

Package ‘lcyanalysis’

October 13, 2022

Type Package

Title Stock Data Analysis Functions

Version 1.0.4

Date 2020-02-07

Author Chun-Yu Liu [aut,cph],
Shu-Nung Yao [rev,ths]

Maintainer Chun-Yu Liu <john401528@gmail.com>

Depends R (>= 3.3)

Description Analysis of stock data ups and downs trend, the stock technical analysis indicators function have trend line, reversal pattern and market trend.

Imports quantmod,TTR,stats,xts,zoo

License GPL-3

NeedsCompilation no

LazyData true

Repository CRAN

RoxygenNote 7.0.2

Encoding UTF-8

Date/Publication 2020-02-07 12:10:16 UTC

R topics documented:

bearpower	2
bullpower	3
downtrend	4
down_function	5
m_top	6
uptrend	7
up_function	8
v_bottom	9
v_top	10
w_bottom	11

bearpower	<i>bear power technical analysis function</i>
-----------	---

Description

bear power technical analysis function is to analyze the reversal pattern conform to the downward trend and bear market of stock data

Usage

```
bearpower(h, down, day)
```

Arguments

h	an stock data
down	an rsi down horizon value
day	Days of data shown

Details

use RSI analysis of the strength of the stock market trend, analyze trends conform to bear power, and RSI function need library 'TTR'

Value

an analysis of stock data for bear power technical analysis indicators

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
bearpower(aapl,40,5)  
  
## End(Not run)
```

`bullpower`*bull power technical analysis function*

Description

bull power technical analysis function is to analyze the reversal pattern conform to the rising trend and bull market of stock data

Usage

```
bullpower(h, top, day)
```

Arguments

<code>h</code>	an stock data
<code>top</code>	an rsi rise horizon value
<code>day</code>	Days of data shown

Details

use RSI analysis of the strength of the stock market trend, analyze trends conform to bull power, and RSI function need library 'TTR'

Value

an analysis of stock data for bull power technical analysis indicators

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
bullpower(aapl,60,5)  
  
## End(Not run)
```

downtrend *downtrend technical analysis function*

Description

Down trend line technical analysis function is to analyze the downward trend of stock data

Usage

```
downtrend(h, day, num)
```

Arguments

h	an stock data
day	the number of days to analysis the data
num	select pivot calculation method 1: $UP1 \leftarrow -(2 * center) - Lo(h)$. 2: $UP2 \leftarrow center + (UP1 - DOWN1)$.

Details

use the down_function analysis data to analysis the downward trend line

Value

an analysis of stock data for down trend technical analysis indicators

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
downtrend(aapl,20,1)  
  
## End(Not run)
```

down_function *down trend line down function*

Description

Down trend line analysis of the down_function is to sort and analysis the stock data

Usage

```
down_function(h,day,num)
```

Arguments

h	an stock data
day	the number of days to analysis the data
num	select pivot calculation method 1: $UP1 \leftarrow -(2 * center) - Lo(h)$. 2: $UP2 \leftarrow center + (UP1 - DOWN1)$.

Details

down_function is to sort the stock data by the set number of days and to filter the data of rising trend

Value

an analysis of stock data for down function

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
down_function(aapl,20,1)  
  
## End(Not run)
```

`m_top`*m top technical analysis function*

Description

m top technical analysis function is to analyze the reversal pattern conform to the downward trend of stock data

Usage

```
m_top(h, top, down, month, day)
```

Arguments

h	an stock data
top	an rsi rise horizon value
down	an rsi down horizon value
month	set the length between the start and end points. Unit:month
day	check the correctness of the end point, set the length between the end and check points. Unit:day

Details

use RSI analysis of the strength of the stock market trend, analyze trends conform to m top, and RSI function need library 'TTR'

Value

an analysis of stock data for m top technical analysis indicators

Note

the month value must be more than one month

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
m_top(aapl,60,40,4,20)  
  
## End(Not run)
```

uptrend	<i>uptrend technical analysis function</i>
---------	--

Description

Up trend line technical analysis function is to analyze the rising trend of stock data

Usage

```
uptrend(h, day, num)
```

Arguments

h	an stock data
day	the number of days to analysis the data
num	select pivot calculation method 1: DOWN1<-(2*center)-Hi(h). 2: DOWN2<-center-(UP1-DOWN1).

Details

use the up_function analysis data to analysis the rising trend line

Value

an analysis of stock data for up trend technical analysis indicators

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
uptrend(aapl,20,1)  
  
## End(Not run)
```

up_function *up trend line up function*

Description

Up trend line analysis of the up_function is to sort and analysis the stock data

Usage

```
up_function(h,day,num)
```

Arguments

h	an stock data
day	the number of days to analysis the data
num	select pivot calculation method 1: $DOWN1 <- (2 * center) - Hi(h)$. 2: $DOWN2 <- center - (UP1 - DOWN1)$.

Details

up_function is to sort the stock data by the set number of days and to filter the data of downward trend

Value

an analysis of stock data for up function

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
up_function(aapl,20,1)  
  
## End(Not run)
```

`v_bottom`*v bottom technical analysis function*

Description

V bottom technical analysis function is to analyze the rising trend of stock data

Usage

```
v_bottom(h, top, down, month, day)
```

Arguments

h	an stock data
top	an rsi rise horizon value
down	an rsi down horizon value
month	set the length between the start and end points. Unit:month
day	check the correctness of the end point, set the length between the end and check points. Unit:day

Details

use RSI analysis of the strength of the stock market trend, analyze trends conform to v bottom, and RSI function need library 'TTR'

Value

an analysis of stock data for v bottom technical analysis indicators

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
v_bottom(aapl,60,40,3,20)  
  
## End(Not run)
```

`v_top`*v top technical analysis function*

Description

V top technical analysis function is to analyze the downward trend of stock data

Usage

```
v_top(h, top, down, month, day)
```

Arguments

h	an stock data
top	an rsi rise horizon value
down	an rsi down horizon value
month	set the length between the start and end points. Unit:month
day	check the correctness of the end point, set the length between the end and check points. Unit:day

Details

use RSI analysis of the strength of the stock market trend, analyze trends conform to v top, and RSI function need library 'TTR'

Value

an analysis of stock data for v top technical analysis indicators

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
v_top(aapl,60,40,3,20)  
  
## End(Not run)
```

w_bottom	<i>w bottom technical analysis function</i>
----------	---

Description

w bottom technical analysis function is to analyze the reversal pattern conform to the rising trend of stock data

Usage

```
w_bottom(h, top, down, month, day)
```

Arguments

h	an stock data
top	an rsi rise horizon value
down	an rsi down horizon value
month	set the length between the start and end points. Unit:month
day	check the correctness of the end point, set the length between the end and check points. Unit:day

Details

use RSI analysis of the strength of the stock market trend, analyze trends conform to w bottom, and RSI function need library 'TTR'

Value

an analysis of stock data for w bottom technical analysis indicators

Note

the month value must be more than one month

Author(s)

Chun-Yu Liu <john401528@gmail.com>

Examples

```
## Not run:  
library(quantmod)  
aapl<-getSymbols("AAPL",src="yahoo",auto.assign=FALSE)  
w_bottom(aapl,60,40,2,20)  
  
## End(Not run)
```

Index

bearpower, [2](#)
bullpower, [3](#)

down_function, [5](#)
downtrend, [4](#)

m_top, [6](#)

up_function, [8](#)
uptrend, [7](#)

v_bottom, [9](#)
v_top, [10](#)

w_bottom, [11](#)