University of Toronto Engineering Finance Association Information Session

September 13, 2018



Agenda



1st Half



Club Objective & History



Club Operations



Club Plan and Schedule



Conclusion; Q&A; Executive Introductions

Break

2nd Half



Analysis Methodology & Sample Pitch

Club Objective and History



Club History and Objective



History

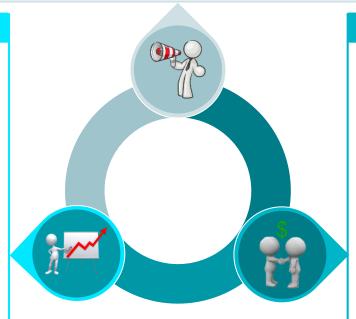
- Founded in 2009 to give Engineering students more exposure to Finance
- Started with Professor Lawryshyn & 3 Engineering students
- Has grown to 60 invested members and just under \$15,000 CAD in cash and equity, 7 Executives and many more active Analysts
- Looking to expand even further!

Objective

Provide an opportunity for students to study and understand various sectors of the market by engaging them in investing activities

What You'll Do/Learn

- Develop the essential skills required in financial service industries
 - Various investment strategies
 - Financial statement analysis
 - Valuation techniques and methodologies
 - How to invest with real money (and make a profit!)
- Develop various soft skills that are key in the corporate world
 - Presentation and communication skills
 - Analytical skills



Why Is This Important

- Provides you with the skills required to succeed in various financial roles and industries
 - Consulting
 - Trading
 - o Investment Funds
 - Private Equity
 - Investment Banking
 - o Equity Research
 - Upper/Middle Management across all industries
- Provides you with the skills to invest independently

Alumni and Members



UTEFA alumni are currently in industry and/or pursuing graduate degrees. Some examples include: • Consulting: Deloitte • Trading: Goldman Sachs, RBC Capital Markets • Investment Funds: CPPIB, OTPP • Investment Banking: CIBC World Markets, Morgan Stanley, Barclays Current UTEFA members include students of all ages (both graduate and undergraduate), education backgrounds (Engineering, Rotman, Music, Computer Science, etc.) and work experience (currently on PEY, returning from PEY, past full-time experience, etc.).

Alumni Spotlight

Company: Deloitte Canada LLP

Role: Manager, Omnia Al

"I continue to be staffed on projects because of my understanding of securities and finance related concepts. UTEFA gave me exposure not only to the stock market and trading but to the language of the industry that I now use everyday."

- Michael Vinelli

Member Spotlight

- Ameer Shaikh; returning from a 12-month PEY at Ontario Teachers' Pension Plan
- Michael Travis; currently doing his 12-month PEY at Ontario Teachers' Pension Plan
- Tom Qi; Rotman Commerce Student & UTEFA Exec
- Cameron Rzadki; McMaster Biochem / Ivey
 Business School graduate, former healthcare
 investment banker, and current Master's in Applied
 Computing student at UofT

Leverage UTEFA to build your network!!

























Morgan Stanley







Club Operations



How does UTEFA make investments?



UTEFA bases all investment decisions on the outcome of the analysis conducted by its members. To do this, we:

- Divide ourselves in different "sector groups" with each being led by one or more executive
- Sector groups analyze companies from both quantitative and qualitative perspectives, including using DCF's, event-driven data and recent news
- Sector groups create stock pitches and present them at the weekly General Meetings
- UTEFA shareholders vote to buy/sell shares
- VP Finance executes all trades during the following day's market hours

How does UTEFA manage its portfolio?



VP Operations and Head Economist oversee the day-to-day movement of UTEFA's investment portfolio

- VP Operations oversees the Market Update Committee which creates weekly market updates highlighting the week's major news events – contact Tiger if you are interested in joining the Market Update Committee!
- Market Update Committee highlights current holdings that should be sold and provides justification for doing so
- Market Update Committee also highlights future investment opportunities the club should look into based on recent news and industry trends

Learning Sessions



Prior to beginning the weekly routine highlighted previously, UTEFA will have 2 weeks of 2-hour learning sessions

Session 1 – September 20, 2018 Introduction to Accounting and Financial Statements Key financial concepts, ratios and valuation metrics Enterprise Value vs. Equity Value and when to use them Session 2 – September 27, 2018 Valuation methodologies (relative vs. intrinsic) Public Company Comparables Precedent Transactions Discounted Cash Flow (DCF) Analysis

Additional learning sessions will be conducted throughout the year covering various topics, including but not limited to: LBOs, Merger Models, Industry Specific Valuations, Portfolio Performance Metrics, etc.

Typical General Meeting Agenda



- General Meetings occur <u>every Thursday</u>, starting October 4th, 2018 (i.e. immediately after the completion of the training sessions)
- General Meetings will **begin at 6:30pm** (allows more time for students currently on PEY to attend) and will end around 7:30pm

Typical General Meeting Agenda:

- ~ 5 minutes: Market Update by the Market Update Committee
- ~ 10 minutes: Discussion of market news, current market trends, follow-up from past meetings
- 35-40 minutes: Presentations by sector groups, Q/A, discussion, ad-hoc learning sessions, etc.
- ~ 5 minutes: Discussion of upcoming responsibilities for future weeks

Club Plans and Schedule



Timeline and Schedule – First Semester



Info Session Training Sessions (Sep 20, Sep 27)

General Meetings (Oct 4 – Dec 6, 2018)

| Session | Date | Time | Room | Agenda |
|---------|--------|--------|---------|--|
| 1 | TODAY | 6:10pm | MP 137 | Information Session |
| 2 | Sep 20 | 6:10pm | BA 2139 | Learning Session – Accounting + Financial Statement Analysis |
| 3 | Sep 27 | 6:10pm | BA 2139 | Learning Session – Valuation Techniques |
| 4 | Oct 4 | 6:30pm | BA 2139 | General Meeting |
| 5 | Oct 11 | 6:30pm | BA 2139 | General Meeting |
| 6 | Oct 18 | 6:30pm | ES B149 | General Meeting |
| 7 | Oct 25 | 6:30pm | BA 2139 | General Meeting |
| 8 | Nov 1 | 6:30pm | ES B149 | General Meeting |
| 9 | Nov 8 | 6:30pm | BA 2139 | General Meeting |
| 10 | Nov 15 | 6:30pm | BA 2139 | General Meeting |
| 11 | Nov 22 | 6:30pm | BA 2139 | General Meeting |
| 12 | Nov 29 | 6:30pm | BA 2139 | General Meeting |
| 13 | Dec 6 | 6:30pm | BA 2139 | General Meeting |

Becoming an Invested Member



Formal invitation to become a UTEFA shareholder will be sent out in mid to late October

- UTEFA shareholders will have voting rights for all investment decisions
- Contact Michael Travis (VP Finance) to learn more!



Additional Plans for the Year



Aside from the General Meetings, UTEFA is looking to create various fun activities throughout the year – more details will be provided via e-mail and during General Meetings.

Activities in the works include:

- Mock Interviews for Trading, Hedge Fund, Private Equity, Investment Banking, Consulting and Equity Research roles
- Guest Speakers (past executives, industry professionals)
- Networking Events / Career Night
- Monthly Pub Nights (awaiting budget approval from ULife / EngSoc)
- Alumni Pub Night
- Case Competitions / Stock Pitch Competitions
- Investment Challenges

BREAK – Meet our Execs!





Prof. LawryshynClub Advisor



Stefan Momic President



Michael Travis
VP Finance



Eric BoszinVP External



Tiger Sheng VP Operations



Ita Zaporozhets

VP Internal



Tom Qi Head Economist



Ameer Shaikh Head Analyst

Analysis Methodology & Sample Pitch



How much do you already know?



Before we go into teaching you how to make a stock pitch / what goes into one, we want to survey how much you already know!

- Present Value / Time Value of Money
- Financial Statements can you name them?
- What is a stock?
- What is an index? What is an ETF?

Introduction to the Business

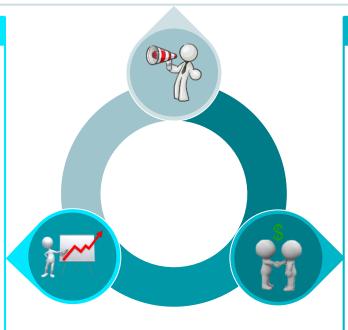


What are Capital Markets??

A market in which individuals and institutions trade financial securities/instruments! Simple viewpoint: Capital Markets is made up of two sides — Buy Side and Sell Side

Buy Side

- Dominated by large institutional investors like Pension Funds, Mutual Funds, Hedge Funds, etc.
- These groups are basically identical except for the rules by which they are governed
- Ultimate goal of buy side funds is to make large returns!



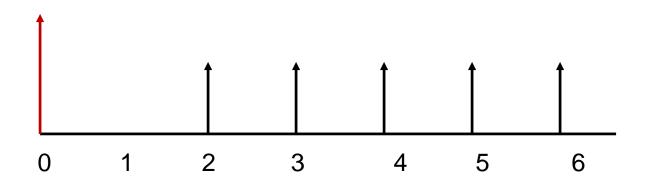
Sell Side

- Includes sales and trading, equity research and investment banking
- Sales and trading: facilitate interaction with primary and secondary markets
- Equity research: cover individual companies and give their opinions to the public (e.g. analyst recommendations)
- Investment banking: facilitate financing for large corporations – M&A, Equity Issuances, Debt Issuances, etc.

Time Value of Money



$$x_{Future} < x_{Today}$$



However, using a "discount rate" dollars in the future can be converted to an equivalent amount of dollars today. This means that any arbitrary cash flow can be converted to an equivalent value today – this is the backbone of the DCF Analysis!

Financial Instruments and Products

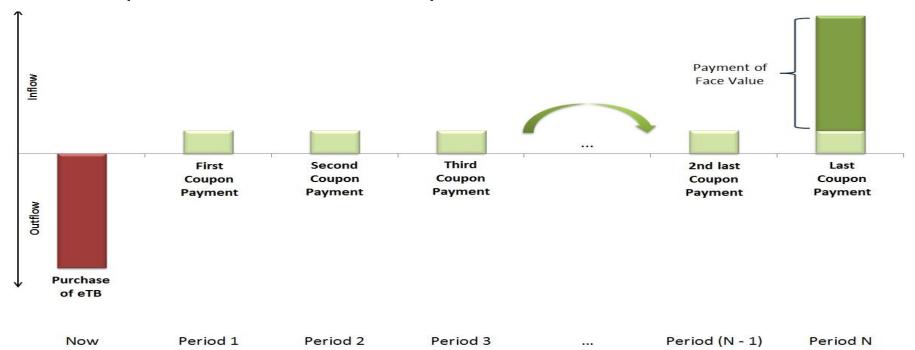


- Stocks
- Bonds corporate, government
- Commodities
- Currency
- **Derivatives** financial product whose value is based on another underlying asset: options, swaps, futures

Bonds – A Fixed Income Security



- Typically a very secure investment
- Typical cash flow: Pay a fixed amount now (i.e. the Price), receive periodic payments (i.e. coupons) and a final lump sum (i.e. Face Value)
- Example: 10 Year US Treasury Note



Stocks – Equity Investments



- UTEFA's main focus
- A stock gives you partial ownership of the company
- Anyone can own stocks, but they are largely held by large institutional investors (hedge funds, pension funds, etc.)
- Stocks are available for purchase in the primary (when stocks are originally issued) and secondary markets (when stocks are traded among investors)
- Many ways to pick which stocks to invest in Fundamental Analysis, Technical Analysis, Speculation, Portfolio Optimization, etc. <u>UTEFA focuses on fundamental analysis</u> <u>based on company financials</u>

Useful Websites to Learn More!



- Investopedia.com
- Morningstar.com
- Finance.google.com
- Finance.yahoo.com
- Bloomberg
- Seekingalpha.com
- Read The News National Post, Global and Mail,
 Wall Street Journal, Financial Times

Procter & Gamble Co – Sample Pitch

NYSE: PG

May 20, 2018



Introduction





Trade Details



Company Background



Market Forecast



Financials



Valuation



Conclusion

Trade Details



Recommendation: BUY

Market Details

Current Stock Price*: \$73.45

DCF Valuation Stock Price: \$81.33

Target Stock Price: \$81.00

Risks of the Trade

- Recent proxy battle with P&G's management indicates uncertainty about the future
- E-commerce competition leading to the inability to continually raise prices due to a lack of brand preference from millennial shoppers
- Lack of innovation with the latest major invention being the Swiffer which launched in 1999
- Slowing growth as a consequence of e-commerce threats and lack of innovation

Trade Rationale / Investment Thesis

- Largest holding in the American Consumer Staples index. The consumer staples sector is expected to appreciate in value as investors shift portfolio focus
- PG shares are trading near historic lows UTEFA believes this represents a strong upside potential with minimal downside risk
- Strong company fundamentals greater operating and net profit margins than industry peers along with lower financial ratios

Investment Horizon

I expect growth induced share price to take affect over the next few years.

As such, I recommend holding PG shares long-term and believe you should reconsider the valuation of P&G a year from now to see how the growth outlook of the stock has changed.

^{*} All values as of market close on Friday, May 18, 2018

Company Background



Procter & Gamble Co, also known as P&G, is an American consumer goods corporation. P&G is made of many individual brands, across many different product ranges including family care, beauty, home care, and health & grooming.

Baby, Feminine & Family Care

Home to 11 family care product brands including Bounty, Charmin, Tampax and Pampers

Beauty

Home to 11 beauty brands including Head & Horbal Essences, Olay, Old Spice and



















Home to 16 health & groomi including Braun, Crest, Gillette























Tell us more about the company. For well known companies this could be light. For smaller companies in niche industries you might need to go into more detail here! It's important to know what you're investing in.





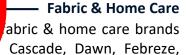








































Market / Industry Forecast



I believe we are currently at the Top of the Stock Market Cycle. With the market moving into Early Bear in the near future, target sectors to be considered should be Consumer Non-Cyclicals, including Consumer Staples.



Investment Risks



Delta Risks

- Recent proxy battle with P&G's upper management indicates uncertainty about the company's future direction
- E-commerce inability to continually raise prices due to a lack of brand preference from millennial shoppers caused by the increased competition from online retailers – P&G's higher net profit margins and diverse set of brands covering varying consumer segments mitigate this risk

What are the intrinsic risks associated with the company?

- arguably bought a couple of the competitive start-ups but it may have missed those opportunities by focusing on selling it's own brands
- Slowing growth as a consequence of e-commerce threats and lack of innovation, P&G has seen slower growth in recent years – I mitigated this risk by assuming no more than 1.25% revenue growth throughout the valuation and still getting a discounted share valuation

FX Risks

Since P&G is traded on the NYSE, we are faced with inherent FX risks. As such, I have quantitatively considered the affect of this FX risk by considering a couple of extreme downside cases.

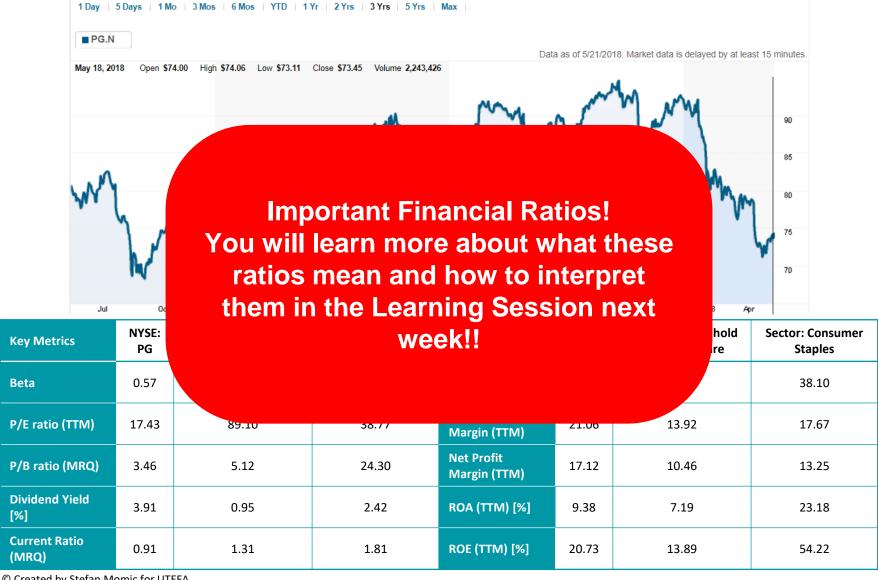
Target price (T) = \$81.00Current Price (S) = \$73.45Current USD/CAD Rate $(FX_1) = 1.29$ Stop-loss Price* = \$70.00

Alth What are some of the hoi Ho macroeconomic risks End implicit in the investment? Hor USD Rate 18.65 14.60 10.55 6.50 2.45 - 1.60 - 5.65 22.70 Realization of Target Stagnant 11.75 0.73 - 2.94 - 6.61 - 10.28 - 13.96 - 17.63 - 21.30 8.08 4.41 Price Action Realization 3.25 - 0.25 - 3.75 - 7.25 - 10.75 - 14.25 - 17.75 - 21.25 - 24.75 6.75 of Stop-**Loss Limit**

^{*} Expect to place a stop-loss limit at \$70, indicating selling off all PG shares if this price is realized © Created by Stefan Momic for UTEFA

Key Financials and Stock Chart





DCF Valuation



Since we expect a long term investment horizon, P&G's annual financials were considered in the valuation. As such, 5 years of historical results were considered and projections were made for the next 5 years.



Key Inputs

| Key Figure | | | | |
|--|---------------------|--|--|--|
| Beta (taken from Reuters) | 0.57 | | | |
| Risk-free rate (| 2.82% | | | |
| Market rate (c DCF Analysis and Ass | umptions!! 10.60% | | | |
| Debt rate (call You will learn how to do | o this during 2.58% | | | |
| Return on equ the Learning Session or | n September 7.25% | | | |
| WACC (calcula 27 th ! | 5.89% | | | |
| Long-term growt dividend yield – I beneve this to be a conservative estimate; | 1.25% | | | |



Valuation (refer to Appendix A for the full DCF valuation)

| Enterprise Value | \$222,579.24M |
|------------------------------|---------------|
| Equity Value | \$204,524.24M |
| Number of Shares Outstanding | 2514.6M |

Implied Share Price: \$81.33 Current Share Price: \$73.45 (10.73% Upside)



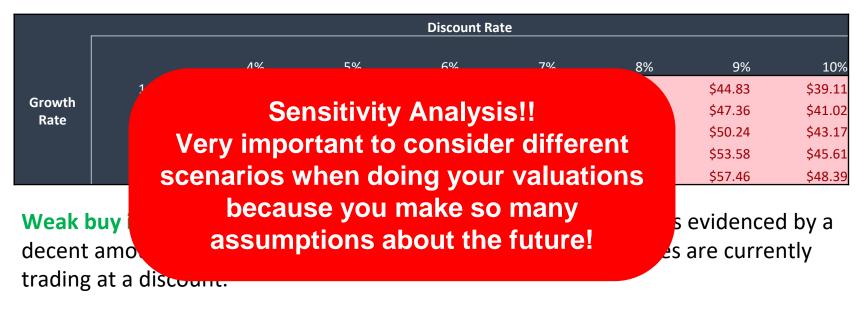
Sensitivity Analysis



I have considered various WACC rates and very conservative growth rates as a factor of safety for the assumptions made



Sensitivity Analysis Results



Legend
Discount
Inconclusive
Premium

Comparables



I calculated the implied share price of P&G using the relevant financial ratios from each competitor. A brief introduction to the competitors, along with some key metrics for comparison is provided below.



Competitors

| | | C | Comparables | | | | |
|--|----------|------------|-------------|------------|----------|-----------|---------|
| | P/E | Price/Book | Price/Sales | Price/FCF | EV/Sales | EV/EBITDA | EV/EBIT |
| The Procter & Gamble Company (PG-US) | 18.23x | 3.74x | 2.80x | 17.19x | 3.10x | 11.91x | 14.21x |
| Colgate-Palmolive Company (CL-N) | 23.30x | NEG | 3.46x | 17.88x | 3.85x | 14.39x | 16.32x |
| The Estee Lauder Companies Inc. (EL-N) | 47.44x | 11.67x | 4.00x | 28.45x | 4.12x | 21.27x | 26.61x |
| Church & Dwight Co., Inc. (CHP | | | | | | 15.22x | 17.87x |
| The Clorox Company (CLX- | | | | | | 13.09x | 14.99x |
| Kimberly-Clark Corporati | | | | | , | 12.56x | 16.06x |
| L'Oreal (OR-FR) | iblia Ca | ampany | Comp | arablac | .11 | 19.02x | 23.70x |
| Unilever (UNA-AE) | | ompany | Compa | ai abies | 11 | 15.90x | 18.75x |
| Unilever PLC (ULVR-LN) | !!!!! | مرا مسم | 4 ماه مه، | وبرام مأمل | .t.a.a. | 15.90x | 18.76x |
| Average | wiii lea | arn how | to ao t | nis aur | ing | 15.92x | 19.13x |
| Median | | | | | | 15.56x | 18.31x |
| High the | Learnin | ig Sess | ion on S | Septem | iber | 21.27x | 26.61x |
| Low | | .5 -000 | | oop to | | 12.56x | 14.99x |
| | | 27 | th | | | | |



Key P&G Stat

| | | | Key Stats | | | |
|----------|------------------|------------|-----------|----------|-----------|-----------|
| Earnings | Enterprise Value | Book Value | Sales | FCF | EBITDA | EBIT |
| 5.80 | 222579.24 | 55,778.00 | 65,058.00 | 13515.93 | 16,774.21 | 13,954.21 |



Implied Share Price from Valuation Multiples

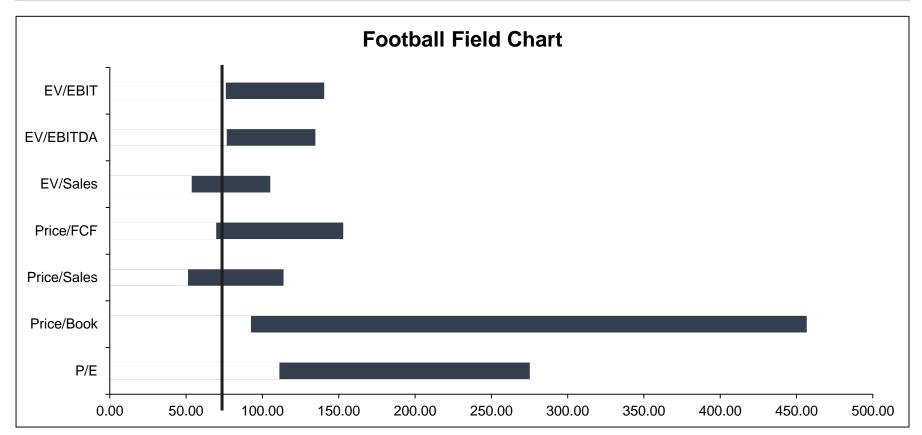
| Implied Share Price | | | | | | | |
|---------------------|--------|------------|-------------|-----------|----------|-----------|---------|
| | P/E | Price/Book | Price/Sales | Price/FCF | EV/Sales | EV/EBITDA | EV/EBIT |
| Average | 155.45 | 225.33 | 79.14 | 101.86 | 79.75 | 99.01 | 98.99 |
| Median | 138.50 | 208.29 | 71.41 | 97.64 | 76.26 | 96.62 | 94.43 |
| High | 275.15 | 456.72 | 113.84 | 152.92 | 105.10 | 134.71 | 140.49 |
| Low | 111.13 | 92.50 | 51.23 | 69.71 | 53.62 | 76.60 | 76.00 |

^{*} Omitted from calculation – deemed to be an outlier

Football Field Chart



| Implied Share Price | | | | | | | |
|---------------------|--------|------------|-------------|-----------|----------|-----------|---------|
| | P/E | Price/Book | Price/Sales | Price/FCF | EV/Sales | EV/EBITDA | EV/EBIT |
| Average | 155.45 | 225.33 | 79.14 | 101.86 | 79.75 | 99.01 | 98.99 |
| Median | 138.50 | 208.29 | 71.41 | 97.64 | 76.26 | 96.62 | 94.43 |
| High | 275.15 | 456.72 | 113.84 | 152.92 | 105.10 | 134.71 | 140.49 |
| Low | 111.13 | 92.50 | 51.23 | 69.71 | 53.62 | 76.60 | 76.00 |



Recommendation: BUY



Based on the valuation conducted I believe that Procter & Gamble Co has a decent upside, with very minimal downside making it an attractive share purchase. With little to no cause for concern given their fundamentals and market standing PG shares are a relatively strong buy.

Sector Appreciation Expected

With an economic slowdown expected, I anticipates the consumer staples sector to appreciate in value investors shift portfolio fo largest consumer staples expect P&G's shares to a well.

Opportunity to buy discount

P&G's shares are trading notion lows representing a great oper to buy PG shares at a discount.

Additionally, P&G's lower financial ratios compared with their peers represents a great opportunity to buy:

- P/E: 17.43 (vs. 89.10 industry and 38.77 sector ratios)
- P/B: 3.46 (vs. 5.12 industry and 24.30 sector ratios)

Recommendation!
Note, investment decisions are not made "because the DCF showed it was undervalued." You need to have additional rationale that might explain why the stock is currently trading at a

discount!

DCF Valuation

Calculated implied share price of \$81.33 is greater than the current se of \$73.45 (10.73% licating that PG shares undervalued

the sensitivity analysis f safety, it was at P&G's stock is derpriced under most

Comparables

P&G's P/E, P/B, EV/EBITDA and EV/EBIT ratios are all lowest compared to their competitors. Assuming P&G performance more closely resembles that of their competitors, P&G's share price is expected to be higher (refer to the Football Field Chart on page 11)

Appendix A - DCF



Discounted Cash Flow



| Procter & Gamble Co Discounted Cash Flow | | | | | | | | | | |
|--|-----------|------------|-----------|------------|-----------|------------|-----------|-----------|-----------|-----------|
| | | | Actual | | | | | Estimates | | |
| YEAR | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| EBIT | 13,817.00 | 14,740.00 | 11,049.00 | 13,441.00 | 13,954.21 | 14,092.38 | 14,233.30 | 14,375.63 | 14,555.33 | 14,737.27 |
| Taxes | | | | | | | | | | |
| Tax rate | 22.75% | 21.06% | 24.75% | 25.00% | 23.11% | 23.33% | 23.33% | 23.33% | 23.33% | 23.33% |
| | | | | | | | | | | |
| Working capital | | | | | | | | | | |
| Total current assets (non-cash) | 18,043.00 | 22,801.00 | 23,059.00 | 26,680.00 | 20,925.00 | 19,315.79 | 19,438.35 | 19,562.13 | 19,718.41 | 19876.64 |
| Total current liabilities (non-debt) | 17,605.00 | 17,769.00 | 18,120.00 | 19,117.00 | 16656.00 | 16,485.40 | 16,314.80 | 16,144.20 | 15,973.60 | 15803.00 |
| Working Capital | 438.00 | 5,032.00 | 4,939.00 | 7,563.00 | 4,269.00 | 2,830.39 | 3,123.55 | 3,417.93 | 3,744.81 | 4,073.64 |
| Change in working captial | | 4,594.00 - | 93.00 | 2,624.00 - | 3,294.00 | - 1,438.61 | 293.16 | 294.38 | 326.88 | 328.83 |
| | | | | | | | | | | |
| Capital expenditures | | | | | | | | | | |
| PP&E | 21,666.00 | 20,268.00 | 22,304.00 | 19,385.00 | 19893.00 | 20,091.93 | 20,292.85 | 20,495.78 | 20,700.74 | 20,907.74 |
| Depreciation | 2,982.00 | 3,141.00 | 3,134.00 | 3,078.00 | 2,820.00 | 3,031.00 | 3,031.00 | 3,031.00 | 3,031.00 | 3,031.00 |
| Change in gross PP&E | | 1,743.00 | 5,170.00 | 159.00 | 3,328.00 | 3,229.93 | 3,231.92 | 3,233.93 | 3,235.96 | 3,238.01 |
| | | | | | | | | | | |
| Non-cash expenses | | | | | | | | | | |
| Depreciation and Amortization | 2,982.00 | 3,141.00 | 3,134.00 | 3,078.00 | 2,820.00 | 3,031.00 | 3,031.00 | 3,031.00 | 3,031.00 | 3,031.00 |
| | | | | | | | | | | |
| Free Cash Flow (FCF) | 13,655.36 | 8,440.14 | 6,371.84 | 10,376.00 | 13,515.93 | 12,044.04 | 10,418.33 | 10,524.22 | 10,627.46 | 10,762.95 |
| PV of FCF | | | | | | 11,374.33 | 9,291.91 | 8,864.42 | 8,453.64 | 8,085.35 |

Important DCF Parameters



| WACC | |
|----------------|--------|
| Risk-free rate | 2.82% |
| Beta | 0.57 |
| Market rate | 10.60% |
| Cost of equity | 7.25% |
| Tax Rate | 23.11% |
| Debt Rate | 2.58% |
| WACC | 5.89% |

| Equity Waterfall | |
|---|------------|
| Entreprise Value | 222,579.24 |
| Cash & Marketable Securities | 15,137.00 |
| Debt | 31,592.00 |
| Preferred Shares | 1,006.00 |
| Minority Interest and other liabilities | 594.00 |
| Pension | |
| Equity Value | 204,524.24 |

| Share Price | |
|-----------------------------|-------------|
| Implied Share Price | \$ 81.33 |
| Current Share Price | \$ 73.45 |
| Current Premium/(Discount) | (9.69%) |
| Maximum Implied Share Price | \$374.46 |
| Minimum Implied Share Price | \$39.11 |

| Gordon Growth Model | |
|----------------------|------------|
| Terminal growth rate | 1.25% |
| Discount Rate | 5.89% |
| Terminal Value | 234,963.77 |
| PV of TV | 176,509.60 |
| PV of FCF's | 46,069.64 |
| Entreprise Value | 222,579.24 |
| TV % of EV | 79.30% |

| Debt to Equity | |
|----------------|------|
| | 116% |

| Other Inputs | |
|-----------------------------|------------|
| Total Equity (Market Value) | 184,697.37 |
| Total Debt | 64,628.00 |
| Stock Ticker | PG |
| Shares Outstanding | 2514.6 |

| Terminal Multiples Method | | | |
|---------------------------|------------|------------|------------|
| Terminal EBIT multiple | 14.00x | 16.00x | 18.00x |
| Termainal Value | 206,321.78 | 235,796.32 | 265,270.86 |
| Implied Growth rate | 0.64% | 1.27% | 1.76% |
| PV of TV | 154,993.15 | 177,135.03 | 199,276.90 |
| Entreprise Value | 201,062.79 | 223,204.67 | 245,346.54 |
| TV % of EV | 77.09% | 79.36% | 81.22% |
| Equity Value | 183,007.79 | 205,149.67 | 227,291.54 |
| Implied Share Price | \$ 72.78 | \$ 81.58 | \$ 90.39 |

| | | Discount Rate | | | | | | | | | | | |
|----------------------|--------|---------------|----------|---------|---------|---------|---------|---------|--|--|--|--|--|
| | | 4% | 5% | 6% | 7% | 8% | 9% | 10% | | | | | |
| | 12.00x | \$69.91 | \$66.69 | \$63.64 | \$60.75 | \$58.01 | \$55.42 | \$52.96 | | | | | |
| Terminal EBIT | 14.00x | \$79.55 | \$75.87 | \$72.40 | \$69.11 | \$65.99 | \$63.04 | \$60.23 | | | | | |
| multiple | 16.00x | \$89.18 | \$85.06 | \$81.16 | \$77.46 | \$73.97 | \$70.65 | \$67.51 | | | | | |
| | 18.00x | \$98.81 | \$94.24 | \$89.92 | \$85.82 | \$81.94 | \$78.27 | \$74.79 | | | | | |
| | 20.00x | \$108.45 | \$103.43 | \$98.67 | \$94.18 | \$89.92 | \$85.89 | \$82.07 | | | | | |

Legend
Discount
Inconclusive
Premium

Balance Sheet - Assets



| Procter & Gamble Co Balance Sheet | | | | | | | | | | | | | |
|--|----------|--------------|----------------|---------------|--------------|-----------|------------|--------------|------------------|----------------|-------------|----------------|-------------|
| | Actual - | | | | | Trend | Growth/Avg | | Estimates | | | | |
| YEAR | | 2013 | 2014 | 2015 | 2016 | 2017 | | | 2018 | 2019 | 2020 | 2021 | 2022 |
| CURRENT ASSETS | | | | | | | | | | | | | |
| Cash and Cash Equivalents, at Carrying Value | \$ | 5,947.00 \$ | 6,845.00 \$ | 8,558.00 \$ | 7,102.00 \$ | 5,569.00 | | | \$ 6,046.92 | 2 \$ 6,108.39 | \$ 6,170.46 | \$ 6,248.44 | \$ 6,327.37 |
| Cash as % Net Sales | | 7.4% | 8.5% | 12.1% | 10.9% | 8.6% | | | | | | | |
| Cash as % Net Earnings from Ops | | 54.21% | 60.48% | 103.27% | 70.83% | 54.63% | | 56.47 | 56.479 | 6 56.47% | 56.47% | 56.47% | 56.47% |
| Available-for-sale Securities | \$ | - \$ | 4,767.00 \$ | 2,128.00\$ | 6,246.00 \$ | 9,568.00 | | | \$ 6,079.35 | \$ \$ 6,079.35 | \$ 6,079.35 | \$ 6,079.35 | \$ 6,079.35 |
| Securities as % of Investment Income | | | 2.12% | 7.00% | 2.91% | 1.79% | | 2.27 | % 2.2 7 9 | 6 2.27% | 2.27% | 2.27% | 2.27% |
| Accounts Receivable | \$ | 6,508.00 \$ | 4,861.00 \$ | 6,386.00 \$ | 4,373.00 \$ | 4,594.00 | | | \$ 4,843.26 | \$ 4,891.69 | \$ 4,940.61 | \$ 5,002.37 | \$ 5,064.90 |
| AR as % Net Sales | | | 6.04% | 9.03% | 6.70% | 7.06% | | 7.39 | 7.399 | 6 7.39% | 7.39% | 7.39% | 7.39% |
| INVENTORIES | | | | | | | | | | | | | |
| Inventory, Raw Materials and Supplies, Gross | \$ | 1,704.00 \$ | 1,392.00 \$ | 1,742.00 \$ | 1,188.00 \$ | 1,308.00 | | | | | | | |
| Inventory, Work in Process, Gross | \$ | 722.00 \$ | 550.00 \$ | 684.00 \$ | 563.00 \$ | 529.00 | | | | | | | |
| Inventory, Finished Goods, Gross | \$ | 4,483.00 \$ | 3,512.00 \$ | 4,333.00 \$ | 2,965.00 \$ | 2,787.00 | | | | | | | |
| Inventory, Net | \$ | 6,909.00 \$ | 5,454.00 \$ | 6,759.00 \$ | 4,716.00 \$ | 4,624.00 | | | \$ 4,670.15 | \$ 4,716.85 | \$ 4,764.02 | \$ 4,823.57 | \$ 4,883.86 |
| Inventory, Net as % COGS | | 17.28% | 13.30% | 18.24% | 14.33% | 14.21% | | | 14.259 | 6 14.25% | 14.25% | 14.25% | 14.25% |
| Deferred Tax Assets, Net of Valuation Allowance, | , | | | | | | | | | | | | |
| Current | \$ | 948.00 \$ | 1,356.00 \$ | 1,092.00 \$ | 1,507.00 \$ | - | | \$ 980.60 | \$ 980.6 | 0\$ 980.60 | \$ 980.60 | \$ 980.60 \$ | 980.60 |
| Prepaid Expense and Other Assets, Current | \$ | 3,678.00 \$ | 2,853.00 \$ | 3,845.00 \$ | 2,653.00 \$ | 2,139.00 | | | \$ 2,742.43 | \$ \$ 2,769.85 | \$ 2,797.55 | \$ 2,832.52 | \$ 2,867.93 |
| Prepaid Expense as % Op Expenses | | 5.55% | 4.34% | 6.44% | 5.12% | 4.19% | | 5.13 | % | | | | |
| Prepaid Expense as % Net Sales | | 4.59% | 3.54% | 5.43% | 4.06% | 3.29% | | 4.18 | 4.189 | 6 4.18% | 4.18% | 4.18% | 4.18% |
| Disposal Group, Including Discontinued | | | | | | | | | | | | | |
| Operation, Assets, Current | \$ | - \$ | 3,510.00 \$ | 2,849.00 \$ | 7,185.00 \$ | - | | | | | | | |
| Current Assets | \$ | 23,990.00 \$ | 29,646.00 \$ | 31,617.00 \$ | 33,782.00 \$ | 26,494.00 | | | \$25,362.7 | 1 \$25,546.74 | \$25,732.59 | \$25,966.84 | \$26,204.01 |
| Current Assets % Net Sales | | 29.9% | 36.8% | 44.7% | 51.7% | 40.7% | | 40.8 | % 38.79 | 6 38.6% | 38.5% | 38.4% | 38.2% |
| Property, Plant and Equipment, Net | \$ | 21,666.00 \$ | 20,268.00 \$ | 22,304.00 \$ | 19,385.00 \$ | 19,893.00 | | | \$20,091.93 | 3 \$20,292.85 | \$20,495.78 | \$20,700.74 | \$20,907.74 |
| PP&E as % Depreceiation Expense | | 13.8% | 15.5% | 14.1% | 15.9% | 14.2% | | | | | | | |
| % Change in PP&E | | | -6.45% | 10.05% | -13.09% | 2.62% | | | | | | | |
| % Change in Net Earnings from Ops | | | 3.3% | -26.8% | 21.0% | 1.7% | | | | | | | |
| Goodwill | \$ | 55,188.00 \$ | 47,316.00 \$ | 53,704.00 \$ | 44,350.00 \$ | 44,699.00 | | | \$45,000.00 | \$45,000.00 | \$45,000.00 | \$45,000.00 | \$45,000.00 |
| Intangible Assets, Net (Excluding Goodwill) | \$ | 31,572.00 \$ | 26,829.00 \$ | 30,843.00 \$ | 24,527.00 \$ | 24,187.00 | | \$ 27,591.60 | \$27,591.60 | \$27,591.60 | \$27,591.60 | \$27,591.60 | \$27,591.60 |
| Other Assets, Noncurrent | \$ | 6,847.00 \$ | 5,436.00 \$ | 5,798.00 \$ | 5,092.00 \$ | 5,133.00 | | \$ 5,661.20 | \$ 5,661.20 | 5,661.20 | \$ 5,661.20 | \$ 5,661.20 \$ | 5 5,661.20 |
| Assets | 139 | 9,263.00 \$1 | .29,495.00 \$1 | .44,266.00 12 | 27,136.00 12 | 20,406.00 | | | 123,707.4 | 4 124,092.39 | 124,481.17 | 124,920.38 | 125,364.55 |

Balance Sheet – Liabilities and Shareholders' Equity



| Procter & Gamble Co Balance Sheet | | | | | | | | | | | | | | |
|--|----|----------------|-------------|--------------|--------------|--------------|-------|-------------|-------------|-------------|----------------|-------------|-------------|--|
| | | | | Actual | | | Trend | Growth/Avg | Estimates | | | | | |
| YEAR | | 2013 | 2014 | 2015 | 2016 | 2017 | | | 2018 | 2019 | 2020 | 2021 | 2022 | |
| CURRENT LIABILITIES | | | | | | | | | | | | | | |
| Accounts Payable, Current | \$ | 8,777.00 \$ | 8,257.00 | \$ 8,461.00 | \$ 9,325.00 | \$ 9,632.00 | | | \$ 9,909.80 | \$10,187.60 | \$10,465.40 | \$10,743.20 | \$11,021.00 | |
| Accrued Liabilities, Current | \$ | 8,828.00 \$ | 8,325.00 | \$ 8,999.00 | \$ 7,449.00 | \$ 7,024.00 | | | \$ 6,575.60 | \$ 6,127.20 | \$ 5,678.80 | \$ 5,230.40 | \$ 4,782.00 | |
| Disposal Group, Including Discontinued | | | | | | | | | | | | | | |
| Operation, Liabilities, Current | \$ | - \$ | 1,187.00 | \$ 660.00 | \$ 2,343.00 | \$ - | | | \$ - | \$ - | \$ - | \$ - | \$ - | |
| Debt, Current | \$ | 12,432.00 \$ | 12,021.00 | 15,606.00 | \$11,653.00 | \$13,554.00 | | | \$11,770.97 | \$11,888.68 | \$12,007.57 | \$12,157.66 | \$12,309.63 | |
| Current Debt as % COGS | | 31.1% | 29.3% | 42.1% | 35.4% | 41.7% | | 35.9% | 35.9% | 35.9% | 35.9% | 35.9% | 35.9% | |
| Liabilities, Current | \$ | 30,037.00 \$ | 29,790.00 | \$33,726.00 | \$30,770.00 | \$30,210.00 | | | \$28,256.37 | \$28,203.48 | \$ \$28,151.77 | \$28,131.26 | \$28,112.63 | |
| Current Liabilities as % Net Sales | | | | | | | | | | | | | | |
| Long-term Debt, Excluding Current Maturities | \$ | 19,111.00 \$ | 18,329.00 | \$19,811.00 | \$18,945.00 | \$18,038.00 | | \$18,846.80 | \$18,846.80 | \$18,846.80 | \$18,846.80 | \$18,846.80 | \$18,846.80 | |
| Deferred Tax Liabilities, Net, Noncurrent | \$ | 10,827.00 \$ | 9,531.00 | \$10,218.00 | \$ 9,113.00 | \$ 8,126.00 | | | \$ 7,544.00 | \$ 6,962.00 | \$ 6,380.00 | \$ 5,798.00 | \$ 5,216.00 | |
| Other Liabilities, Noncurrent | \$ | 10,579.00 \$ | 8,795.00 | \$10,535.00 | \$10,325.00 | \$ 8,254.00 | | \$ 9,697.60 | \$ 9,697.60 | \$ 9,697.60 | \$ 9,697.60 | \$ 9,697.60 | \$ 9,697.60 | |
| Liabilities | \$ | 70,554.00 \$ | 66,445.00 | \$74,290.00 | \$69,153.00 | \$64,628.00 | | | \$64,344.77 | \$63,709.88 | \$63,076.17 | \$62,473.66 | \$61,873.03 | |
| SHAREHOLDERS' EQUITY | | | | | | | | | | | | | | |
| Common Stock, Value, Issued | \$ | 4,009.00 \$ | 4,009.00 | \$ 4,009.00 | \$ 4,009.00 | \$ 4,009.00 | | | | | | | | |
| Additional Paid in Capital | \$ | 63,538.00 \$ | 63,852.00 | 63,911.00 | \$63,714.00 | \$63,641.00 | | | | | | | | |
| | | | | | | | | | | | | | | |
| Reserve for ESOP Debt Retirement | \$ | (1,352.00) \$ | (1,320.00) | \$(1,340.00) | \$(1,290.00) | \$(1,249.00) | | | | | | | | |
| Accumulated Other Comprehensive Income | | | | | | | | | | | | | | |
| (Loss), Net of Tax | \$ | (7,499.00) (1 | 2,780.00) | \$(7,662.00) | (15,907.00) | (14,632.00) | | | | | | | | |
| Treasury Stock, Value | \$ | (71,966.00) (7 | 7,226.00) (| (75,805.00) | (82,176.00) | (93,715.00) | | | | | | | | |
| Retained Earnings (Accumulated Deficit) | \$ | 80,197.00 \$ | 84,807.00 | \$84,990.00 | \$87,953.00 | \$96,124.00 | | | | | | | | |
| Stockholders' Equity Attributable to | | | | | | | | | | | | | | |
| Noncontrolling Interest | \$ | 645.00 \$ | 631.00 | \$ 762.00 | \$ 642.00 | \$ 594.00 | | | | | | | | |
| Stockholders' Equity, Including Portion | | | | | | | | | | | | | | |
| Attributable to Noncontrolling Interest | | | | | | | | | | | | | | |
| Preferred Stock, Stated Value, Issued | \$ | 1,137.00 \$ | 1,077.00 | \$ 1,111.00 | \$ 1,038.00 | \$ 1,006.00 | | | | | | | | |
| Total Equity | \$ | 68,709.00 \$ | 63,050.00 | \$69,976.00 | \$57,983.00 | \$55,778.00 | | | | | | | | |
| Total Liabilities and Equity | \$ | 139,263.00 1 | 29,495.00 | 144,266.00 | 127,136.00 | 120,406.00 | | | | | | | | |

Income Statement



| Procter & Gamble Co Income Statement | | | | | | | | | | | | |
|--|--------------|-----------------|---------------|--------------|-----------|--------|------------|-----------|-----------|-----------|-----------|-----------|
| | | | Actual | | | Trend | Growth/Avg | Estimates | | | | |
| YEAR | 2013 | 2014 | 2015 | 2016 | 2017 | | | 2018 | 2019 | 2020 | 2021 | 2022 |
| Net Sales | \$ 80,116.00 | \$ 80,510.00 | 70,749.00 \$ | 65,299.00 \$ | 65,058.00 | / | | 65,545.94 | 66,201.39 | 66,863.41 | 67,699.20 | 68,545.44 |
| Net Sales Change over time | | | | | | | | | | | | |
| Cost of Goods Sold | \$ 39,991.00 | \$ 41,010.00 \$ | 37,056.00 \$ | 32,909.00 \$ | 32,535.00 | | | 32,772.97 | 33,100.70 | 33,431.70 | 33,849.60 | 34,272.72 |
| COGS as % Net Sales | 49.92% | 50.94% | 52.38% | 50.40% | 50.01% | | 50.73% | 50.00% | 50.00% | 50.00% | 50.00% | 50.00% |
| Selling, General and Administrative Expense | \$ 26,000.00 | \$ 24,760.00 \$ | 20,616.00 \$ | 18,949.00 \$ | 18,568.00 | | | 18,680.59 | 18,867.40 | 19,056.07 | 19,294.27 | 19,535.45 |
| SG&A as % Net Sales | 32.45% | 30.75% | 29.14% | 29.02% | 28.54% | | 28.90% | 28.50% | 28.50% | 28.50% | 28.50% | 28.50% |
| Venezuela Deconsolidation Charge | \$ 308.00 | \$ - \$ | 2,028.00 \$ | - \$ | - | | | \$ | - \$ | - \$ | - \$ | - |
| Operating Income (EBIT) | \$ 13,817.00 | \$ 14,740.00 \$ | 11,049.00 \$ | 13,441.00 \$ | 13,954.21 | | | 14,092.38 | 14,233.30 | 14,375.63 | 14,555.33 | 14,737.27 |
| EBIT as % Net Sales | 17.25% | 18.31% | 15.62% | 20.58% | 21.45% | | | 21.50% | 21.50% | 21.50% | 21.50% | 21.50% |
| Interest Expense | \$ 667.00 | \$ 710.00 \$ | 626.00 \$ | 579.00 \$ | 465.00 | | | 565.13 | 564.07 | 563.04 | 562.63 | 562.25 |
| Interest Expense as % Current Liability | 2.22% | 2.38% | 1.86% | 1.88% | 1.54% | | 1.98% | 2.00% | 2.00% | 2.00% | 2.00% | 2.00% |
| Interest Expense as % Total Liability | 0.95% | 1.07% | 0.84% | 0.84% | 0.72% | \ \ | 0.88% | | | | | |
| Investment Income, Interest | \$ 88.00 | \$ 101.00 \$ | 149.00 \$ | 182.00 \$ | 171.00 | | \$ 138.20 | 138.20 | 138.20 | 138.20 | 138.20 | 138.20 |
| Other Nonoperating Income (Expense) | \$ 941.00 | \$ 206.00 \$ | 440.00 \$ | 325.00 \$ | (404.00) | - | \$ 301.60 | 301.60 | 301.60 | 301.60 | 301.60 | 301.60 |
| Earnings From Continuing Ops Before Tax | \$ 14,179.00 | \$ 14,337.00 | 11,012.00 \$ | 13,369.00 \$ | 13,256.21 | | | 13,967.05 | 14,109.03 | 14,252.40 | 14,432.50 | 14,614.82 |
| EBT as % Net Sales | | | | | | | | | | | | |
| Income Taxes on Continuing Operations | \$ 3,226.00 | \$ 3,019.00 \$ | 2,725.00 \$ | 3,342.00 \$ | 3,063.00 | \ \ | | 3,258.77 | 3,291.90 | 3,325.35 | 3,367.37 | 3,409.91 |
| Tax Rate | 22.8% | 21.1% | 24.7% | 25.0% | 23.1% | | 23.3% | 23.3% | 23.3% | 23.3% | 23.3% | 23.3% |
| Net Earnings from Continuing Operations | \$ 10,953.00 | \$ 11,318.00 \$ | 8,287.00 \$ | 10,027.00 \$ | 10,193.21 | | | 10,708.27 | 10,817.13 | 10,927.05 | 11,065.13 | 11,204.91 |
| Net Earnings/(Loss) from Discontinued Operations | \$ 449.00 | \$ 467.00 \$ | (1,143.00) \$ | 577.00 \$ | 5,217.00 | | | | | | | |
| Net Earnings | \$ 11,402.00 | \$ 11,785.00 \$ | 7,144.00 \$ | 10,604.00 \$ | 15,410.21 | | | | | | | |
| Interest | \$ 90.00 | \$ 142.00 \$ | 108.00 \$ | 96.00 \$ | 85.00 | | | | | | | |
| Net Earnings Attributable to Procter & Gamble | \$ 11,312.00 | \$ 11,643.00 \$ | 7,036.00 \$ | 10,508.00 \$ | 15,325.21 | | | | | | | |
| BASIC NET EARNINGS PER COMMON SHARE | | | | | | | | | | | | |
| Share | 3.87 | 4.03 | 2.92 | 3.59 | 3.79 | | | | | | | |
| Disposal of Discontinued Operations, Net of Tax, | 0.17 | 0.16 | -0.42 | 0.21 | 2.01 | | | | | | | |
| Earnings Per Share, Basic | 4.04 | 4.19 | 2.50 | 3.80 | 5.80 | | | | | | | |
| DILUTED NET EARNINGS PER COMMON SHARE | | | | | | | | | | | | |
| Share | 3.71 | 3.86 | 2.84 | 3.49 | 3.69 | - | | | | | | |
| Disposal of Discontinued Operations, Net of Tax, | 0.15 | 0.15 | -0.40 | 0.20 | 1.90 | _/ | | | | | | |
| Earnings Per Share, Diluted | 3.86 | 4.01 | 2.44 | 3.69 | 5.59 | ~/ | | | | | | |
| Dividends, Per Common Share | \$ 2.29 | \$ 2.45 | 2.59 | 2.66 | 2.70 | | | | | | | |

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Conclusion



Thank you for coming out to the Information Session!

Our first Learning Session will be held on:

Thursday September 20th at 6:10pm in BA 2139

Please leave us your name and e-mail on the paper provided so we can add you to our mailing list!

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Questions and Comments?



