1. Dupont Analysis:

	2012	2011	2010	2009	2008	2007
Net Sales	$ 83,680.00	$ 81,104.00	$ 77,567.00	$ 75,295.00	$ 77,714.00	$ 71,095.00
Net Income	$ 10,756.00	$ 11,797.00	$ 12,736.00	$ 13,436.00	$ 12,075.00	$ 10,340.00
Total Assets	$ 132,244.00	$ 138,354.00	$ 128,172.00	$ 134,833.00	$ 143,992.00	$ 138,014.00
Equity	$ 64,035.00	$ 68,001.00	$ 61,439.00	$ 63,382.00	$ 69,784.00	$ 67,012.00
EPS, basic	$ 3.82	$ 4.12	$ 4.32	$ 4.49	$ 3.86	$ 3.22
EPS, diluted	$ 3.66	$ 3.93	$ 4.11			
Dividends	$ 2.14	$ 1.97	$ 1.80	$ 1.64	$ 1.45	$ 1.28
ROS	12.85%	14.55%	16.42%	17.84%	15.54%	14.54%
AT	0.63	0.59	0.61	0.56	0.54	0.52
ROA	8.13%	8.53%	9.94%	9.96%	8.39%	7.49%
Equity Multiplier	2.07	2.03	2.09	2.13	2.06	2.06
ROE	16.80%	17.35%	20.73%	21.20%	17.30%	15.43%
Payout Ratio	56.02%	47.82%	41.67%	36.53%	37.56%	39.75%
Retention Ratio	43.98%	52.18%	58.33%	63.47%	62.44%	60.25%
SGR	7%	9%	12%	13%	11%	9%
Price Per Share (Year End)	$ 67.15					
P/E	17.58					
M/B	2.95					

Table 1: Dupont Analysis for P&G 2007-2012. Dollars in Millions Except EPS and Dividends. (Data Retrieved from https://drive.google.com/file/d/0B4xgnHAZWDt5bDFlOTFrLW1iOUk/view; Year End Price Per Share Retrieved from https://finance.yahoo.com/)

	2012	2011	2010	2009	2008	2007
Net Sales	$ 17,085.00	$ 16,734.00	$ 15,564.00	$ 15,370.00	$ 15,330.00	$ 13,790.00
Net Income	$ 2,472.00	$ 2,431.00	$ 2,203.00	$ 2,291.00	$ 1,957.00	$ 1,737.00
Total Assets	$ 13,394.00	$ 12,724.00	$ 11,172.00	$ 11,134.00	$ 9,979.00	$ 10,112.00
Equity	$ 2,189.00	$ 2,375.00	$ 2,675.00	$ 3,116.00	$ 1,923.00	$ 2,286.00
EPS, basic	$ 5.19	$ 4.98	$ 4.45	$ 4.53	$ 3.81	$ 3.35
EPS, diluted	$ 5.15	$ 4.94	$ 4.31	$ 4.37	$ 3.66	$ 3.20
Dividends	$ 2.44	$ 2.27	$ 2.03	$ 1.72	$ 1.56	$ 1.40
ROS	14.47%	14.53%	14.15%	14.91%	12.77%	12.60%
AT	1.28	1.32	1.39	1.38	1.54	1.36
ROA	18.46%	19.11%	19.72%	20.58%	19.61%	17.18%
Equity Multiplier	6.12	5.36	4.18	3.57	5.19	4.42
ROE	112.93%	102.36%	82.36%	73.52%	101.77%	75.98%
Payout Ratio	47.01%	45.58%	45.62%	37.97%	40.94%	41.79%
Retention Ratio	52.99%	54.42%	54.38%	62.03%	59.06%	58.21%
SGR	60%	56%	45%	46%	60%	44%
Price Per Share (Year End)	$ 104.54					
P/E	20.14					
M/B	22.75					

Table 2: Dupont Analysis for CP 2007-2012. Dollars in Millions Except EPS and Dividends. (Data Retrieved from https://drive.google.com/file/d/0B4xgnHAZWDt5bDFlOTFrLW1iOUk/view)

2. Inference:

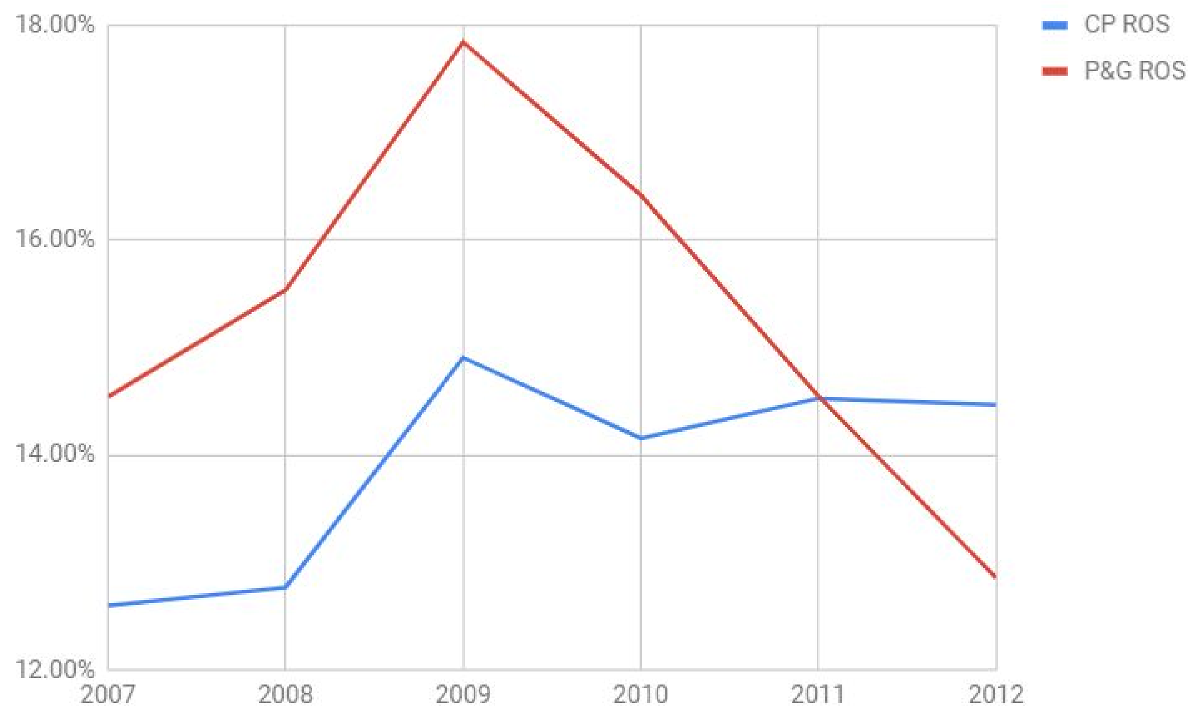

Figure 1: CP ROS and P&G ROS from 2007-2012

At first glance, both companies shows far stronger ROS than the average of 5% across companies. Moreover, data obtained from statista (2018) also indicates strong performances for both companies compared to their industry (Personal & Household Products) average, which hovers at 10% from 2010 to 2012. From 2008 to 2009, notably during a financial crisis, both companies increase their ROS by approximately 2% (from 12.77% to 14.91% for CP and from 15.54% to 17.84% for P&G). However, after 2009, the two show significant difference. While CP's ROS fluctuates rather stably around the 14.5% mark, P&G sees a steep downturn in ROS from 17.84% to 12.85% in just 3 years.

The remarkable difference is the repercussion of each company's strategy. CP's stable performance is due to its relatively small size and very focused investments. They are proud and satisfied to be really good at oral care. 44% of CP's sales is oral care products. The company controls 45% of the global oral care market and sell about 33% of all manual toothbrushes. They have established an unmatched brand in emerging markets, thus enjoying immense prospective long-term growth opportunities. These, in addition to its previous failures to diversify, have convinced CP to concentrate optimizing the profit margin instead of broadening their product mix. This strategy bestows upon the company five advantages: (1) CP is much more agile than P&G in expansion to new markets. While CP is already establishing a brand in India, P&G is not even ready to get into this market. (2) They could invest their cash in optimizing and overhauling their production chain. The company retains up to 53% of its income in 2012 to modernize their machinery and reinvest for further growth; P&G only retains 44% at the same time. (3) The company could better assess and maneuver in a business landscape it is very used to, thus making efficient use of its capital. For example, while it keeps launching new oral care brands for different market segments, CP also sells underperforming brands (Fab, Dynamo, Arctic Power, etc) and licenses new products (such as Ajax) to efficiently utilize its assets. This allows the company to have an asset turnover that is twice as high as that of P&G (see figure 2) as it does not make expensive acquisitions that unnecessarily increase its assets; (4) The company could focus on seizing a bigger market share for its respective product type. In fact, CP has established a wide range of toothpaste brands that cater customers with various socio-economic background. Thanks to this strategy, CP's ROS is mostly unaffected during the crisis; (5) The company saves money on advertisements, allowing cross promotions and discounts for related products. This lets CP have a firm grasp on a few related personal care products that would normally have low product differentiation, such as toothbrushes. Usually, it is not as easy to distinguish toothbrush brands as toothpaste's. Thus, by selling combo packs of its own toothpaste and toothbrush, CP enjoys a boost in toothbrush sales as a side effect.

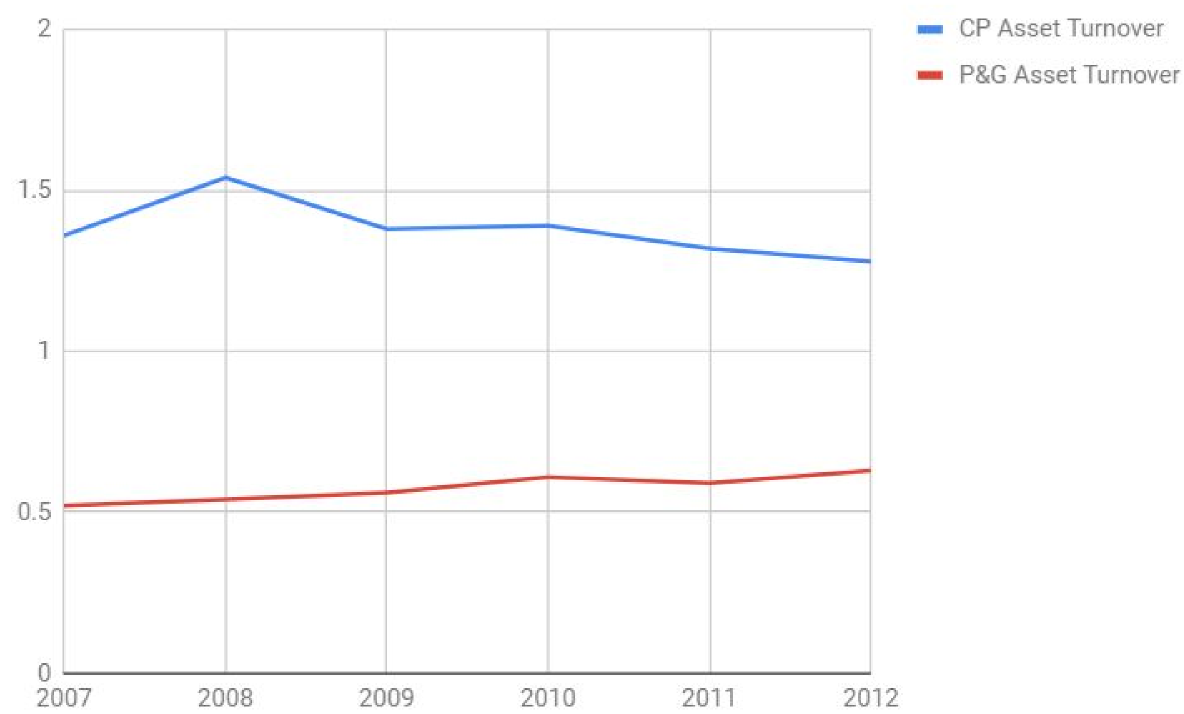

Figure 2: CP Asset Turnover and P&G Asset Turnover, 2007-2012. It is evident that CP has a much higher asset turnover.

P&G, on the other hand, is much larger than CP in terms of size (126,000[1] employees compared to CP's 37,000 year end 2012) and market cap ($168B[2] compared to CP's $185M year end 2012). Throughout its course of history, the company has, for multiple times, invested in mergers and acquisitions aggressively to get bigger and further broaden its product mix. This strategy is evident in the huge amount of goodwill and intangible assets in P&G's balance sheet ($84,761M, accounting for 64% of total assets in 2012, and $90,182M, accounting for 65% of total assets in 2011) compared to CP's tiny amount of $2,500M (19% of total assets) in 2012 and $2,494M (18% of total assets) in 2011. Before the crisis, the company has a higher ROS than CP due to pricing and diversification. Lafley's "premiumization" strategy lets the company have a high profit margin up until the crisis, at which point customers stop spending wildly. In fact, its acquisition of beauty care companies such as Wella and Gillette fails due to the halt in customer needs for these products. The decline in ROS also corresponds to the uprise of a new CEO, Bob McDonald, whose strategies are slow to react against the rapid change in market trend. First, his vision of growing the company's revenue by raising prices at a time where others hold steady causes backlash against the company's high-end product mix. Second, his restructuring of the organization causes more bureaucracy that hinders the company's ability to make timely decisions, thus further worsening the problem. In fact, the firm's incapability during the crisis is evident through its retention rate trend. The declining retention rate from 63.47% when McDonald became CEO in 2009, to merely 43.98% in 2012 shows the reluctance of the company in carrying on expanding and continually investing. At the same time, there is no sound strategy proposals to turn around problematic businesses such as Pantene, Olay, Gillette, or Wella.

[1] Data retrieved from http://www.pginvestor.com/Cache/1001174630.PDF?O=PDF&T=&Y=&D=&FID=1001174630&iid=4004124

[2] Data retrieved from https://www.macrotrends.net/stocks/charts/PG/procter-gamble/market-cap

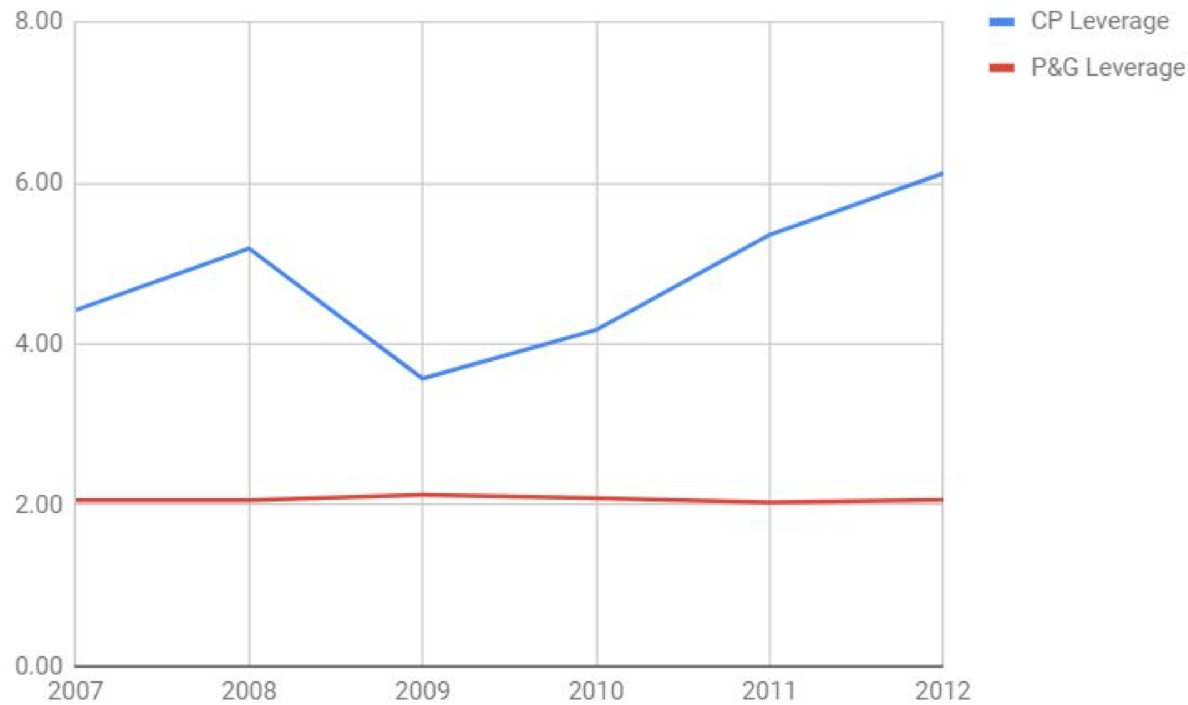

Figure 3: CP Leverage and P&G Leverage, 2007-2012. CP shows 2-3 times higher leverage than P&G.

There is also a noticeable difference in leverage between the two companies. Even though P&G has accumulated large assets through investments and M&A, CP has a far higher leverage. According to Zacks (2015), this is due to the company's policy of returning excess cash to shareholders via stock buyback and increases in dividends, which keeps CP's equity low. This is another side effect of CP's narrow market focus. On the other hand, P&G's many investments always keeps its equity high. This explains CP's very appealing ROE (112.93% in 2012) compared to P&G's mediocre 16.80%. Investors seem to sense the appeal too, as the stock price for CP, despite it being a much smaller company, is $104.54, compared to P&G's $67.15 at year end 2012. This justifies the higher P/E (20.14) and M/B (22.75) of CP compared to P&G's 17.58 and 2.95, respectively.

CP's decision of increasing leverage, however, might be questionable. For a company that focuses on a small set of product mix, it could be the right choice to increase leverage as increasing margin and asset turnover gets less probable. It could also work well for the company given its policy of not overinvesting. But past performance does not indicate future performance. And a misstep for CP could result into a large ROE loss that drives investors into its competitors.

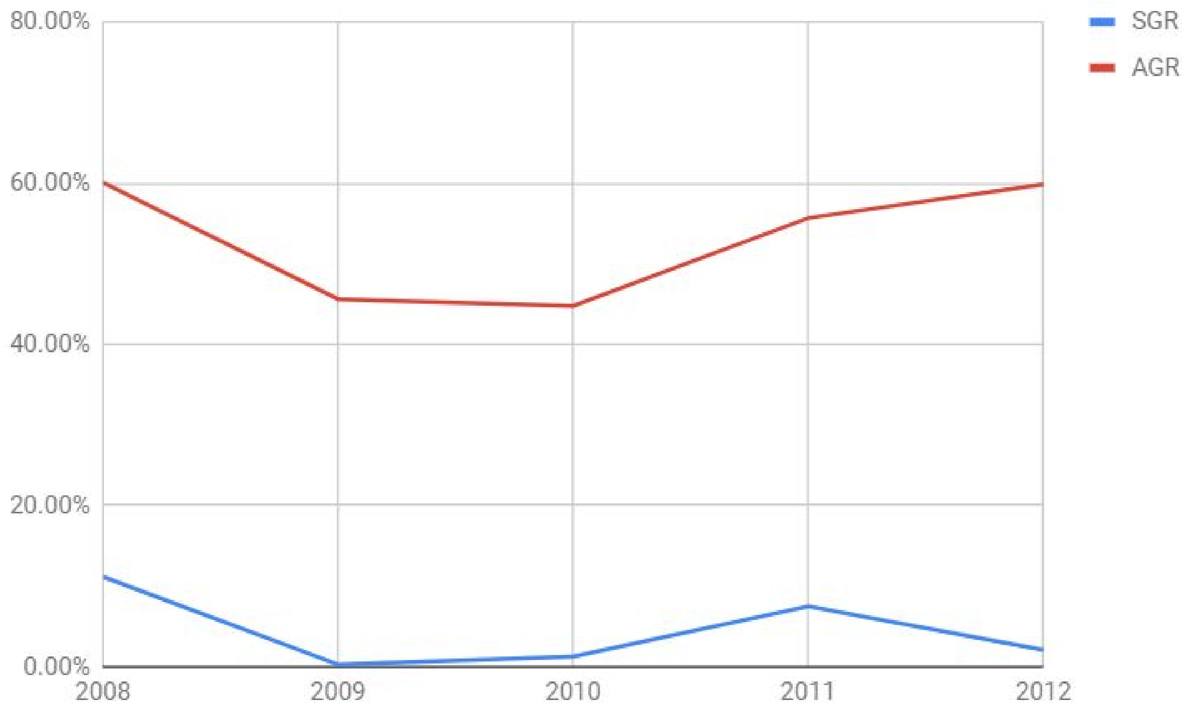

Figure 4: Sustainable Growth Rate vs Actual Sales Growth Rate, CP, 2008-2012.

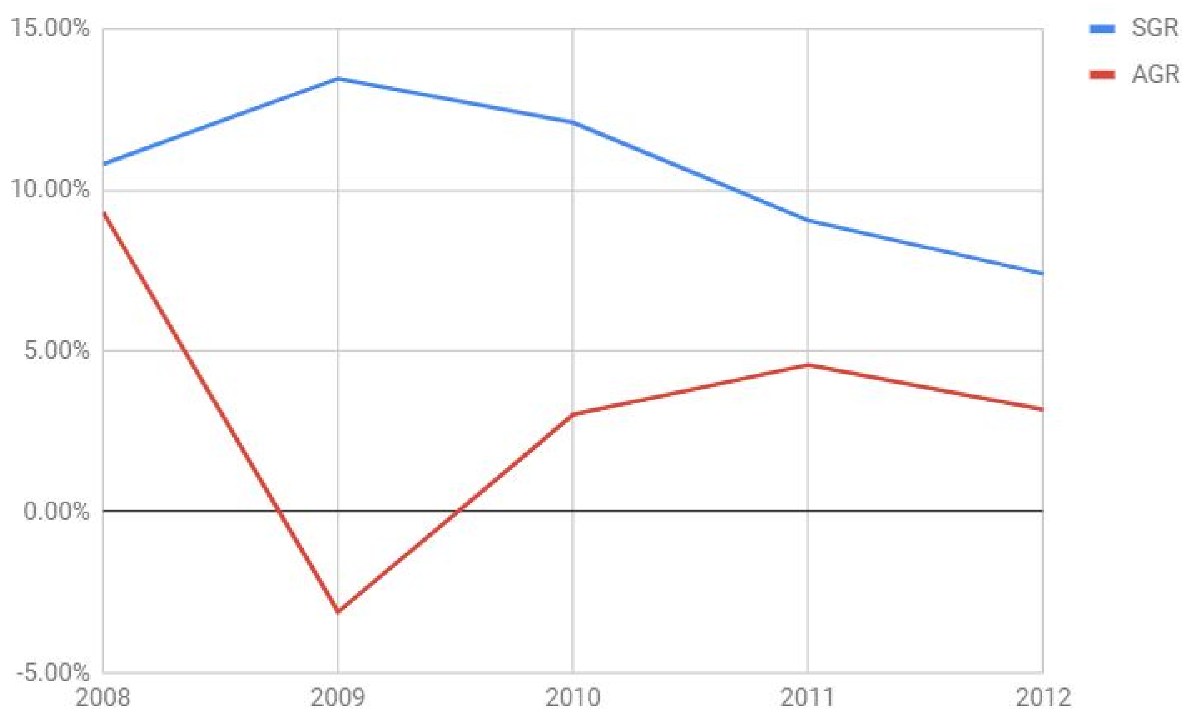

Figure 5: Sustainable Growth Rate vs Actual Growth Rate, P&G, 2008-2012.[3]

Last but not least, it should also be noticed that both firms are not growing as rapidly as their SGR indicates (figures 4 & 5). According to Higgins (1986), this indicates that the company would unlikely be able to meet its financial targets (of maintaining a fixed asset to equity ratio, target payout ratio, or target sales margin. Because an actual growth rate lower than the SGR also means that the company has already got more capital than it needs to develop, Higgins suggests executives to increase liquid assets, reduce leverage, or increase dividends to keep SGR attractive. This is exactly both companies have done. As aforementioned, both companies frequently distribute excess cash back to shareholders via share buybacks or dividends. The result is that SGR and leverage is kept at a stable level for both companies, with SGR fluctuates around 60% for CP and 10% for P&G, while leverage fluctuates around 5 for CP and 2 for P&G (figures 3, 4, 5).[4]

3. Conclusion:

CP has a better performance overall due to high internal consistency. P&G shows a neglection to dynamic consistency by being slow to react to the changing business landscape. The performance of the companies are the manifestation of their leaders' policies. Lafley proves to be among the greatest leaders by leading the company to its peak in the few year before the financial crisis with good investments, pricing, and broadening of product mix. He also fosters a decentralized matrix structure that spread responsibility among executives of various departments, geographical regions, and product categories. McDonald's focus on HR and marketing, as well as an organization structure that turns out to be cumbersome and bureaucratic, diverts and discourages the flow of new ideas, thus making P&G slow to adapt to the harsh environment after the crisis. On the other hand, Cook has proved to be a fine substitution for his predecessor by maintaining the growth rate of CP. He does not impose any radically new vision upon the company, but maybe a consistent leader is exactly what CP needs amidst the post-crisis business landscape. Working with a leverage more than twice as high as the average of 2.5 requires much precision in planning and execution. We would surely need to follow the CP chairman closely in the next few years to further assess his quality.[5]

4. Reference:

[1] Damodaran, A. (2018). Profit Margin by Industry. Retrieved from http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/margin.html

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[3] #dataviz: Recognize interesting relationships in the financial report and plot graphs to demonstrate those relationships.

[4] #critique: Critique the performance of two companies. Compare and contrast their multiple trends and stats.

[5] #organization: Smoothly organize the paper to transitions through questions of the assignment without the need to mention them. Sections are written thoroughly to connect well with each other.

[2] Zacks Research. (2015). Colgate Lifts Dividend Issues New Share Buyback Program. Retrieved from https://www.zacks.com/stock/news/165200/colgate-lifts-dividend-issues-new-share-buyback-program
[3] Percival, J. (2018). Procter & Gamble and Colgate-Palmolive: Similar but Different. Retrieved from *https://drive.google.com/file/d/0B4xgnHAZWDt5bDFlOTFrLW1iOUk/view*
[4] MacroTrends. (2018). Procter & Gamble Market Cap. Retrieved from https://www.macrotrends.net/stocks/charts/PG/procter-gamble/market-cap
[5] Procter & Gamble. (2012). P&G Annual Letter to Shareholders. Retrieved from http://www.pginvestor.com/Cache/1001174630.PDF?O=PDF&T=&Y=&D=&FID=1001174630&iid=4004124
[6] Higgins, R. (1986). How Much Growth Can A Firm Afford?
WORD COUNT: 1350 (excluding reference, footnotes, and exhibits)
Spreadsheet containing calculations could be accessed **here**