



MONASH  
BUSINESS  
SCHOOL

## Expert advice from experts

**Marie Curie**

Nobel Prize, PhD

**Pierre Curie**

Nobel Prize, PhD

Report for  
Acme Corporation

**24 September 2020**

**Department of  
Econometrics &  
Business Statistics**

☎ (03) 9905 2478  
✉ [BusEco-Econometrics@monash.edu](mailto:BusEco-Econometrics@monash.edu)

ABN: 12 377 614 012

147 variables with 102 having the missing value

```
##      Name          Symbol          Market          Sector
## Length:45      Length:45      Length:45      Length:45
## Class :character Class :character Class :character Class :character
## Mode  :character Mode  :character Mode  :character Mode  :character
##
##
##
##      Industry      intra_day      ent_value      trail_pe
## Length:45      Min.    :    6.4  Min.    :    7.8  Min.    :    7.54
## Class :character 1st Qu.:    36.3 1st Qu.:    59.3 1st Qu.:   17.26
## Mode  :character Median :    79.6 Median :   122.4 Median :   24.74
##                  Mean   :  71455.7 Mean   :  70367.6 Mean   :   46.22
##                  3rd Qu.:   204.8 3rd Qu.:   241.0 3rd Qu.:   41.50
##                  Max.    :1670000.0 Max.    :1670000.0 Max.    :  769.92
##      for_pe      peg      ttm      mrq
## Min.    : 3.59  Min.    :-27.96  Min.    : 0.25  Min.    : 0.620
## 1st Qu.:14.62  1st Qu.:  1.34  1st Qu.: 1.17  1st Qu.: 2.490
## Median :18.54  Median :  2.39  Median : 3.08  Median : 5.320
## Mean   :21.90  Mean   : 19.23  Mean   : 4.40  Mean   : 7.352
## 3rd Qu.:25.85  3rd Qu.:  4.19  3rd Qu.: 5.94  3rd Qu.:11.710
## Max.    :98.25  Max.    :713.67  Max.    :18.62  Max.    :28.070
##      rev      ebitda      tot_risk      envir_risk
## Min.    : 0.560  Min.    :  5.69  Min.    :11.00  Min.    : 0.000
## 1st Qu.: 1.420  1st Qu.:11.48  1st Qu.:17.00  1st Qu.:  1.000
## Median : 3.670  Median :14.68  Median :20.00  Median :  2.000
## Mean   : 4.779  Mean   :18.52  Mean   :22.78  Mean   :  4.333
## 3rd Qu.: 6.940  3rd Qu.:21.38  3rd Qu.:27.00  3rd Qu.:  7.000
## Max.    :17.570  Max.    :83.52  Max.    :40.00  Max.    :18.000
##      social_risk      gover_risk
## Min.    : 3.00  Min.    :  4.0
## 1st Qu.: 7.00  1st Qu.:  6.0
## Median :10.00  Median :  7.0
```

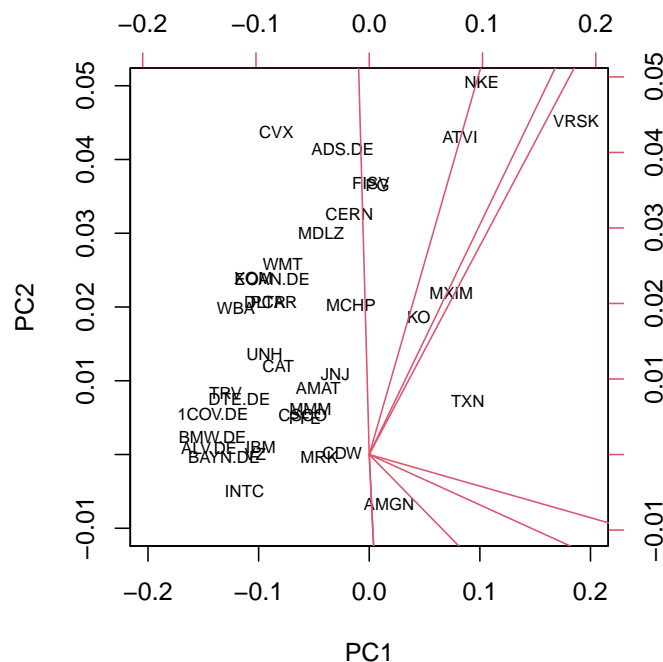
## Mean :10.76 Mean : 7.6  
## 3rd Qu.:14.00 3rd Qu.: 9.0  
## Max. :25.00 Max. :12.0

## 0.1 Description of the variables related to the value of stocks:

- Market capitalization refers to how much a company is worth as determined by the stock market. It is defined as the total market value of all outstanding shares. To calculate a company's market cap, multiply the number of outstanding shares by the current market value of one share. Companies are typically divided according to market capitalization: large-cap (\$10 billion or more), mid-cap (\$2 billion to \$10 billion), and small-cap (\$300 million to \$2 billion). Enterprise value includes in its calculation the market capitalization of a company but also short-term and long-term debt as well as any cash on the company's balance sheet. Enterprise value is used as the basis for many financial ratios that measure the performance of a company.
- Enterprise value (EV) is a measure of a company's total value, often used as a more comprehensive alternative to equity market capitalization.
- Trailing P/E is calculated by dividing the current market value, or share price, by the earnings per share over the previous 12 months.
- The forward P/E ratio estimates a company's likely earnings per share for the next 12 months.
- The PEG ratio enhances the P/E ratio by adding in expected earnings growth into the calculation. The PEG ratio is considered to be an indicator of a stock's true value, and similar to the P/E ratio, *a lower PEG may indicate that a stock is undervalued.*
- The P/S ratio is a key analysis and valuation tool that shows *how much investors are willing to pay per dollar of sales for a stock.* The P/S ratio is typically calculated by dividing the stock price by the underlying company's sales per share. A low ratio could imply the stock is undervalued while a ratio that is higher-than-average could indicate that the stock is overvalued.
- The P/B ratio measures the market's valuation of a company relative to its book value. *The market value of equity is typically higher than the book value of a company.* P/B ratio is used by value investors to identify potential investments. P/B ratios under 1 are typically considered solid investments.
- The enterprise value-to-revenue (EV/R) multiple helps compares a company's revenues to its enterprise value. *The lower the better, in that, a lower EV/R multiple signals a company is undervalued.*

- 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. The EV/EBITDA metric is a popular valuation tool that helps investors compare companies in order to make an investment decision. EV calculates a company’s total value or assessed worth, while EBITDA measures a company’s overall financial performance and profitability. Typically, when evaluating a company, *an EV/EBITDA value below 10 is seen as healthy*. It’s best to use the EV/EBITDA metric when comparing companies within the same industry or sector.

## 0.2 Value Analysis



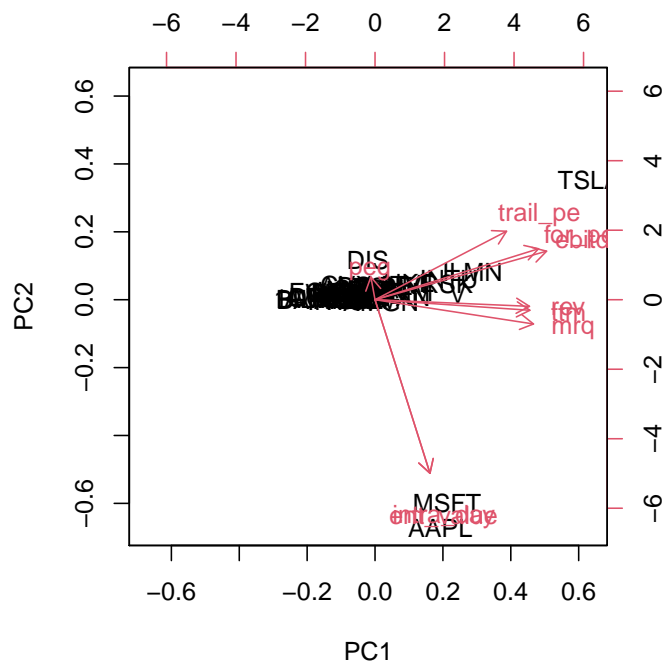
## 0.3 Value analysis(All)

## Importance of components:

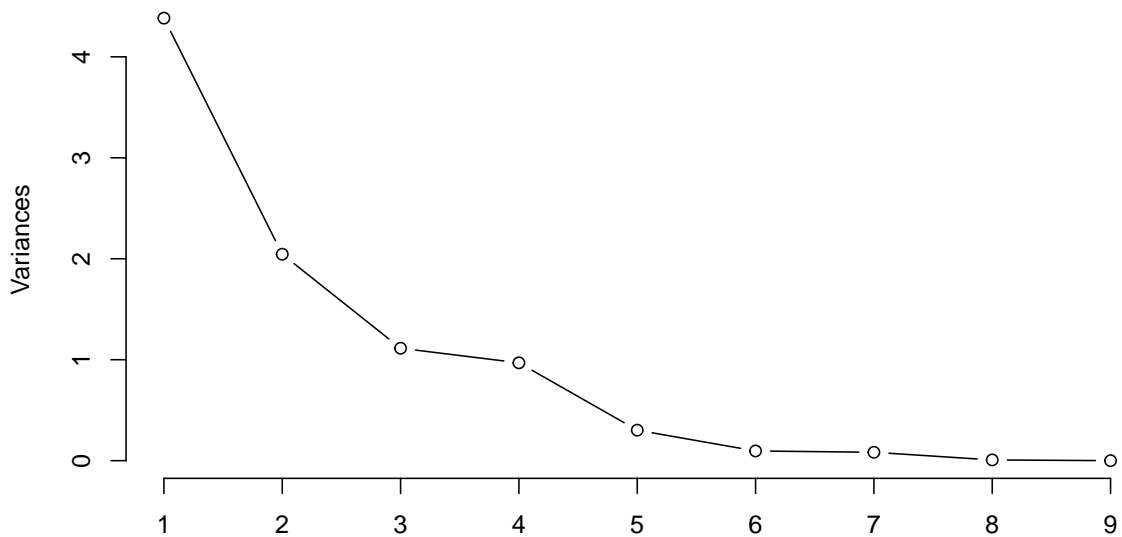
| ##                        | PC1     | PC2     | PC3    | PC4    | PC5     | PC6     | PC7     |
|---------------------------|---------|---------|--------|--------|---------|---------|---------|
| ## Standard deviation     | 2.0937  | 1.4300  | 1.0553 | 0.9845 | 0.54966 | 0.31005 | 0.28822 |
| ## Proportion of Variance | 0.4871  | 0.2272  | 0.1237 | 0.1077 | 0.03357 | 0.01068 | 0.00923 |
| ## Cumulative Proportion  | 0.4871  | 0.7143  | 0.8380 | 0.9457 | 0.97927 | 0.98996 | 0.99919 |
| ##                        | PC8     | PC9     |        |        |         |         |         |
| ## Standard deviation     | 0.08486 | 0.01127 |        |        |         |         |         |

## Proportion of Variance 0.00080 0.00001

## Cumulative Proportion 0.99999 1.00000



all\_value



## 0.4 Risk