IOI ChartBook – Procter & Gamble (PG)

The news is good – too bad it's already priced into the stock

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Three Things You Should Know About P&G

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- **P&G is making material improvements to its operating performance through divestiture of non-core brands, work-force reductions, and supply chain restructuring.**

  There is no doubt that the restructuring projects and focus on cash returns have positively impacted PG's financial performance. The company has delivered a step change in Owners' Cash Profit (OCP) margins over the last 2 years. If this step change proves durable, it will be the third one in P&G's recent history and will represent a quadrupling of the efficiency with which P&G converts revenues to profits since the 1990s.

- **P&G managers claim that the company will return $70Bn to shareholders over the next 4 years, but actual shareholder benefits will likely be less.**

  "Seventy billion dollars" is a big number. We think it is meant to be a shock-and-awe figure to boost stakeholder confidence in the company's new strategic direction; however, the $25 billion of this figure slated to be in the form of stock repurchases is suspect to us. Over the last three years, P&G has bought back 214 million shares at a total cost of $16.6 billion. At this rate, the four-year buyback total would be over $22 billion, so the $25 billion figure means increasing buyback activity by $1 billion per year.

  The important thing to realize, however, is that simultaneous to its buy-back programs, it has also issued 180 million shares in executive compensation. From a shareholder's perspective, this is akin to taking 2.14 steps forward and 1.80 steps back. The increased share repurchase may marginally aid shareholders as long as it is not made simultaneous to increasing share compensation to employees.

  The remainder of P&G's shock-and-awe shareholder package will be in the form of dividends and share retirements. We do not anticipate a material change to P&G dividend policy and the retirements are related to transactions already announced.

- **P&G has the potential to increase operational performance from here, but these potential improvements have largely been factored into the current stock price.**

  The increase in profitability combined with slightly higher activity designed to boost shareholder returns is a good sign. However, from the vantage point of our valuation methodology, it looks like the market has already acted on this information. Six of our eight valuation scenarios lie at a price below the present market price and the ultimate best-case valuation scenario for P&G would represent the company firing on all cylinders in a way it never has before.

Valuation Overview

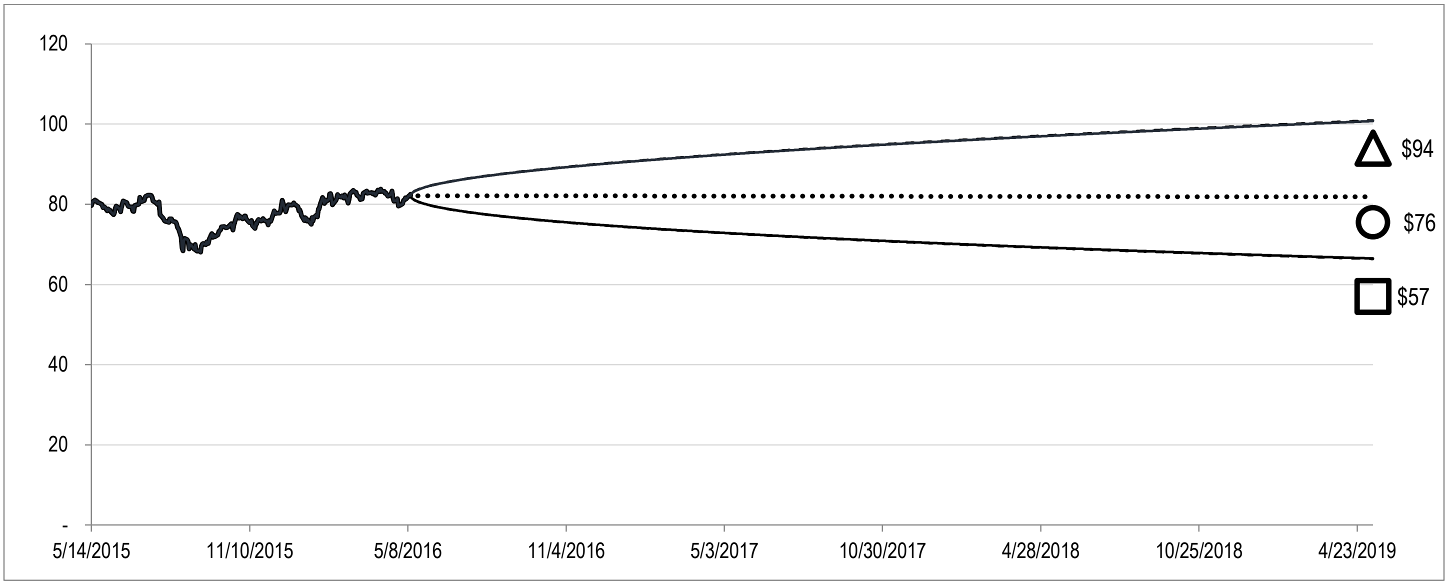


Figure 1. Source: YCharts, CBOE, IOI Analysis. Geometrical markers show IOI's best-case (triangle), worst-case (square), and equally-weighted average value (circle). Cone-shaped region indicates option market's projection of Apple's future stock price.

	IOI Best Case	IOI Worst Case	Historical Median
Year 1-5 Average Revenue Growth	0%	-2%	0%, 1% (5, 10-year)
Year 1-5 Average Profitability	19%	15%	13%, 14% (5, 10-year)
Year 6-10 Cash Flow Growth	8%	3%	0%

Our profitability assumptions may look high, but the trailing twelve-month OCP margin is over 17% and there are reasons to believe that higher levels are possible. See also the section entitled Profitability below.

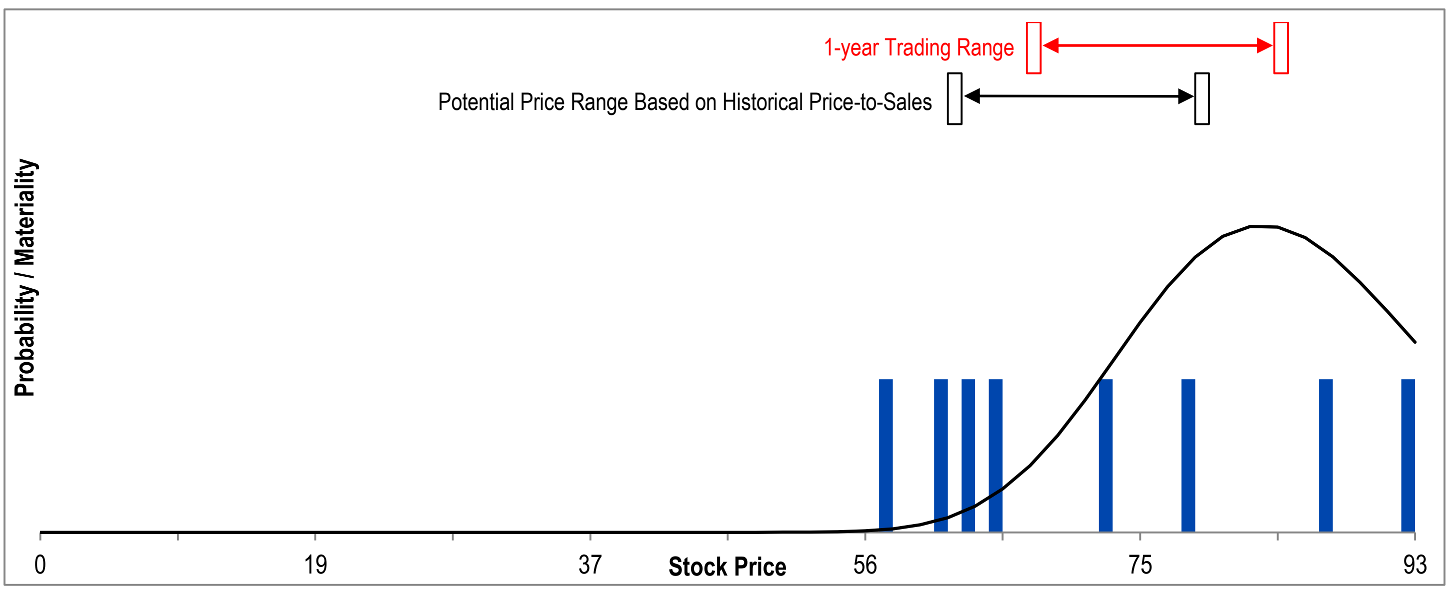


Figure 2. Source: CBOE, IOI Analysis

Other than the highest ($94 / share) and second highest ($88 / share) scenaios, all our valuation scenarios lie to the left of the present market price of $83 / share. While our model indicates the shares are roughly fairly valued now, clearly, risks lies to the downside in our opinion. The highest valuation estimate assumes average revenue growth of 4% per year after the divestments of FY 2016 are in the books (P&G's fiscal year ends on June 30, 2016), OCP margin averaging 19% (which is a material improvement from present and historical levels), and medium-term cash flow growth of 8% per year. All of these assumptions represent very optimistic best-case scenarios.

Valuation Drivers

Revenue Growth

P&G's restructuring program has been aggressive in its paring of non-core brands, with the firm jettisoning over 100 of these lines over the past few years. We think these divestitures make good strategic sense, especially considering that revenues are down only about 10% in return for about $6 billion of extra cash in its coffers.

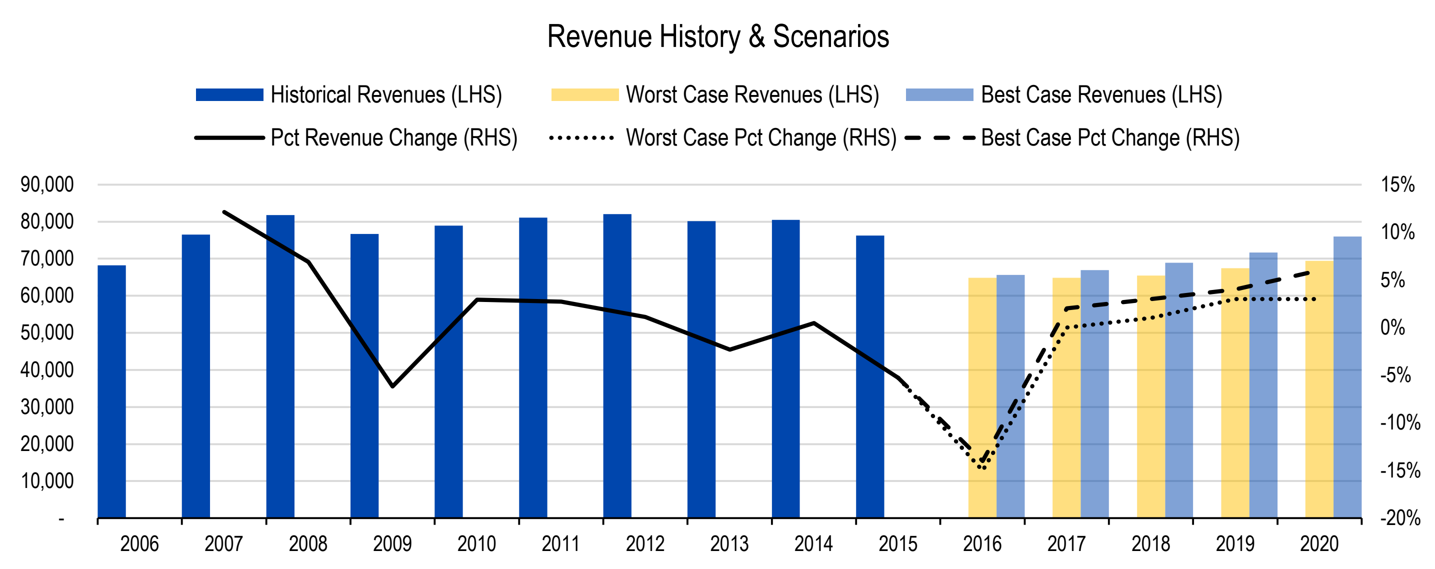


Figure 3. Source: Company Statements, IOI Analysis

Best case revenue projections assume some fairly large strategic initiatives domestically and in emerging markets. We will publish another report detailing what possibilities exist for P&G in several key markets. Worst-case revenue growth simply assumes that divestments cease and present product lines enjoy normal organic growth. We do not bake in a recession in our worst-case assumptions.

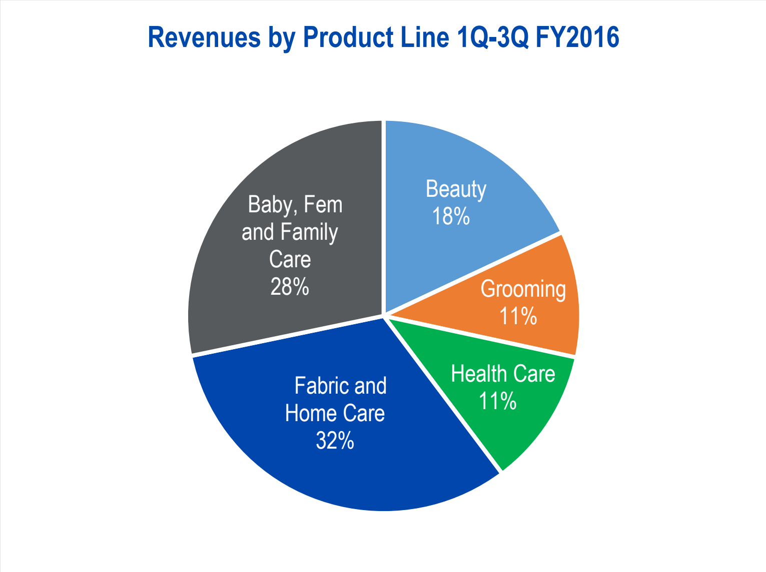


Figure 4. Source: Company Statements, IOI Analysis

P&G Brands

Fabric & Home Care: Tide, Swiffer, Cascade, Downy, Dawn, Gain, Ariel.

Baby, Feminine and Family Care: Charmin, Luvs, Bounty, Pampers, Tampax, Always.

Beauty, Hair and Personal Care: Clairol, Head & Shoulders, Nice 'n Easy, Secret, CoverGirl, Max Factor, Olay, Vidal Sassoon, Dolce & Gabbana, Old Spice, Ivory, Wella, Pantene, HUGO BOSS.

Grooming: Gillette, Venus, Braun.

Health Care: Metamucil, Pepto-Bismol, Vicks, Prilosec, Clearblue, Crest, Oral-B, Fixodent, Scope.

P&G sells common household items – laundry soap, razors, shampoo, cough drops – at a premium price, an untenable business model if not for two interrelated factors: innovation and branding. The essence of branding is to demonstrate increased functionality either in terms of product efficacy or quality, or packaging innovation and link that functionality with the product's name in the consumer's mind. During recessions, some percentage of brand users will trade down to generic or store-brand products, but the assumption has always been that as economic conditions improve, these users would trade back up to the brand. The singular nature of the 2008-2009 recession and its aftermath is such that this bounce-back has not been as strong as in prior cycles; a fact that contributes to the flatness of the revenue columns in Figure 3. European supermarket Lidl – which is planning an expansion into the US and sells only store brands, is the logical continuation of the longer trend toward store brands and is a threat not only to Kroger, but to brand-selling companies like P&G as well. On the innovation side, since the introduction of Swiffer in 1999, P&G's product pipeline has been relatively weak. This dearth of new good ideas has also been a contributing factor to P&G's tepid growth over the past few years.

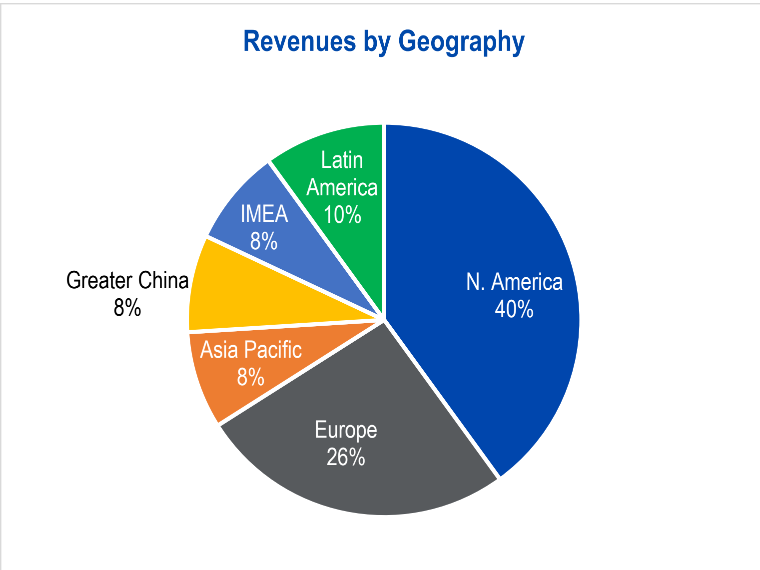


Figure 5. Source: Company Statements, IOI Analysis

Foreign Exchange

Only 40% of P&G's revenue is generated in the US. The strength in the US Dollar over the past few years has also contributed to the top-line weakness mentioned above. We do not consider this foreign exchange exposure to be material to P&G's valuation because it has natural hedges in its overseas branches (i.e., revenues and costs are denominated in the same currency).

Foreign Pricing

One issue with which P&G has struggled is its entry into foreign markets. In the attempt to gain market share in emerging markets, it has moved away from a premium pricing strategy and prices closer to market competitors. This strategy eases its entry into emerging markets but fails to differentiate its products as aspirational ones; it also has contributed to the more tepid top-line growth seen in figure 3.

Valuation Driver analysis continued on next page.

Profitability

Owners' Cash Profits (OCP), a measure similar to Buffett's Shareholder Earnings, is IOI's preferred measure of profitability.

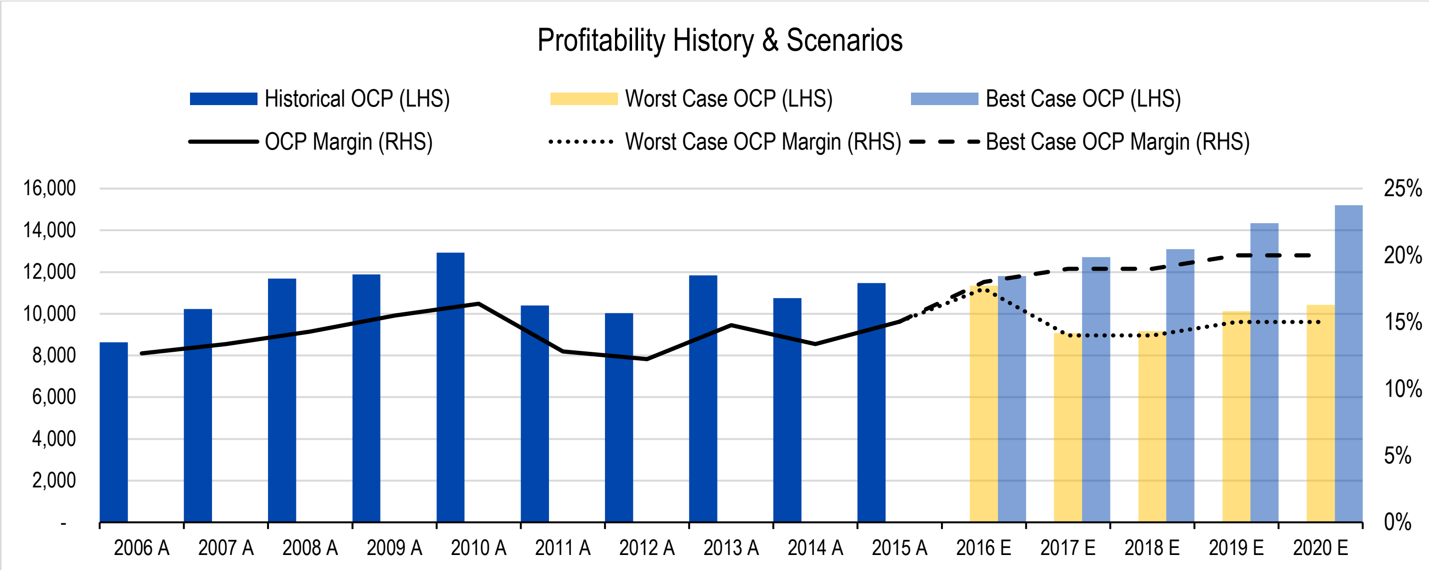


Figure 6. Source: Company Statements, IOI Analysis

Judging by the first three quarters of the year, we believe that P&G's full-year profit margin for FY 2016 will mark an historical high.

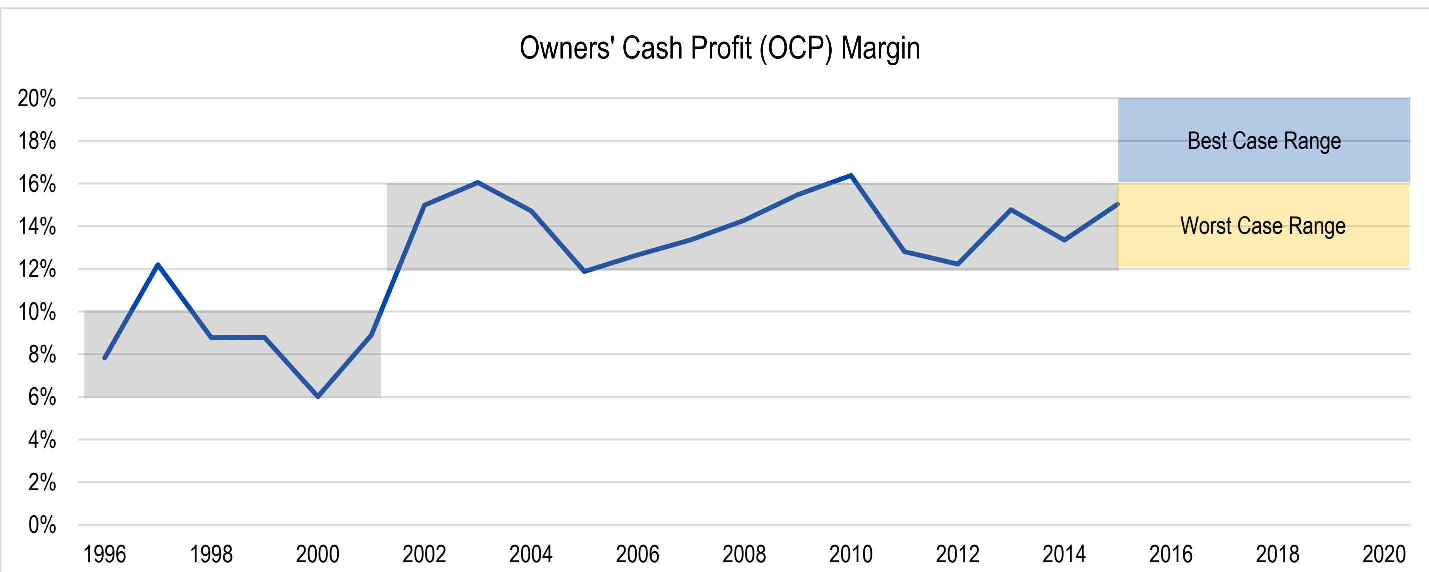


Figure 7. Source: Company Statements, IOI Analysis

The firm has shown two distinct profit profiles; high-single digit OCP margins in the 1990s and mid-double digit OCP margins since the turn of the century. Over the past two years, the firm has been able to find even more efficiencies, and we think that there is room for this trend toward increased profitability to continue. In the worst case, we think the firm will be able to generate profitability in-line with present levels.

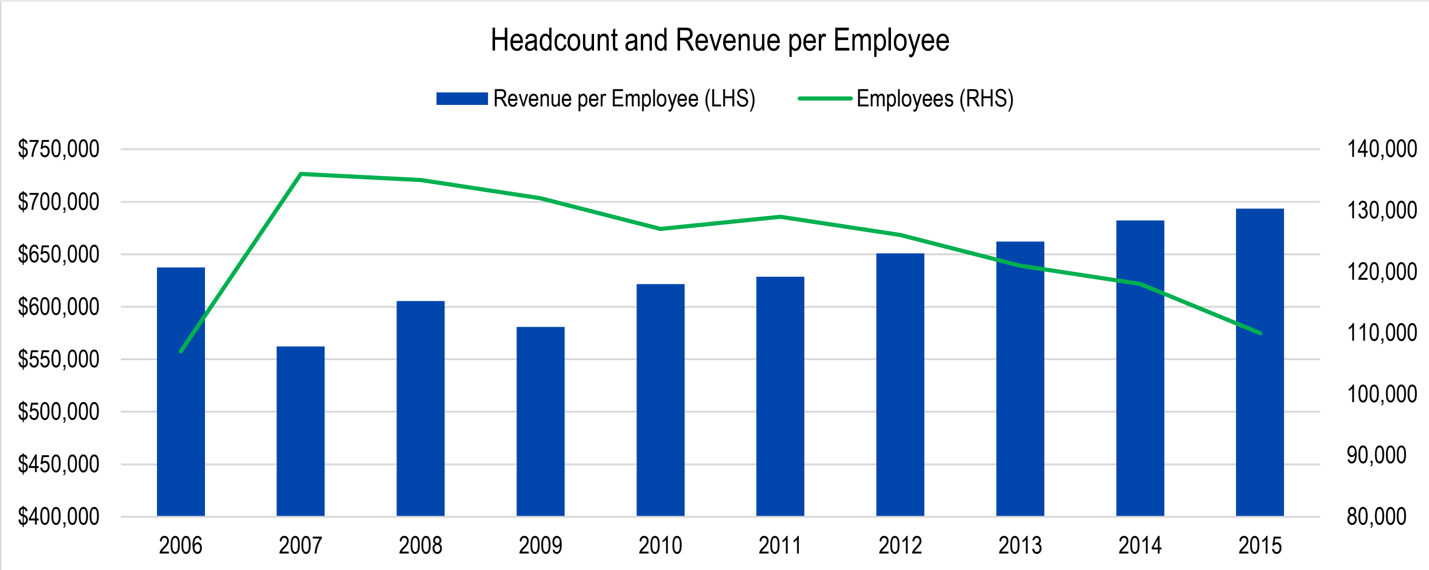


Figure 8. Source: Company Statements, IOI Analysis

Part of the reason for the increased profitability has been a reduction in headcount. The 2007 spike in figure 8 represents the employees taken on in the acquisition of Gillette, the core of P&G's grooming business. Note that P&G's 2015 headcount was roughly back down to the same level at the time before the Gillette acquisition.

Investment Level

Expansionary Cash Flow is IOI's measure of investment spending net of asset sales and divestments.

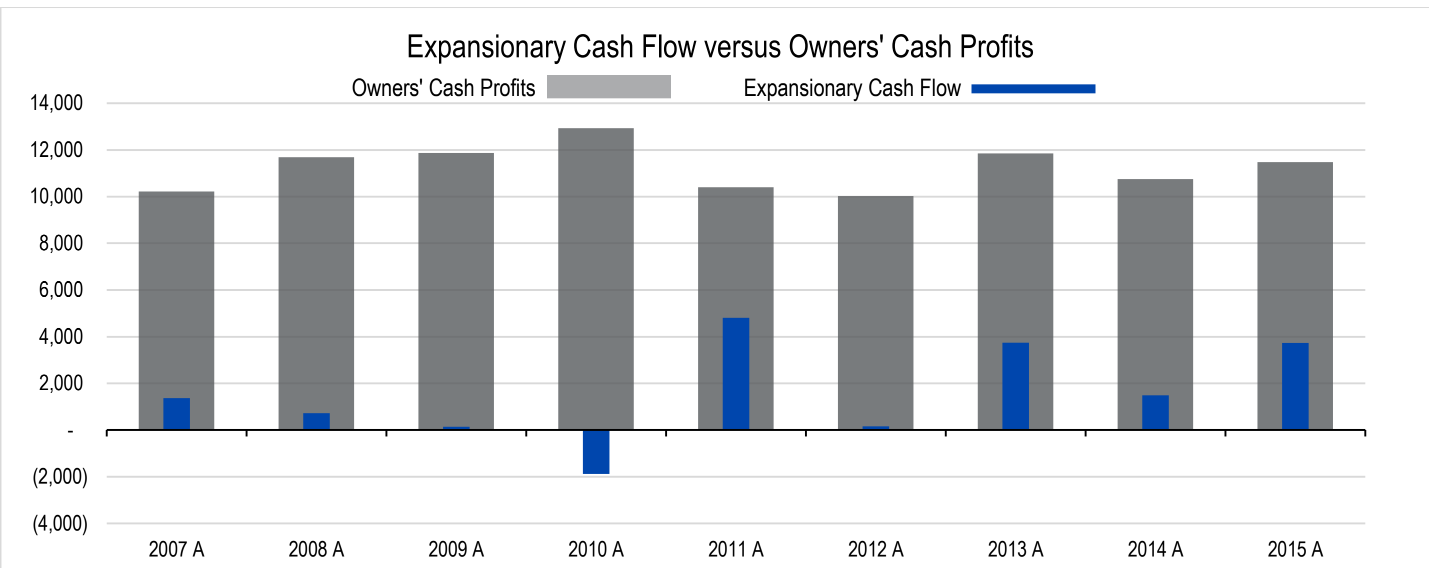


Figure 9. Source: Company Statements, IOI Analysis

P&G has been divesting brands, so viewing the company's investments during this period gives the inaccurate impression that P&G's business requires little investment. Net Expansionary Cash Flow as a percentage of profits during this period averages only 14%. Note that for clarity's sake, we have chosen not to display the enormous expenditure for the Gillette acquisition in 2006.

To gain a true picture of P&G's investment spending needs, then, we took a look at a longer time period. See the following page for the graph.

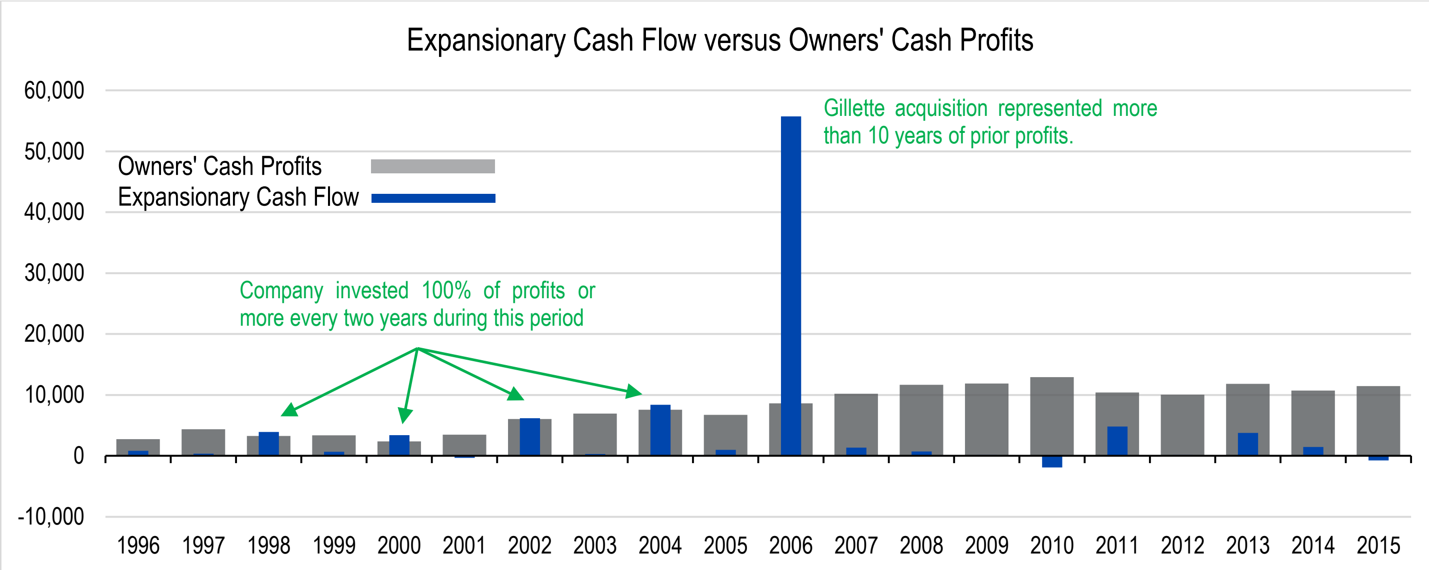


Figure 10. Source: Company Statements, IOI Analysis

If we look at ECF as a percentage of OCP over this entire period – including Gillette in 2006 – we find an average of 56% (i.e., on average, the company spent more than half its profits on investments). Excluding 2006, that proportion falls to 23%. Considering P&G's present position and investment opportunities, we have chosen to model investment spending as 20% of profits in the near-term.

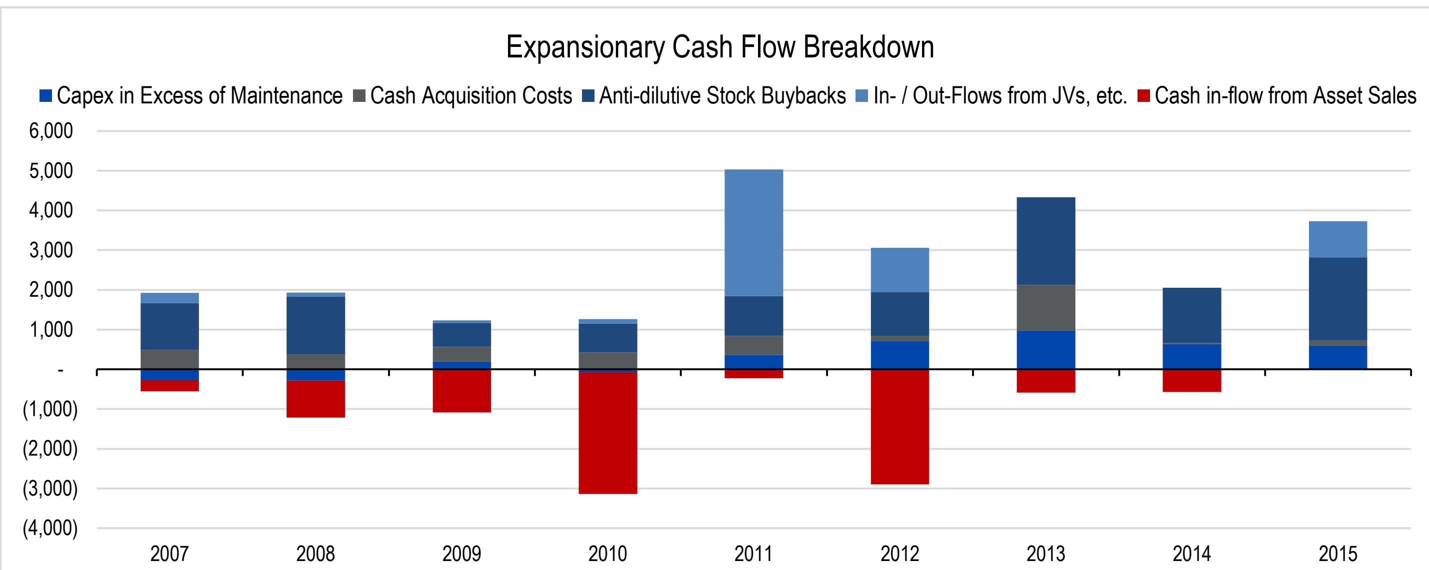


Figure 11. Source: Company Statements, IOI Analysis

Note that the majority of investment spending over the last four years has been cash spent on soaking up dilution from executive compensation. This might be issuance of stock to entice employees to take early retirement

Investment Efficacy

Corporate investments lead to profit growth. IOI measures profit growth versus the standard yardstick of nominal GDP growth to assess the efficacy of the company's past investments.

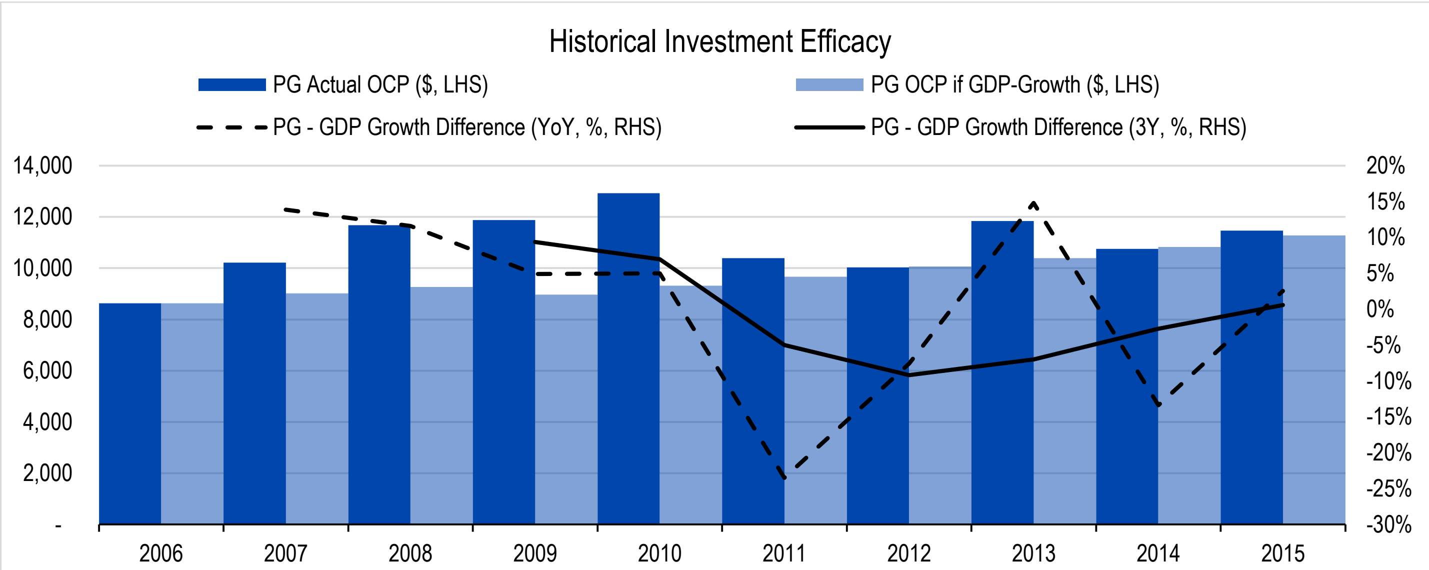


Figure 12. Source: Company Statements, Bureau of Economic Analysis, IOI Analysis

P&G's growth was much better than the economy at large until 2011. Over this entire period, its growth has averaged out to be about the same as the economy at large.

Free Cash Flow to Owners

Free Cash Flow to Owners (FCFO) is the metric IOI uses to value companies. It equals Owners' Cash Profits less Net Expansionary Cash Flow.

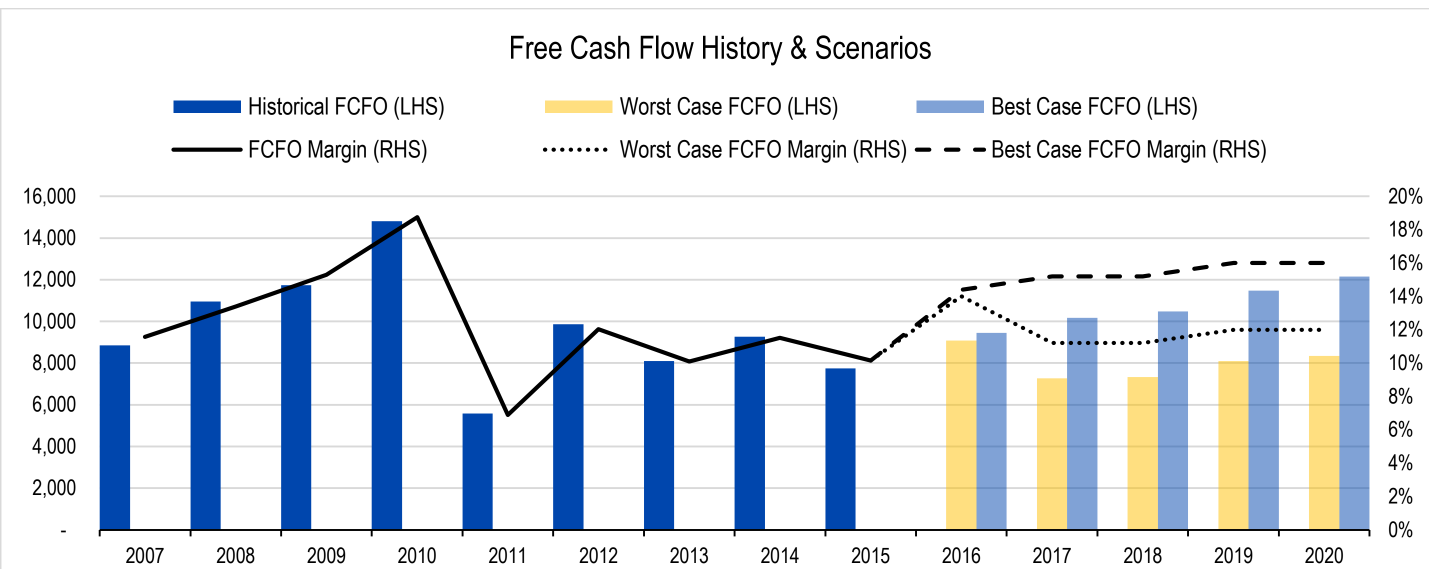


Figure 13. Source: Company Statements, IOI Analysis

Our best-case scenario sees the company consistently generating FCFO margins in the mid-teens percentage region.

Valuation Waterfall

Revenue Growth

After 2015's divestitures are complete, our worst-case scenario has the firm growing at an average of 2% per year through FY 2020. Our best case generates a growth rate of twice that. Employment and income growth in developed markets plus the efficient exploitation of growth opportunities in overseas markets is crucial to P&G's revenue growth rate.

Profitability

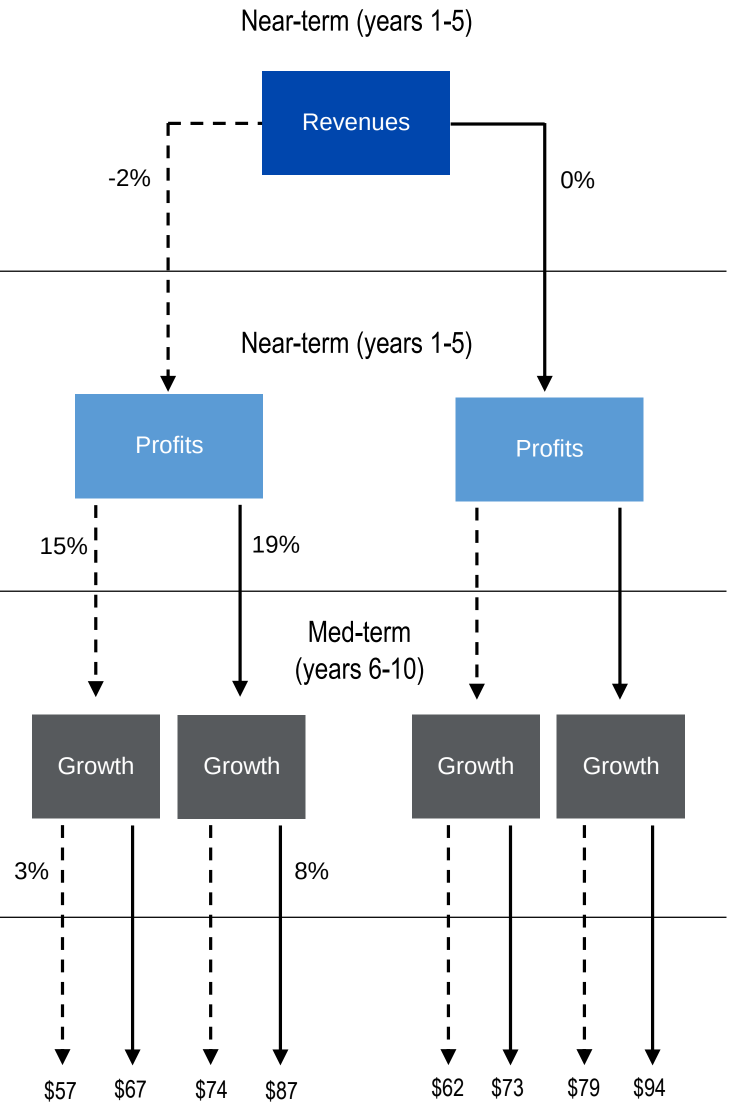
With the rate it is going now, P&G, which is already best of breed for this industry in terms of profitability, will become even more profitable in coming years. It is possible that some of the efficiencies gained through its present restructuring will be plowed back into the business. In this case, profitability will be lower, but medium-term growth will likely be higher.

Medium-Term Cash Flow Growth

With all of P&G's recent divestments, plus the fact that medium-term growth is really contingent on strategies and investments that will be embarked upon in the next fiscal year, this rate is a hard one to forecast. In our view, the firm will either generate higher profitability in the near term and have lower medium-term growth or vice versa.

Fair Value Range

Our fair value range, extends from $57 to $94 / share. We did not choose any valuation scenarios as being more likely than others, but the $94 / share valuation represents such a perfect confluence of conditions to be almost impossible for the company to attain, in our opinion.



Methodology

IOI analyses focus on three main valuation drivers: revenue growth, profitability, and medium-term cash flow growth. We estimate a best- and worst-case scenario for each of these drivers resulting in a total of $2^3 = 8$ fair value scenarios based on discounted cash flow methodology. Profitability is measured by Owners' Cash Profit (OCP) margin. We use a discount rate of 10% for large capitalization stocks.

A wide spread of lowest and highest fair values indicates a firm whose value is uncertain. Risk depends on the stock price's relationship to the valuation range.

Best-case scenarios are represented with a solid line; worst-case scenarios, with a dotted one.

Options involve risk and are not suitable for all investors. For more information, please read the [Characteristics and Risks of Standardized Options].