#### IEOR 242 - Homework 1

#### **Descriptive Statistics of 10-K Forms**

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#### TEAM 6

# **S&P Global Industry Classification Standard (GICS)**

- 1. Consumer Discretionary
- 2. Consumer Staples
- 3. Energy
- 4. Financials
- 5. Health Care
- 6. Industrials
- 7. Information Technology
- 8. Materials
- 9. Telecommunication Services
- 10. Utilities

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#### **Consumer Staples Sector**

It includes manufacturers and distributors of:

- food
- beverages
- tobacco
- producers of non-durable household goods
- personal products

# **Companies**







2012, 2013, 2014







2012, 2013, 2014







2012, 2013, 2014

# **Summary of 10K data for Procter and Gamble**

	2012	2013	2014
Words	41924	42540	42973
Characters	301467	304090	307810
Images	2	2	2
Tables	166	171	170
Pages	86	83	85
Avg Stock Price	66.14	78.56	82.37

# **Summary of 10K data for Colgate Palmolive**

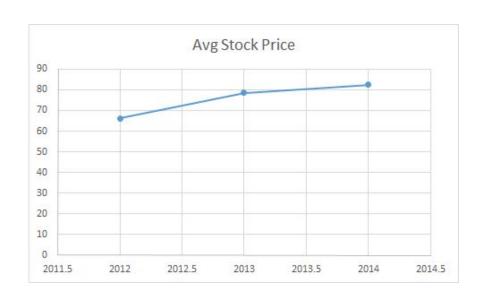
	2012	2013	2014
Words	39581	43496	44262
Characters	293927	318494	324326
Images	4	4	4
Tables	228	235	238
Pages	95	104	109
Avg Stock Price	100.88	80.64	65.9

# **Summary of 10K data for Johnson and Johnson**

	2012	2013	2014
Words	51519	47839	49187
Characters	387327	362987	369118
Images	12	3	3
Tables	294	268	272
Pages	104	92	92
Avg Stock Price	66.93	85.73	100.82

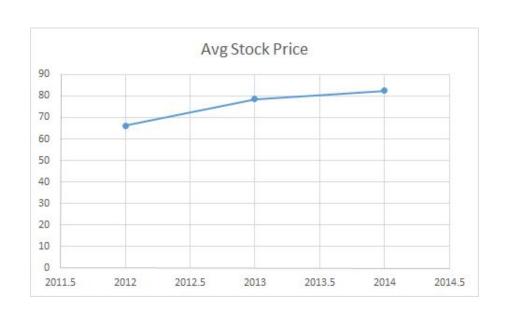
#### Most Frequent Performance related words PG 2012





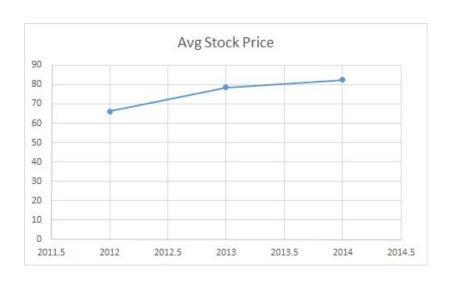
#### Most Frequent Performance related words PG 2013



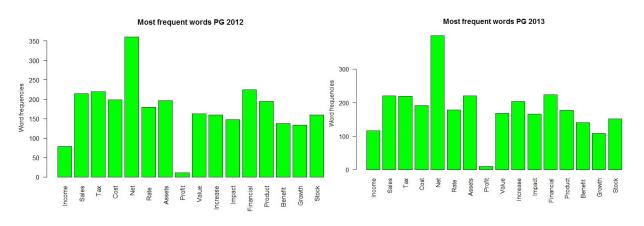


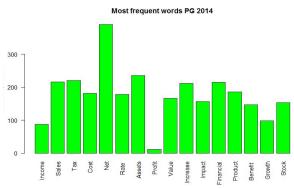
#### Most Frequent Performance related words PG 2014





# Most frequent words yearwise for P&G



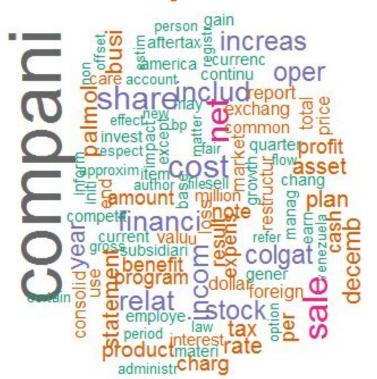


#### Most Frequent Performance related words CP 2012





#### Most Frequent Performance related words CP 2013





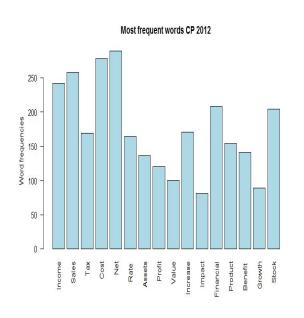
#### Most Frequent Performance related words CP 2014

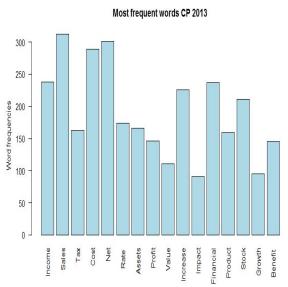


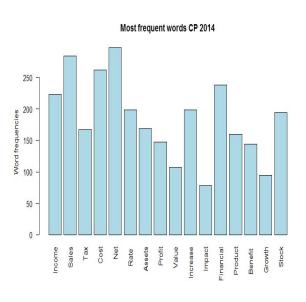


# compani

# Most frequent words yearwise for CP







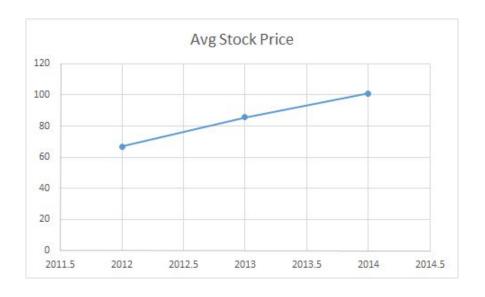
#### Most Frequent Performance related words JJ 2012





#### Most Frequent Performance related words JJ 2013



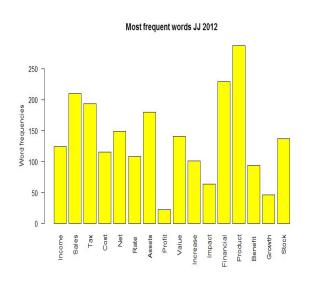


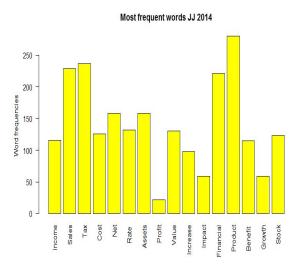
#### Most Frequent Performance related words JJ 2014

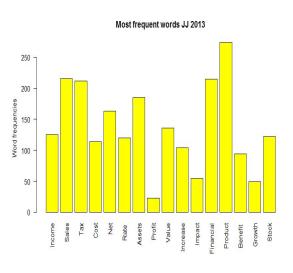




#### Most frequent words yearwise for J&J







# **Insights**

- No observable correlation between count statistics and stock price
- 1) Count statistics and stock price are roughly positively correlated for P&G negatively correlated for Colgate Palmolive and no significant correlation for Johnson & Johnson.

#### **Insights**

- Style of management determines the focus of the report
- 1) Colgate Palmolive has a huge frequency of the word "profit" but it is almost absent in P&G and Johnson & Johnson.
- 2) Johnson & Johnson focuses a lot on the product in the report whereas Colgate Palmolive and P&G focus on financial information
- 3) The style of 10-K report is consistent over all three years for a certain firm
- 4) Most frequently occurring words are neutral- no indications about financial performance; deeper analysis required to derive insights