Package 'quant'

August 7, 2022

Title Fundamentals Data for Stock Research

Version 0.0.1.0000

Description Provides commands for easy retrieval of fundamental stock data from gurufo-
cus.com and tipranks.com for thousands of publicly traded companies.

URL https://github.com/OliverHennhoefer/quant

Language en-US

Imports plyr,
data.table,
rvest,
utils

License GPL-3

Encoding UTF-8

BugReports https://github.com

Roxygen list(markdown = TRUE)

RoxygenNote 7.1.2

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

R topics documented:

data_gurufocus   *Fetch complete stock list of gurufocus.com*

Description

Fetches the stock list provided by gurufocus.com

Usage

```
data_gurufocus()
```

Value

data.table data.frame

data_nasdaq100   *Fetch components of the Nasdaq-100*

Description

Fetches the list of components provided by wikipedia.org

Usage

```
data_nasdaq100()
```

Value

data.table data.frame

---

data_sp500   *Fetch components of the S&P 500*

Description

Fetches the list of components provided by wikipedia.org

Usage

```
data_sp500()
```

Value

data.table data.frame

---

get_altman_z   *Get Altman Z-Score*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_altman_z(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                  ticker symbol.

Details

The Altman Z-Score quantifies the risk of bankruptcy of a company within the next two years. The
Z-Score is a multivariate measure of financial distress and classifies the rated company either into
the *Distress Zone* (<=1.8) or into the *Safe Zone* (>=3). Values in between can be seen as *Grey Zone*
indicating *Grey Zone* indicating a latent risks of bankruptcy.

The original formula for calculating the **Altman Z-score** is a linear combination of five business
ratios:

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$$

- X_1: Ratio of working capital to total assets. Measures liquid assets in relation to the size of
  the company and determines the short-term company's solvency.

- X_2: Ratio of retained earnings to total assets. Determines whether the company was successful
  in generating profits and retaining profits for future reinvestments in the business.

- X_3: Ratio of earnings before interest and taxes to total assets. Determines how effective a
  company is at using its own assets for generating profits.

- X_4: Ratio of market value of equity to book value of total liabilities. Gives an impression to what extent the company's own assets can decline in value before the liabilities exceed these assets and the company becomes insolvent.
- X_5: Ratio of Sales to total assets. Common measure for determining the total asset turnover ratio that measures how effective a company is at generating revenue from its own assets.

The formula was parameterized by multivariate linear discriminant analysis applied on a data set of 33 solvent and 33 insolvent companies (see *references*).

Value

Input data.frame supplemented by the company's available **Altman Z-score** data.

References

Altman, Edward I. (1968): Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy in The Journal of Finance, Volume 23, Issue 4, p. 589-610

Altman, Edward I., Sanders, A. (1998): Credit Risk Measurement: Developments over the last 20 Years in Journal of Banking and Finance, Volume 21, p. 1721-1742

Altman, Edward I. (2000): Predicting Financial Distress of Companies: Revisiting the Z-Score and Zeta Models, Working Paper, New York University

Altman, Edward I. (2002): Revisiting Credit Scoring Models in a Basel 2 Environment, Working Paper, Stern School of Business, New York University

Altman, Edward I., Iwanicz-Drozdowska, Malgorzata, Laitinen, Erkki K., Suvas, Arto (2014): Distressed Firm and Bankruptcy Prediction in an international Context: A Review and empirical Analysis of Altman's Z-Score Model, Working Paper, Stern School of Business, New York University

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_altman_z(df)
```

---

get_asset_turnover *Get Asset-Turnover-Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_asset_turnover(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Asset-Turnover-Ratio measures the value of a company's *Net Sales Revenue* relative to the value of its *Total Assets*. The ratio indicates how effectively a company is using its assets in order to generate sales.

Value

Input data.frame supplemented by the company's available **Asset Turnover** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_asset_turnover(df)
```

---

get_beneish_m   *Get Beneish M-Score*

Description

Wrapper function for fetching data from gurufocus.com.

The Beneish M-Score quantifies the likelihood of reported earnings manipulation. The M-Score is a probabilistic model that classifies the rated company either into the category "Unlikely Manipulator" (M-Score>=-1.78) or "Likely Manipulator" (M-Score>-1.78). The M-Score must not be applied among financial firms like banks and insurance companies due to their very specific business characteristics.

Usage

```
get_beneish_m(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                ticker symbol.

Details

The original formula for calculating the **Beneish M-Score** consists of eight financial ratios:

$$M = -4.84 + 0.92xDSRI + 0.528xGMI + 0.404xAQI + 0.892xSGI + 0.115xDEPI - 0.172xSGAI + 4.679xTATA$$

- DSRI: Days Sales in Receivables Index as earnings quality metric indicates whether earnings quality is rising or falling.
- GMI: Gross Margin Index as a fundamental momentum metric indicates whether a company's profitability and pricing power is rising or falling.
- AQI: Asset Quality Index can be used to determine whether a company is excessively capitalizing expenses.
- SGI: Sales Growth Index indicates whether a company's sales are rising or falling.
- DEPI: Depreciation Index indicates whether a company is depreciating assets at faster or slower rates.

- SGAI: Sales, General and Administrative (SGA) Expenses Index indicates whether a company's SGA Expenses are rising or falling.
- LVGI: Leverage Index indicates whether a company's leverage is rising or falling.
- TATA: Total Accruals to Total Assets indicates whether a change in accounting practices may resulted in

The formula was parameterized by multivariate linear discriminant analysis applied on a data set of 33 solvent and 33 insolvent companies (see *references*).

Value

Input data.frame supplemented by the company's available **Beneish M-Score** data.

References

Beneish, Messod D. (1999): The Detection of Earnings Manipulation in Financial Analysts Journal, Volume 55, Issue 5, p. 24-36

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_beneish_m(df)
```

---

get_book_value_per_share

Get Book Value per Share

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_book_value_per_share(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

Book value per common share (or, simply book value per share - BVPS) is a method to calculate the per-share book value of a company based on common shareholders' equity in the company. The book value of a company is the difference between that company's total assets and total liabilities, and not its share price in the market.

Value

Input data.frame supplemented by the company's available **Book Value per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_book_value_per_share(df)
```

---

get_buyback_yield   *Get Buyback Yield*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_buyback_yield(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                      ticker symbol.

Details

The buyback yield gives the repurchased outstanding shares in relation to the market capitalization.
Higher buyback yields may indicate the managements expectation that the stock is undervalued or
its attempt to prevent a hostile takeover among other reasons.

Value

Input data.frame supplemented by the company's available **Buyback Yield** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_buyback_yield(df)
```

---

get_capex_to_sales   *Get CAPEX-Sales-Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_capex_to_sales(df)
```

Arguments

df	data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The CAPEX-Sales-Ratio measures a company's investments into property, plant, equipment and other capital assets (CAPEX) relative to its total sales. The measure indicates how aggressively a company is reinvesting its revenue into productive assets. The interpretation of the ratio depends on how effectively a company uses its assets to produce new income.

Value

Input data.frame supplemented by the company's available **CAPEX-Sales-Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_capex_to_sales(df)
```

---

get_cash_conv_cycle   *Get Cash Conversion Cycle*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_cash_conv_cycle(df)
```

Arguments

df	data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Cash Conversion Cycle measures the amount of days it takes for a company to convert its investments in inventory and other resources into cash flows from sales. The measure it calculated by Days Sales Outstanding + Days Inventory - Days Payable.

A negative value indicates that it takes a company longer to pay its suppliers than it takes the company to sell its inventory and collect its money. It is difficult to compare the Cash Conversion Cycle between different industries.

Value

Input data.frame supplemented by the company's available **Cash Conversion Cycle** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_cash_conv_cycle(df)
```

---

get_cash_per_share   *Get Cash-per-Share*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_cash_per_share(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                    ticker symbol.

Details

Cash-per-Share gives the cash, cash equivalents and marketable securities divided by the shares
outstanding.

Value

Input data.frame supplemented by the company's available **Cash-per-Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_cash_per_share(df)
```

---

get_cash_ratio   *Get Cash-Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_cash_ratio(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                    ticker symbol.

Details

The Asset-Turnover-Ratio measures the value of a company's cash, cash equivalents, marketable securities relative to its current liabilities. The ratio indicates how liquid a company is.

It differs from the Cash-to-Debt-Ratio by focusing on current liabilities due in the short-term (< 1 year).

Value

Input data.frame supplemented by the company's available **Cash-Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_cash_ratio(df)
```

---

get_cash_to_debt   *Get Cash-Debt-Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_cash_to_debt(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                  ticker symbol.

Details

The Cash-Debt-Ratio measures a company's cash, cash equivalents, marketable securities relative to its debt. A Cash-Debt-Ratio greater 1 indicates that a company can pay off its debt using its cash on hand.

It differs from the Cash-Ratio by focusing on current as well as on non-current liabilities.

Value

Input data.frame supplemented by the company's available **Cash-Debt-Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_cash_to_debt(df)
```

get_cogs_to_revenue   *Get Cost-of-Goods-Sold-to-Revenue-Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_cogs_to_revenue(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                ticker symbol.

Details

The Asset-Turnover-Ratio measures the direct cost attributed to the production of the products sold
relative to the total revenue generated by the company over the same time period. Higher values
may indicate inefficiencies in procurement and/or production processes.

Value

Input data.frame supplemented by the company's available **Cost-of-Goods-Sold-to-Revenue-Ratio**
data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_cogs_to_revenue(df)
```

get_current_ratio   *Get Current Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_current_ratio(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                ticker symbol.

Details

The Current Ratio measures a company's ability to its shot-term obligations.

Value

Input data.frame supplemented by the company's available **Current Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_current_ratio(df)
```

---

get_days_inventory   *Get Days Inventory*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_days_inventory(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
              ticker symbol.

Details

The Asset-Turnover-Ratio indicates the average time in day that a company takes to turn its inventory, including goods that are work in progress, into sales.

Value

Input data.frame supplemented by the company's available **Days Inventory** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_days_inventory(df)
```

```
get_days_sales_outstanding
```
Get Days Sales Outstanding

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_days_sales_outstanding(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
            ticker symbol.

Details

The Days Sales Outstanding is the average number of days it takes a company to receive payment
for a sale. A higher Days Sales Outstanding indicates the company is getting its payments quickly.
Generally DSO <45 days is considered low.

Value

Input data.frame supplemented by the company's available **Days Sales Outstanding** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_days_sales_outstanding(df)
```

```
get_debt_to_assets          Get Debt to Asset Ratio
```

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_debt_to_assets(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
            ticker symbol.

Details

The Asset-Turnover-Ratio is a leverage ratio that defines the total amount of debt relative to a company's assets. A ratio of about >= 1 means a company owns the same amount of liabilities or more as its assets and with that is highly leveraged. Lower ratios indicate that a company owns more asset than liabilities and can meet its obligations by selling assets if needed.

Value

Input data.frame supplemented by the company's available **Debt to Asset Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_debt_to_assets(df)
```

---

get_debt_to_ebitda   *Get Debt to EBITDA*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_debt_to_ebitda(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Debt to EBITDA is a ratio measuring the amount of income generated and available to pay down debt before covering interest, taxes, depreciation, and amortization expenses. Generally, net debt-to-EBITDA ratios of less than 3 are considered acceptable. The lower the ratio, the higher the probability of the firm successfully paying off its debt. Ratios higher than 3 or 4 serve as red flags and indicate that the company may be financially distressed in the future.

Value

Input data.frame supplemented by the company's available **Debt to EBITDA** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_debt_to_ebitda(df)
```

---

get_debt_to_equity   *Get Debt to Equity Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_debt_to_equity(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                      ticker symbol.

Details

The debt-to-equity (D/E) ratio compares a company's total liabilities to its shareholder equity and
can be used to evaluate how much leverage a company is using. Higher-leverage ratios tend to
indicate a company or stock with higher risk to shareholders.

Value

Input data.frame supplemented by the company's available **Debt to Equity Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_debt_to_equity(df)
```

---

get_debt_to_revenue   *Get Debt-to-Revenue Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_debt_to_revenue(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                      ticker symbol.

Details

The Debt-to-Revenue Ratio is a personal finance measure that compares the amount of debt you have to your overall income. Lenders, including issuers of mortgages, use it as a way to measure your ability to manage the payments you make each month and repay the money you have borrowed.

Value

Input data.frame supplemented by the company's available **Debt to Revenue Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_debt_to_revenue(df)
```

---

get_diluted_eps   *Get Diluted Earnings per Share*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_diluted_eps(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Diluted Earnings per Share calculates a company's earnings per share if all convertible securities were converted. Dilutive securities aren't common stock, but instead securities that can be converted to common stock.

Value

Input data.frame supplemented by the company's available **Diluted Earnings per Share ** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_diluted_eps(df)
```

```
get_dividend_per_share
```
Get Dividend per Share

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_dividend_per_share(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                        ticker symbol.

Details

Dividend per share (DPS) is the sum of declared dividends issued by a company for every ordinary
share outstanding. The figure is calculated by dividing the total dividends paid out by a business,
including interim dividends, over a period of time, usually a year, by the number of outstanding
ordinary shares issued.

Value

Input data.frame supplemented by the company's available **Dividend per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_dividend_per_share(df)
```

```
get_e10
```
Get E10

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_e10(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                        ticker symbol.

Details

E10 is a main component used to calculate Shiller PE Ratio. If the month end stock price for this stock is zero, result may not be accurate due to the exchange rate between different shares and the data will not be stored into our database. Selected historical data showed in the calculation section below is only for demonstration purpose. E10 is a concept invented by Prof. Robert Shiller, who uses E10 for his Shiller P/E calculation. E10 is the average of the inflation adjusted earnings of a company over the past 10 years

Value

Input data.frame supplemented by the company's available **E10** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_e10(df)
```

---

get_ebitda_per_share   *Get Earnings Before Interest, Tax and Depreciation Per Share*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_ebitda_per_share(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

EBITDA per Share is the amount of Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) per outstanding share of the company's stock.

Value

Input data.frame supplemented by the company's available **Get Earnings Before Interest, Tax and Depreciation Per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_ebitda_per_share(df)
```

---

get_ebit_per_share   *Get Earnings Before Interest and Taxes per Share*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_ebit_per_share(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

EBIT per Share is the amount of Earnings Before Interest and Taxes (EBIT) per outstanding share of the company's stock.

Value

Input data.frame supplemented by the company's available **Earnings Before Interest and Taxes per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_ebit_per_share(df)
```

---

get_eff_interest_rate   *Effective Annual Interest Rate*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_eff_interest_rate(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Effective Annual Interest Rate is the interest rate on a loan restated from the nominal interest rate and expressed as if compound interest was payable annually. It makes interest rates between loans with different compounding periods more comparable.

Value

Input data.frame supplemented by the company's available **Effective Annual Interest Rate** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_eff_interest_rate(df)
```

---

get_eps_ex_nri   *Get Earnings per Share without Non-recurrent Items*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_eps_ex_nri(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                  ticker symbol.

Details

The Earnings per Share without Non-recurrent Items is calculated by subtracting non-recurring items, the dividends of preferred stocks and non-operating income from the total net income. With that the measure gives a better impression about the real earnings power of a company.

Value

Input data.frame supplemented by the company's available **Earnings per Share ex Non-recurrent Items** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_eps_ex_nri(df)
```

get_equity_to_assets   *Get Equity-to-Total-Assets Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_equity_to_assets(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                    ticker symbol.

Details

The Asset-Turnover-Ratio measures the amount of equity the business or farm has when compared
to the total assets owned by the business or farm. To determine the Equity-To-Asset ratio you divide
the Net Worth by the Total Assets. This ratio is measured as a percentage.

Value

Input data.frame supplemented by the company's available **Equity-to-Total-Assets Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_equity_to_assets(df)
```

get_ev_to_ebit   *Get Enterprise Value to Earnings before Interest Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_ev_to_ebit(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                    ticker symbol.

Details

The enterprise value to earnings before interest, taxes, depreciation, and amortization ratio (EV/EBITDA) compares the value of a company—debt included—to the company's cash earnings less non-cash expenses.

Value

Input data.frame supplemented by the company's available **Enterprise Value to Earnings before Interest Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_ev_to_ebit(df)
```

---

get_ev_to_ebitda	*Get Enterprise-Value-to-Earnings-before-Interest-and-Depreciation-Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_ev_to_ebitda(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The enterprise value to earnings before interest, taxes, depreciation, and amortization ratio (EV/EBITDA) compares the value of a company—debt included—to the company's cash earnings less non-cash expenses.

Value

Input data.frame supplemented by the company's available **Enterprise Value to Earnings before Interest and Depreciation** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_ev_to_ebitda(df)
```

---

get_ev_to_revenue   *Get Enterprise-Value-to-Revenue Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_ev_to_revenue(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Enterprise-Value-to-Revenue Ratio is calculated as the company's enterprise value relative to its revenue. Often used to value a company that does not generate income/profits yet.

Value

Input data.frame supplemented by the company's available **Enterprise-Value-to-Revenue Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_ev_to_revenue(df)
```

---

get_fcf_per_share   *Get Free Cash Flow per Share*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_fcf_per_share(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

Free cash flow per share (FCF) is a measure of a company's financial flexibility that is determined by dividing free cash flow by the total number of shares outstanding. This measure serves as a proxy for measuring changes in earnings per share.

Value

Input data.frame supplemented by the company's available **Free Cash Flow per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_fcf_per_share(df)
```

get_financial_distress

Get Probability of Financial Distress

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_financial_distress(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
            ticker symbol.

Details

The Probability of Financial Distress measures the probability that a company will go bankrupt in the upcoming year given its current financial position. The measure is obtained by a logit probability model based on eight explanatory variables.

Value

Input data.frame supplemented by the company's available **Probability of Financial Distress** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_financial_distress(df)
```

```
get_financial_strength
```
Get Financial Strength Rank

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_financial_strength(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                ticker symbol.

Details

The Financial Strength Rank measures how strong a company's financial situation is. The rank is
base on following factors:

- Interest Coverage
- Debt-to-Revenue Ratio
- Altman Z-score

Companies with a rank of 3 or less are likely to be in financial distress.

Value

Input data.frame supplemented by the company's available **Financial Strength Rank** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_financial_strength(df)
```

```
get_free_floate
```
Get Float Percentage of Total Shares Outstanding

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_free_floate(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                      ticker symbol.

Details

The free float percentage, also known as float percentage of total shares outstanding, simply shows
the percentage of shares outstanding that trade freely.

Value

Input data.frame supplemented by the company's available **Float Percentage of Total Shares Out-
standing** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_free_floate(df)
```

---

get_goodwill_to_assets

Get Goodwill to Assets Ratio

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_goodwill_to_assets(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                      ticker symbol.

Details

The Asset-Turnover-Ratio measures the proportion of a company's goodwill, which is an intangible
asset, to its total assets and is a factor in that company's valuation. The ratio quantifies a company's
brand value and other intangible aspects of its valuation.

Value

Input data.frame supplemented by the company's available **Goodwill to Asset Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_goodwill_to_assets(df)
```

```
get_greenblatt_earnings_yield
```
Get Earnings Yield (Formula by Joel Greenblatt)

Description

Fetching *Earnings Yield (Formula by Joel Greenblatt)* from gurufocus.com.

Usage

```
get_greenblatt_earnings_yield(df)
```

Arguments

df   data.frame. Data frame with column *symbol* containing at least one valid stock
                      ticker symbol.

Details

Joel Greenblatt's definition of Earnings Yield has the same problems the regular earnings yield does.
It does not consider the growth of the company. It only looks at one-year's business operation. For
cyclical companies, the earnings yield is usually highest at the peak of the business cycle, although
these earnings are rarely sustainable.

Value

Input data.frame supplemented by the company's available **Earnings Yield (Joel Greenblatt)** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_greenblatt_earnings_yield(df)
```

```
get_gross_profit_to_assets
```
Get Gross Profit to Asset Ratio

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_gross_profit_to_assets(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                      ticker symbol.

Details

The Asset-Turnover-Ratio is calculated as Gross Profits divided by the firm's Total Assets. The ratio determined how efficiently a firm uses its assets to generate gross profits.

Value

Input data.frame supplemented by the company's available **Gross Profit to Asset Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_gross_profit_to_assets(df)
```

---

get_insider_ownership   *Get Insider Ownership*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_insider_ownership(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Insider Ownership is the percentage of shares that are owned by company insiders relative to the total shares outstanding. Insiders are a company's officers, directors, relatives or generally everyone with key information before made available to the public. High insider ownership can in many cases be interpreted as a signal of confidence. Larger companies have typically low(er) insider ownership.

Value

Input data.frame supplemented by the company's available **Insider Ownership** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_insider_ownership(df)
```

---

get_institutional_ownership

Get Institutional Ownership Percentage

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_institutional_ownership(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                 ticker symbol.

Details

The Institutional Ownership is the percentage of shares that are owned by mutual or pension funds,
insurance companies, investment firms, private foundations, endowments and other large entities
that manage funds on behalf of others relative to the total shares outstanding.High institutional
ownership can in many cases be interpreted as a signal of confidence.

Value

Input data.frame supplemented by the company's available **Institutional Ownership** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_institutional_ownership(df)
```

---

get_interest_coverage   *Get Interest Coverage*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_interest_coverage(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                 ticker symbol.

Details

The Interest Coverage measures how easily a company ca pay interest expenses on outstanding debt. It is calculated by diving a company's Operating Income by its Interest Expense. Higher a coverage are naturally better for the financial stability of a company.

Value

Input data.frame supplemented by the company's available **Interest Coverage** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_interest_coverage(df)
```

```
get_inventory_to_revenue
```
Get Inventory to Revenue Ratio

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_inventory_to_revenue(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                ticker symbol.

Details

The Asset-Turnover-Ratio measures the percentage of inventories the company currently has on hand to support the current amount of revenue. The ratio indicated of a company to manage their inventory levels.

Value

Input data.frame supplemented by the company's available **Inventory to Revenue Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_inventory_to_revenue(df)
```

```
get_inventory_turnover
```
                              Get Inventory Turnover

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_inventory_turnover(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                       ticker symbol.

Details

Inventory Turnover measures how fast the company turns over its inventory within a year. It is
calculated as Cost of Goods Sold divided by Total Inventories.

Value

Input data.frame supplemented by the company's available **Inventory Turnover** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_inventory_turnover(df)
```

```
get_liabilities_to_assets
```
                              Get Liabilities to Assets Ratio

---

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_liabilities_to_assets(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                       ticker symbol.

Details

The Liabilities to Assets Ratio is a solvency ratio indicating how much of the company's assets are made of liabilities, calculated as total liabilities divided by total assets. The higher the ratio is, the more risk there is in the company.

Value

Input data.frame supplemented by the company's available **Liabilities-to-Assets-Ratiop** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_liabilities_to_assets(df)
```

---

get_ltd_to_total_assets

Get Long-Term Debt to Total Asset Ratio

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_ltd_to_total_assets(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                ticker symbol.

Details

The Asset-Turnover-Ratio measures the percentage if a company's assets that are financed with loans and financial obligations lasting more than one year. The ratio gives an indication about a company's ability to meet financial requirements for outstanding loans.

Value

Input data.frame supplemented by the company's available **Long-Term Debt to Total Asset Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_ltd_to_total_assets(df)
```

```
get_net_cash_per_share
```
                                   Get Net Cash per Share

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_net_cash_per_share(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                      ticker symbol.

Details

Net Cash per Share is calculated by taking all a company's cash, less all current liabilities and
dividing that number by the total shares outstanding.

Value

Input data.frame supplemented by the company's available **Net Cash per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_net_cash_per_share(df)
```

```
get_net_net_working_capital
```
                                  Get Net-Net Working Capital

---

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_net_net_working_capital(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                      ticker symbol.

Details

The Net-Net Working Capital technique was developed by Benjamin Graham, in which a company is valued based on its net-current assets per share (NCAVPS). The Net-Net Working Capital is calculated based on current assets, taking cash and cash equivalents at full value, then reducing accounts receivable for doubtful accounts and reducing inventories to liquidation values. Net-net value is calculated by deducting total liabilities from the adjusted current assets. Since the measure does not consider long-term assets or liabilities, it is unreliable for long-term investments.

Value

Input data.frame supplemented by the company's available **Net-Net Working Capital** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_net_net_working_capital(df)
```

---

get_operating_cash_flow

Get Operating Cash Flow per Share

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_operating_cash_flow(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Asset-Turnover-Ratio measures the value of a company's *Net Sales Revenue* relative to the value of its *Total Assets*. The ratio indicates how effectively a company is using its assets in order to generate sales.

Value

Input data.frame supplemented by the company's available **Operating Cash Flow per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_operating_cash_flow(df)
```

---

get_owners_eps *Get Owners Earnings per Share*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_owners_eps(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
              ticker symbol.

Details

The Owners Earnings per Share is a measure invented by Warren Buffet and originally described in
one of his famous annual shareholder letters as follows: "If we think through these questions, we
can gain some insights about what may be called 'owner earnings.' These represent (a) reported
earnings plus (b) depreciation, depletion, amortization, and certain other non-cash charges such
as Company N's items (1) and (4) less the average annual amount of capitalized expenditures for
plant and equipment, etc. that the business requires to fully maintain its long-term competitive
position and its unit volume. (If the business requires additional working capital to maintain its
competitive position and unit volume, the increment also should be included in (c). However,
businesses following the LIFO inventory method usually do not require additional working capital
if unit volume does not change.)"

Value

Input data.frame supplemented by the company's available **Owners Earnings per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_owners_eps(df)
```

---

get_peg_ratio *Get Price-Earnings-Growth Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_peg_ratio(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                   ticker symbol.

Details

The Asset-Turnover-Ratio is defined by the Price-to-Earnings Ratio (without NRI) divided by the
5-Year EBITDA growth rate. A PEG Ratio >1 may indicate overvaluation of a stock, whereas as
PEG Ratio <1 may indicate undervaluation.

Value

Input data.frame supplemented by the company's available **Price-Earnings-Growth Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_peg_ratio(df)
```

---

get_pe_ratio   *Get Price-Earnings Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_pe_ratio(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                   ticker symbol.

Details

The Price-Earnings Ratio calculated by the earnings divided by the market capitalization of a company.

Value

Input data.frame supplemented by the company's available **Price Earnings Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_pe_ratio(df)
```

---

get_pe_ratio_nri   *Get Price-Earnings Ratio without Non-Recurring Items*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_pe_ratio_nri(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                       ticker symbol.

Details

The Asset-Turnover-Ratio gives the price to earnings ratio without the potentially misleading effects
if non-recurring items (e.g. sale of a major asset). The ratio only considers regular operating
income.

Value

Input data.frame supplemented by the company's available **Price Earnings Ratio with Non-Recurring
Items** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_pe_ratio_nri(df)
```

---

get_piotroski_f   *Get Piotroski F-Score*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_piotroski_f(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                       ticker symbol.

Details

The Asset-Turnover-Ratio measures the value of a company's *Net Sales Revenue* relative to the value of its *Total Assets*. The ratio indicates how effectively a company is using its assets in order to generate sales.

Value

Input data.frame supplemented by the company's available **Piotroski F-Score** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_piotroski_f(df)
```

---

get_predictability   *Get Predictability Rank*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_predictability(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                  ticker symbol.

Details

Gurufocus.com ranks the predictability of companies based on the consistency of their revenue per share and EBITDA (earning before interest, tax, depreciation and amortization) per share over the past ten fiscal years, and study the correlation between the stock performances and the predictability of the business.

Value

Input data.frame supplemented by the company's available **Predictability Rank** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_predictability(df)
```

---

get_price_to_book *Get Price to Book Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_price_to_book(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
               ticker symbol.

Details

The Asset-Turnover-Ratio measures the market price of a company to its book value.

Value

Input data.frame supplemented by the company's available **Price to Book Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_price_to_book(df)
```

---

get_price_to_fcf *Get Price-to-Free-Cash-Flow-Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_price_to_fcf(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
               ticker symbol.

Details

The Price-to-Free-Cash-Flow-Ratio measures a company's value relative to its Free Cash Flows.

Value

Input data.frame supplemented by the company's available **Price-to-Free-Cash-Flow-Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_price_to_fcf(df)
```

get_price_to_opcf   *Get Price-to-Operating-Cash-Flow-Ratio*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_price_to_opcf(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                  ticker symbol.

Details

The Price-to-Operating-Cash-Flow-Ratio measures a company's value relative to its Operating Cash
Flows.

Value

Input data.frame supplemented by the company's available **Price-to-Operating-Cash-Flow-Ratio**
data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_price_to_opcf(df)
```

`get_price_to_tangible_book`
Get Price-Tangible-Book-Ratio

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_price_to_tangible_book(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Price-Tangible-Book-Ratio measures a company's market value to its tangible assets. This ratio is applicable mainly to industrial or other capital-intensive companies (manufacturers, miner, ...) that own a high proportion of hard assets.

Value

Input data.frame supplemented by the company's available **Price-Tangible-Book-Ratio** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_price_to_tangible_book(df)
```

`get_profitability`   *Get Profitability Rank*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_profitability(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

Gurufocus.com calculated the Profitability Rank by how profitable a company is and how likely the company's business will stay that way. The maximum rank is 10. A rank of 7 or higher means a higher profitability and may stay that way. A rank of 3 or lower indicates that the company has had trouble to make a profit. The Profitability Rank is based on the Operating Margin and its 5-year average, the Piotroski F-Score, the Consistency of the Profitability and the Predictability Rank (see get_predictability)

Value

Input data.frame supplemented by the company's available **Profitability Rank** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_profitability(df)
```

---

get_revenue_per_share   *Get Revenue per Share*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_revenue_per_share(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

The Asset-Turnover-Ratio measures the value of a company's *Revenue* relative to its market capitalization.

Value

Input data.frame supplemented by the company's available **Revenue per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_revenue_per_share(df)
```

---

get_snoa   *Get Scaled Net Operating Assets*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_snoa(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
                      ticker symbol.

Details

Scaled Net Operating Assets (SNOA) is calculated as the difference between operating assets and
operating liabilities, scaled by lagged total assets.

Value

Input data.frame supplemented by the company's available **Scaled Net Operating Assets** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_snoa(df)
```

---

get_table   *Get HTML table element*

Description

Get HTML table element

Usage

```
get_table(url, xpath, name, raw = FALSE)
```

Arguments

url   String. The Uniform Resource Locator of the resource of interest.

xpath   String. The XML path to an element of interest.

name   String. The prefix preceding every scraped output column.

raw   Logical. Controls whether 'gurufocus.com'-specific data processing shall be
                      applied to the table.

Value

The table to be found under the given XML path and URL.

Examples

```
get_table(name = 'test',
          url = 'https://www.gurufocus.com/term/cash_per_share/AAPL/',
          xpath = '//*[@id="target_def_historical_data"]/div[2]/div/table')
```

---

get_tangible_book_per_share
Get Tangible Book Value Per Share

Description

Fetching *Tangible Book Value Per Share* from gurufocus.com

Usage

```
get_tangible_book_per_share(df)
```

Arguments

df   data.frame. Data.frame with column *symbol* containing at least one valid stock
                  ticker symbol.

Details

The *Tangible book value per share* is the value of a company's tangible assets divided by its current
outstanding shares. The TBVPS determines the potential value per share of a company in the event
that it must liquidate it's assets. Assets such as property and equipment are considered tangible
assets.

Value

Input data.frame supplemented by the company's available **Tangible Book Per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_tangible_book_per_share(df)
```

get_text	*Get HTML text element*

Description

Get HTML text element

Usage

```
get_text(url, xpath)
```

Arguments

url	String. The Uniform Resource Locator of the resource of interest.
xpath	String. The XML path to an element of interest.

Value

The string to be found under the given XML path and URL.

Examples

```
get_text(url = 'https://www.gurufocus.com/stock/AAPL/summary',
xpath = '//*[@id="stock-header"]/div/div[1]/div[1]/div[2]/div/h1/span[1]')
```

get_total_debt_per_share	
	Get Total Debt Per Share

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_total_debt_per_share(df)
```

Arguments

df	data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

Total Debt per Share is calculated as total debt divided by Shares Outstanding (EOP). Total debt is calculated as Long-Term Debt & Capital Lease Obligation plus Short-Term Debt & Capital Lease Obligation.

Value

Input data.frame supplemented by the company's available **Total Debt per Share** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_total_debt_per_share(df)
```

---

get_yacktman_forward_return

Get Forward Rate of Return (Yacktman)

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_yacktman_forward_return(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock
            ticker symbol.

Details

Yacktman defines forward rate of return as the normalized free cash flow yield plus real growth
plus inflation. 's forward rate of return for was 0.00%. Unlike the Earnings Yield %, the Forward
Rate of Return uses the normalized Free Cash Flow of the past seven years, and considers growth.
The forward rate of return can be thought of as the return that investors buying the stock today can
expect from it in the future.

Value

Input data.frame supplemented by the company's available **Forward Rate of Return (Yacktman)**
data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_yacktman_forward_return(df)
```

---

get_yoy_ebitda_growth   *Get Year-over-Year Earnings before Interest, Tax and Appreciation Growth-Rate*

Description

Fetching *Year-over-Year Earnings before Interest, Tax and Appreciation Growth-Rate* from gurufocus.com

Usage

```
get_yoy_ebitda_growth(df)
```

Arguments

df   data.frame. Data.frame with column *symbol* containing at least one valid ticker symbol of a listed stock.

Details

YoY EBITDA Growth is the percentage change of EBITDA per share.

Value

Input data.frame supplemented by the company's available **Year-over-Year Earnings before Interest, Tax and Appreciation Growth** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_yoy_ebitda_growth(df)
```

---

get_yoy_eps_growth   *Get Year-over-Year Earnings per Share Growth*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_yoy_eps_growth(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

YoY EPS Growth is the percentage change of Earnings per Share (Diluted) over the past twelve months.

Value

Input data.frame supplemented by the company's available **Year-over-Year Earnings per Share Growth** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_yoy_eps_growth(df)
```

---

get_yoy_revenue_growth

Get Year-over-Year Revenue Per Share Growth

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_yoy_revenue_growth(df)
```

Arguments

df   data.frame. Data frame with column 'symbol' containing at least one valid stock ticker symbol.

Details

YoY Rev. per Sh. Growth is the percentage change of Revenue per Share over the past twelve months

Value

Input data.frame supplemented by the company's available **Year-over-Year Revenue Per Share Growth** data.

Examples

```
df <- data.frame('symbol' = 'AAPL')
res <- get_yoy_revenue_growth(df)
```

input_merge	*Merge original data frame with scraped data Internal function. Merges data.frame resulting from web scraping to the data.frame provided as input of a respective function.*

Description

Merge original data frame with scraped data

Internal function. Merges data.frame resulting from web scraping to the data.frame provided as input of a respective function.

Usage

```
input_merge(df = NULL, input = NULL)
```

Arguments

df	Data.frame. A data.frame to be merged to the original input.
input	Data.frame. A data.frame provided as original function input.

Examples

```
df <- data.frame("symbol" = "STOCK", "eps_2016" = 99)
input <- data.frame("symbol" = "STOCK", "eps_2016" = 99, "eps_2017" = 199)
input_merge(df = df, input = input)
```

regex_ttm	*Text-processing of key figure from gurufocus.com*

Description

Internal **'quant'**-function for processing the scraped character string of key figures provided by gurufocus.com

Usage

```
regex_ttm(string)
```

Arguments

string	String. The character string to be processed

Value

The input data frame supplemented by the company's respective key figures of the last five fiscal years plus current years TTM.

| sanity | *Apply sanity checks* |

Description

Internal function. Applies a sanity check on given input parameter(s)

Usage

```
sanity(df)
```

Arguments

df   Data.frame. A data.frame to be checked for sanity.

Value

A "data.table" "data.frame" object.

| scrape_key_fig | *Scrape Key Figures from gurufocus.com Main internal* **'quant'**-*function for scraping stock key figures from* R*hrefhttps://www.gurufocus.com/dashboardgurufocus.com* |

Description

Scrape Key Figures from gurufocus.com

Main internal **'quant'**-function for scraping stock key figures from gurufocus.com

Usage

```
scrape_key_fig(df, url, pfx, xpath_txt, xpath_tbl)
```

Arguments

df	data.frame. Data frame with a column 'symbol' containing at least one valid stock ticker symbol.
url	String. The Uniform Resource Locator of the resource of interest.
pfx	String. Prefix for column names of scraped data sets.
xpath_txt	String. The XML path to a text element of interest.
xpath_tbl	String. The XML path to a table element of interest.

Value

The input data frame supplemented by a company's respective key figure value of the last five fiscal years plus current years TTM.

---

scrape_ownership_fig   *Get Key Figure from gurufocus.com*

Description

Function for fetching data from [gurufocus.com.](gurufocus.com)

Usage

```
scrape_ownership_fig(df, url, pfx, xpath_txt, xpath_tbl)
```

Arguments

df	data.frame. Data frame with a column 'symbol' containing at least one valid stock ticker symbol.
url	String. The Uniform Resource Locator of the resource of interest.
pfx	String. Prefix for column names of scraped data sets.
xpath_txt	String. The XML path to a text element of interest.
xpath_tbl	String. The XML path to a table element of interest.

Value

The input data frame supplemented by a company's respective key figure value of the last five fiscal years plus current years TTM.

---

scrape_predictability   *Helper Function for Predictability*

Description

Helper Function for Predictability

Usage

```
scrape_predictability(df, url, xpath_txt)
```

Arguments

df	data.frame
url	String
xpath_txt	String

Value

data.frame

scrape_profitability   *Helper Function for Profitability @usage scrape_profitability(df, url, xpath_txt)*

Description

Helper Function for Profitability

@usage scrape_profitability(df, url, xpath_txt)

Usage

```
scrape_profitability(df, url, xpath_txt)
```

Arguments

df	data.frame
url	String
xpath_txt	String

Value

data.frame

---

topicality   *Merge original data frame with scraped data Internal function. Merges data.frame resulting from web scraping to the data.frame provided as input of a respective function.*

Description

Merge original data frame with scraped data

Internal function. Merges data.frame resulting from web scraping to the data.frame provided as input of a respective function.

Usage

```
topicality(table)
```

Arguments

table	Data.frame

Examples

```
df <- data.frame("symbol" = "STOCK", "eps_2016" = 99)
topicality(df)
```

Index