</code> containing price data. If a character vector is provided, the data are automatically fetched from the BRVM API. If a <code>data.frame</code> is supplied, it must include at least the following columns: "Date", "Open", "High", "Low", "Close", and "Volume". When additional "Ticker" columns are present, multiple series are plotted.
from	Start date of the period to retrieve (quoted). Must be in "YYYY-MM-DD" or "YYYY/MM/DD" format. Defaults to 89 days before today.
to	End date of the period to retrieve (quoted). Must be in "YYYY-MM-DD" or "YYYY/MM/DD" format. Defaults to yesterday.
up.col	Color for upward movements. Default is "darkgreen".
down.col	Color for downward movements. Default is "red".
...	another arguments.
ticker.name	character, ticker name.

Value

An interactive highchart object displaying price and volume dynamics.

Author(s)

Koffi Frederic SESSIE
Olabiyi Aurel Geoffroy ODJO

See Also

Other Data Retrieval: [BRVM_bySector\(\)](#), [BRVM_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_get\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#)

Other BRVM: [BRVM_cap\(\)](#), [BRVM_company_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_company_url\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#), [normality_test\(\)](#), [stationarity_test\(\)](#)

Examples

```
## Not run:
library(highcharter)
library(lubridate)
library(rlang)
library(httr2)
library(dplyr)
library(stringr)
library(xts)

# Plot a single ticker
```

```

BRVM_plot("BICC")

# Customize the up and down colors
BRVM_plot("BICC", up.col = "blue", down.col = "pink")

# Plot a group of tickers
BRVM_plot(object = c("BICC", "ETIT", "SNTS"))

# Plot using a local data.frame with market data
data = BRVM_get("BOABF")
BRVM_plot(data)

data <- data.frame(
  Date = Sys.Date() - 0:5,
  Open = 1:6, High = 2:7, Low = 1:6, Close = 2:7, Volume = 10:15
)
BRVM_plot(data)

## End(Not run)

```

BRVM_rank

*BRVM Capitalization Ranking***Description**

Retrieves market capitalization data of companies listed on the Bourse Régionale des Valeurs Mobilières (BRVM) and ranks them in descending order. Users can choose to extract either the top or bottom n companies by their global capitalization.

Usage

```

BRVM_rank(select = "Top", N = 10)

## S4 method for signature 'character,numeric'
BRVM_rank(select = "Top", N = 10)

```

Arguments

<code>select</code>	A character string indicating whether to return the "Top" or "Bottom" ranked companies. Default is "Top".
<code>N</code>	An integer specifying the number of companies to return. Default is 10.

Value

A tibble containing company names, market capitalization, and related information from the BRVM website.

Author(s)

Koffi Frederic SESSIE
 Olabiyi Aurel Geoffroy ODJO

See Also

<https://www.brvm.org/en/capitalisations/0>

Other Data Retrieval: [BRVM_bySector\(\)](#), [BRVM_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_get\(\)](#), [BRVM_plot\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#)

Other BRVM: [BRVM_cap\(\)](#), [BRVM_company_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_company_url\(\)](#), [BRVM_plot\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#), [normality_test\(\)](#), [stationarity_test\(\)](#)

Examples

```
# Top 10 companies by capitalization
BRVM_rank("Top", 10)

# Bottom 5 companies by capitalization
BRVM_rank("Bottom", 5)
```

BRVM_stock_market	<i>BRVM Official Quotation reviews</i>
-------------------	--

Description

This function receives as input a day of the week (working day) and returns the official quotation reviews of that day.

Usage

```
BRVM_stock_market(.weekday)

## S4 method for signature 'character'
BRVM_stock_market(.weekday)
```

Arguments

<code>.weekday</code>	A quoted date, ie. "2022-01-31" or "2022/01/31". The date must be in ymd format "YYYY-MM-DD" or "YYYY/MM/DD". Must not be a weekend or a holiday
-----------------------	--

Value

A formattable table

Author(s)

Koffi Frederic SESSIE
 Olabiyi Aurel Geoffroy ODJO

See Also

Other Data Retrieval: [BRVM_bySector\(\)](#), [BRVM_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_get\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [company_sector\(\)](#)

Other BRVM: [BRVM_cap\(\)](#), [BRVM_company_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_company_url\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [company_sector\(\)](#), [normality_test\(\)](#), [stationarity_test\(\)](#)

Examples

```
library(httr)
library(lubridate)
library(rvest)
library(timeDate)
library(formattable)
library(stringr)

BRVM_stock_market("2022-04-25")
BRVM_stock_market("2025-05-22")
```

BRVM_tickers

Get BRVM Tickers

Description

A method that retrieves and processes ticker data for indexes and shares from the BRVM website. Retrieves information about companies listed on the Bourse Régionale des Valeurs Mobilières (BRVM). This function returns an S4 object containing the list of tickers, detailed shares information, and (optionally) BRVM indexes.

Usage

```
BRVM_tickers(object)

## S4 method for signature 'missing'
BRVM_tickers(object)
```

Arguments

object	An object of class <code>missing</code> , indicating this method is a constructor that does not require an input object.
--------	--

Details

The BRVM (Bourse Régionale des Valeurs Mobilières) is a regional stock exchange serving the West African Economic and Monetary Union (WAEMU / UEMOA).

Value

A new S4 object of class `market_description` populated with ticker data from the BRVM.

Author(s)

Koffi Frederic SESSIE
Olabiyi Aurel Geoffroy ODJO
Oudouss Diakite Abdoul
Steven P. Sanderson II, MPH

Examples

```
## Not run:  
BRVM_tickers()  
ticks <- BRVM_tickers()  
dput(ticks$Ticker) ## Returns the name of all tickers  
  
## End(Not run)  
  
# Retrieve BRVM tickers  
library(rvest)  
library(httr2)  
library(tidyr)  
brvm_tickers <- BRVM_tickers()  
  
# Display shares  
brvm_tickers$Shares  
  
# List of tickers  
brvm_tickers$List  
  
# Print object  
brvm_tickers
```

Description

This function takes the name (ticker) of a company listed on the BRVM stock exchange, converts it to uppercase using `toupper()`, and returns information about the company's sector.

If the company is not found, a message is displayed indicating that the company does not exist. If a single match is found, the function returns the corresponding sector as a character string. If multiple matches are found, it returns a data frame containing both tickers and their sectors.

Usage

```
company_sector(company)
```

```
## S4 method for signature 'character'  
company_sector(company)
```

Arguments

company	A character string specifying the ticker of a company listed on the BRVM stock exchange.
---------	--

Value

A character string representing the sector of the company if a single match is found, or a data frame if multiple matches are found.

Author(s)

Koffi Frederic SESSIE

Olabiyi Aurel Geoffroy ODJO

See Also

Other Data Retrieval: [BRVM_bySector\(\)](#), [BRVM_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_get\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#)

Other BRVM: [BRVM_cap\(\)](#), [BRVM_company_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_company_url\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [normality_test\(\)](#), [stationarity_test\(\)](#)

Examples

```
company_sector("BICC")  
company_sector("SNTS")
```

CREATE_ALL_MARKETS	<i>Create and return all available markets</i>
--------------------	--

Description

Create and return all available markets

Usage

```
CREATE_ALL_MARKETS(object)

## S4 method for signature 'missing'
CREATE_ALL_MARKETS(object)
```

Arguments

object ignored (use the "missing" method)

Value

A list of objects of type market_data or derived classes

Author(s)

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normality_test	<i>Normality test with univariate data</i>
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Description

Performs different types of normality test.

Usage

```
normality_test(x, type.test = "ALL")

## S4 method for signature 'numeric,character'
normality_test(x, type.test = "ALL")

## S4 method for signature 'ts,character'
normality_test(x, type.test = "ALL")
```

Arguments

x	a numeric vector or time series..
type.test	character such as "Anderson-Darling","Shapiro-Wilk","Jarque Bera","Cramer-von Mises","Shapiro-Francia","Lilliefors (Kolmogorov-Smirnov)","Pearson chi-square", "Agostino".

Value

a number that indicates the P-value of the normality test

Author(s)

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See Also

`stationarity_test`

Other Test: [stationarity_test\(\)](#)

Other BRVM: [BRVM_cap\(\)](#), [BRVM_company_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_company_url\(\)](#), [BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#), [stationarity_test\(\)](#)

Examples

```
library(goftest)
library(tseries)
library(nortest)
library(fBasics)

# one and a half week stock index
# data including a weekend
y <- ts(c(5353.08,5409.24,5315.57,5270.53, 5211.66,NA,NA,5160.80,5172.37,5160.80,5172.37))

normality_test(y , "Shapiro-Wilk")

# You can test multiple methods simultaneously
normality_test(y,type.test = c("anderson-darling", "Shapiro-Wilk", "agostino"))
```

```
show,african_market-method
```

Show method for african_market

Description

Show method for african_market

Usage

```
## S4 method for signature 'african_market'
show(object)
```

Arguments

object An object of class african_market.

```
stationarity_test
```

Stationarity test with univariate data

Description

Performs different types of stationarity test.

Usage

```
stationarity_test(x, type.test)
```

```
## S4 method for signature 'numeric'
stationarity_test(x, type.test)
```

```
## S4 method for signature 'ts'
stationarity_test(x, type.test)
```

Arguments

x a numeric vector or time series.

type.test character such as "Box-Pierce and Ljung-Box", "Kwiatkowski-Phillips-Schmidt-Shin (KPSS)", "Augmented Dickey-Fuller Test (ADF)", "Phillips-Perron Unit Root Test"

Value

a number that indicates the P-value of the stationarity test

Author(s)

Koffi Frederic SESSIE
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See Also

normality_test

Other Test: [normality_test\(\)](#)

Other BRVM: [BRVM_cap\(\)](#), [BRVM_company_cap\(\)](#), [BRVM_company_rank\(\)](#), [BRVM_company_url\(\)](#),
[BRVM_plot\(\)](#), [BRVM_rank\(\)](#), [BRVM_stock_market\(\)](#), [company_sector\(\)](#), [normality_test\(\)](#)

Examples

```
library(tseries)

# one and a half week stock index
# data including a weekend
y <-ts(c(5353.08,5409.24,5315.57,5270.53, 5211.66,NA,NA,5160.80,5172.37,5160.80,5172.37))

stationarity_test(y, "Box-Pierce and Ljung-Box")
stationarity_test(y, "ALL")
```


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