Package 'OBL'

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Type Package

Title Optimum Block Length

Version 0.2.1

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Description Obtain optimum block from Non-overlapping Block Bootstrap method.

Depends R (>= 4.2.0)

Imports forecast, foreach, dplyr, forcats, ggplot2, utils, stats, tibble

License GPL (>= 2)

Encoding UTF-8

RoxygenNote 7.1.2

LazyData true

Suggests knitr, rmarkdown

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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Description

OBL: Optimal Block Length

Compute Optimal Block Length for Non-overlapping, Overlapping, Circular Block, tapered moving, and tapered circular Block Bootstrap method

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Compute Optimal Block Length for Non-overlapping, Overlapping, Circular Block, tapered moving, and tapered circular Block Bootstrap method

Usage

```
blockboot(
  ts,
  R,
  seed,
  n_cores,
  methods = c("optnbb", "optmbb", "optcbb", "opttmbb", "opttcbb")
)

lolliblock(
  ts,
  R,
  seed,
  n_cores,
  methods = c("optnbb", "optmbb", "optcbb", "opttmbb", "opttcbb")
)
```

Arguments

`ts`	univariate time series
`R`	number of resample
`seed`	RNG seed
`n_cores`	number of core(s) to be used on your operaterating system
`methods`	"optnbb", "optmbb", "optcbb", "opttmbb", "opttcbb"

Value

A data frame get printed to the console

A data frame get printed to the console

Functions

- `blockboot`: package helps to obtain the optimal block length of a time series data
- `lolliblock`: package helps to obtain the optimal block length of a time series data

Examples

```
set.seed(289805)
ts <- arima.sim(n = 3, model = list(ar = 0.8, order = c(1, 0, 0)), sd = 1)
blockboot(ts = ts, R = 2, seed = 6, n_cores = 1)

set.seed(289805)
ts <- arima.sim(n = 3, model = list(ar = 0.8, order = c(1, 0, 0)), sd = 1)
lolliblock(ts, R = 2, seed = 6, n_cores = 1)
```

`ts` *Ten (10) simulated univaariate time series data.*

Description

`arima.sim` returns the sum of all the values present in its arguments.

Usage

```
ts
```

Format

A time series data with 10 rows and 1 variables:

price price, in US dollars

carat weight of the diamond, in carats ...

Details

A dataset containing simulated univariate time series of 10 ts.

Value

It returns a univairate time series data It could be a vector

Source

Simulated data generated with the following code: set.seed(289805) ts <- stats::arima.sim(n = 10, model = list(ar = 0.8, order = c(1, 0, 0)), sd = 1)

Examples

```
set.seed(289805)
ts <- stats::arima.sim(n = 10, model = list(ar = 0.8, order = c(1, 0, 0)), sd = 1)
```

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