Package 'quant'

March 3, 2022

Title Provides functions for conveniently accessing quantitative stock data offered by gurufocus.com.

Version 0.0.0.9000

Description The package provides wrapper functions for scraping different kinds of operating data, fundamentals, valuation ratios, etc. for thousands of publicly traded companies listed on gurufocus.com. The packages allows for conveniently scraping data and updating or extending past scraping results.

Imports plyr,
data.table,
dplyr,
rvest,
utils

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Encoding UTF-8

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*

Description

Fetches the stock list provided by gurufocus.com/stock_list

Usage

```
data_gurufocus()
```

Value

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

Examples

```
stock_list <- data_gurufocus()
```

`data_nasdaq100` *Fetch quotes for NASDAQ-100 Index*

Description

Fetches the stock list provided by wikipedia.org

Usage

```
data_nasdaq100()
```

Value

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

Examples

```
nasdaq100 <- data_nasdaq100()
```

data_sp500 *Fetch quotes for S&P500 Index*

Description

Fetches the stock list provided by wikipedia.org

Usage

```
data_sp500()
```

Value

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

Examples

```
sp500 <- data_sp500()
```

get_altman_z_score *Get Altman Z-score*

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_zscore(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

The original data.frame supplemented by the companys **Altman Z-score** of the last five fiscal years plus current years TTM.

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, Wokring 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_zscore(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 companys *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

The original data.frame supplemented by the company's **Altman Z-score** of the last five fiscal years plus current years TTM.

Examples

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

---

get_beneish_mscore *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 probabalistic 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_mscore(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

The original data.frame supplemented by the company's **Beneish M-score** of the last five fiscal years plus current years TTM.

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_mscore(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

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

The original data.frame supplemented by the companys **Book Value per Share** of the last five fiscal years plus current years TTM.

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, Wokring 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_zscore(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

The original data.frame supplemented by the company's **Buyback Yield** of the last five fiscal years plus current years TTM.

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 companys 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

The original data.frame supplemented by the companys **CAPEX-Sales-Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Cash Conversion Cycle** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Cash-per-Share** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Cash-Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the companys **Cash-Debt-Ratio** of the last five fiscal years plus current years TTM.

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 attribued 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

The original data.frame supplemented by the company's **Cost-of-Goods-Sold-to-Revenue-Ratio** of the last five fiscal years plus current years TTM.

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_cratio(df)
```

Arguments

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

Details

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

Value

The original data.frame supplemented by the company's **Current Ratio** of the last five fiscal years plus current years TTM.

Examples

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

The original data.frame supplemented by the company's **Days Inventory** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Days Sales Outstanding** of the last five fiscal years plus current years TTM.

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 ownsthe 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 oblications by selling assets if needed.

Value

The original data.frame supplemented by the company's **Debt to Asset Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Debt to EBITDA** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Debt to Equity Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Debt to Revenue Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Diluted Earnings per Share ** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Dividend per Share** of the last five fiscal years plus current years TTM.

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 sectione below is only for demostration 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

The original data.frame supplemented by the company's **E10** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Get Earnings Before Interest, Tax and Depreciation Per Share** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Earnings Before Interest and Taxes per Share** of the last five fiscal years plus current years TTM.

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 compunding periods more comparable.

Value

The original data.frame supplemented by the company's **Effective Annual Interest Rate** of the last five fiscal years plus current years TTM.

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 substracting nin-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

The original data.frame supplemented by the company's **Earnings per Share ex Non-recurrent Items** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Equity-to-Total-Assets Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Enterprise Value to Earnings before Interest Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Enterprise Value to Earnings before Interest and Depreciation** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Enterprise-Value-to-Revenue Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Free Cash Flow per Share** of the last five fiscal years plus current years TTM.

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_fin_distress_prob(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

The original data.frame supplemented by the company's current **Probability of Financial Distress**.

Examples

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

The original data.frame supplemented by the company's current years **Financial Strength Rank**.

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

The original data.frame supplemented by the company's **Float Percentage of Total Shares Outstanding** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Goodwill to Asset Ratio** of the last five fiscal years plus current years TTM.

Examples

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

get_greenblatt_earnings_yield

Get Eanings Yield (Joel Greenblatt)

Description

Wrapper function for fetching data from gurufocus.com\ (https://www.gurufocus.com/term/earning_yield_greenblatt/AA

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. But these earnings are rarely sustainable.

Value

The original data.frame supplemented by the company's **Eanings Yield (Joel Greenblatt)** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Gross Profit to Asset Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Insider Ownership** of the last five fiscal years plus current years TTM.

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 Insitutional 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

The original data.frame supplemented by the company's **Institutional Ownership** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Interest Coverage** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Inventory to Revenue Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Inventory Turnover** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Altman Z-score** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Long-Term Debt to Total Asset Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Net Cash per Share** of the last five fiscal years plus current years TTM.

Examples

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

get_net_current_asset_value

Get Net Current Asset Value

Description

Wrapper function for fetching data from gurufocus.com.

Usage

```
get_net_current_asset_value(df)
```

Arguments

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

Details

The Net Current Asset Value is a company's liquidation value. The liquidation value is the total worth of all its physical assets, such as fixtures, equipment, inventory and real estate. It excludes intangible assets, such as intellectual property, brand recognition and goodwill.

Value

The original data.frame supplemented by the company's **Net Current Asset Value** of the last five fiscal years plus current years TTM.

Examples

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

The original data.frame supplemented by the company's **Net-Net Working Capital** of the last five fiscal years plus current years TTM.

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 companys *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

The original data.frame supplemented by the company's **Operating Cash Flow per Share** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Owners Earnings per Share** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Price-Earnings-Growth Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Price Earnings Ratio without Non-Recurring Items** of the last five fiscal years plus current years TTM.

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 (eg. sale of a major asset). The ratio only considers regular operating income.

Value

The original data.frame supplemented by the company's **Price Earnings Ratio without Non-Recurring Items** of the last five fiscal years plus current years TTM.

Examples

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

---

get_piotroski_f_score *Get Piotroski F-Score*

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 companys *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

The original data.frame supplemented by the company's **Piotroski F-Score** of the last five fiscal years plus current years TTM.

Examples

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

The original data.frame supplemented by the company's **Predictability Rank** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Price to Book Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Price-to-Free-Cash-Flow-Ratio** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Price-to-Operating-Cash-Flow-Ratio** of the last five fiscal years plus current years TTM.

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. Tis ratio is applicable mainly to industrial or other captial-intensive companies (manufacturers, miner, ...) that own a high proportion of hard assets.

Value

The original data.frame supplemented by the company's **Price-Tangible-Book-Ratio** of the last five fiscal years plus current years TTM.

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_predicatability)

Value

The original data.frame supplemented by the company's **Profitability Rank** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Revenue per Share** of the last five fiscal years plus current years TTM.

Examples

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

get_sectors *Get Sector and Subsector*

Description

Function for fetching data from gurufocus.com.

Usage

```
get_sectors(df)
```

Arguments

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

Value

The original data.frame supplemented by the company's sector and sub sector.

Examples

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

The original data.frame supplemented by the company's **Scaled Net Operating Assets** of the last five fiscal years plus current years TTM.

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(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 Per Share

Description

Wrapper function for fetching data from gurufocus.com\ (https://www.gurufocus.com/term/Tangibles_book_per_share/A

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

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

Value

The original data.frame supplemented by the company's **Tangible Book Per Share** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Altman Z-score** of the last five fiscal years plus current years TTM.

Examples

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

---

get_trading_volume *Get Trading Volume*

Description

Function for fetching data from gurufocus.com.

Usage

```
get_trading_volume(df)
```

Arguments

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

Value

The original data.frame supplemented by the company's average **Trading Volume** over the last two months.

Examples

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

The original data.frame supplemented by the company's **Forward Rate of Return (Yacktman)** of the last five fiscal years plus current years TTM.

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*

Description

Wrapper function for fetching data from gurufocus.com\ (https://www.gurufocus.com/term/growth_per_share_ebitda/AA

Usage

```
get_yoy_ebitda_growth(df)
```

Arguments

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

Details

YoY EBITDA Growth is the percentage change of EBITDA per Share over the past twelve months.

Value

The original data.frame supplemented by the company's **Year-over-Year Earnings before Interest, Tax and Appreciation Growth** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Year-over-Year Earnings per Share Growth** of the last five fiscal years plus current years TTM.

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

The original data.frame supplemented by the company's **Year-over-Year Revenue Per Share Growth** of the last five fiscal years plus current years TTM.

Examples

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

---

input_merge *Merge original data frame with scraped data*

Description

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)
```

---

quant *flightsbr: Download Flight And Airport Data from Brazil*

Description

Download flight and airport data from Brazil's Civil Aviation Agency (ANAC) https://www.gov.br/anac. The data includes detailed information on all aircrafts, aerodromes, airports, and airports movements registered in ANAC, and on every international flight to and from Brazil, as well as domestic flights within the country.

Usage

Please check the vignettes on the website.

Author(s)

Maintainer: Oliver Hennhöfer <oliver.hennhoefer@mail.de> (ORCID)

---

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

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

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.

Examples

```
sanity(data.frame("symbol" = "AAPL", "MSFT", "BABA)) #passes
sanity(data.frame("stocks" = "AAPL", "MSFT", "BABA)) #flunks
```

scrape_key_fig *Get key figure from gurufocus.com*

Description

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

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.

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