IOI ChartBook – Kroger (KR)

The grocery landscape is in the midst of a sea change and Kroger is well-positioned to weather it

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Three Things You Should Know About Kroger

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- **The grocery world is changing faster than you imagine.**

  While you may not think of groceries as a dynamic industry, there is good reason to believe that a generation from now, the grocery business will look substantially different from the way it does now. Kroger's recent acquisitions and business strategy look to provide it a strong position in a world where the lines between fast casual restaurant and grocery store are blurred and in which a significant portion of the population uses a WiFi connection rather than a shopping cart to buy bread and eggs.

- **Kroger's profitability is shooting up.**

  Looking at traditional measures like gross margin IOI's preferred measure of profit – Owners Cash Profits (OCP), Kroger is steadily converting a higher proportion of its revenues to profits. This rise in profitability likely has several root causes – it's shift to more profitable business lines such as organic and prepared foods, its fine tuning of its organic food supply chain to generate more profits from its own line of organic generics, and what appears to be a trend of more efficient working capital management. You might think that a boost in profit margin from 2% to 3% is no big deal, but it is the same percentage change as if a company generating 10% margins suddenly started generating profits of 15%.

- **Kroger has spent heavily on investments and will continue to have to do so.**

  In a changing environment, a company has to spend in order to stay ahead of the competition. We have seen an uptick in acquisition activity at Kroger and think there are more acquisitions to come. While the high level of investment spending does mean less cash available to the firm's owners, we believe Kroger's investments will pay off with a much stronger competitive position long-term. Also, Kroger's scale allows it a much larger pool of profits out of which to invest than a competitor like Whole Foods Markets (WFM), a company on which we have also reported and in which we have a bearish position. If Kroger and Whole Foods were both sitting at a poker table, Kroger would have a mountain of chips in front of it while Whole Foods would be rubbing its remaining chips together nervously.

Valuation Overview

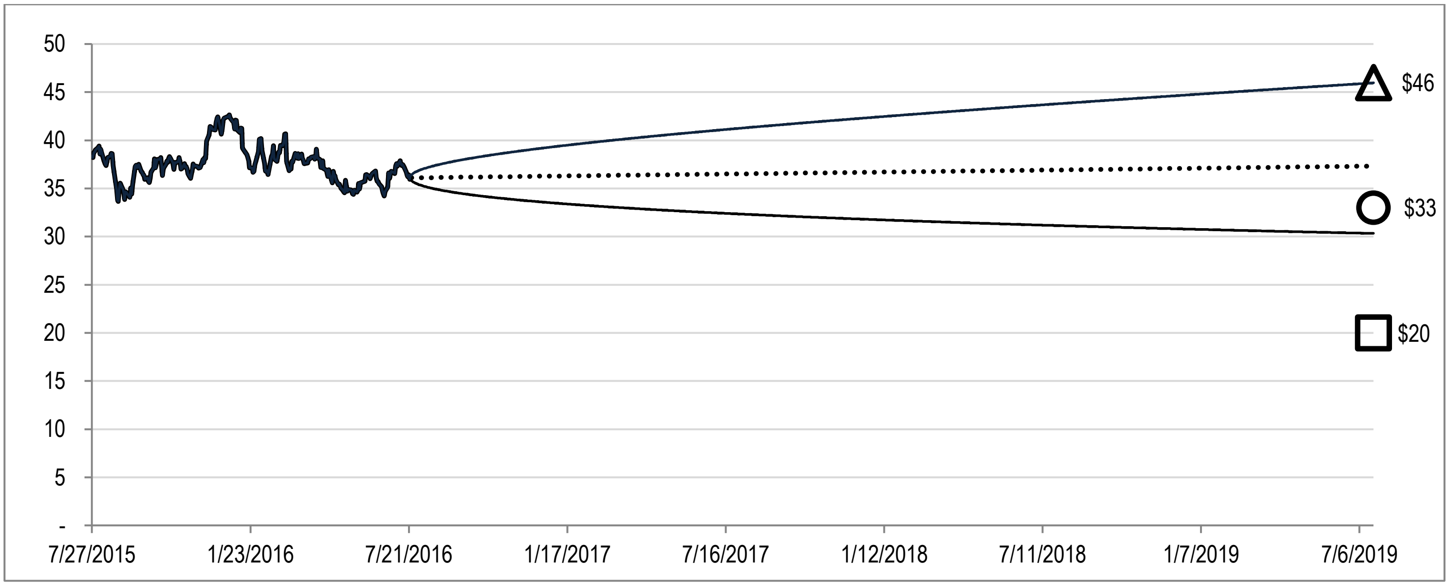


Figure 1. Source: YCharts, CBOE, IOI Analysis. Geometrical markers show IOI's best-case (triangle), worst-case (square), and equally-weighted average value (circle). Cone-shaped region indicates option market's projection of Kroger's future stock price.

	IOI Best Case	IOI Worst Case	Historical Median
Year 1-5 Average Revenue Growth	7%	5%	7% (5-, 10-year)
Year 1-5 Average Profitability	3%	2%	2% (5-, 10-year)
Year 6-10 Cash Flow Growth	15%	8%	8%

The BSM Cone diagram's simple valuation range gives a more bearish view of the company than we think is probably warranted. The company is responding well to competitive pressures and appears to be running an increasingly profitable operation. The glory of investing is that you don't need to swing at every pitch, and this is one (bearish) pitch that we would rather not swing at for reasons further explained in this report.

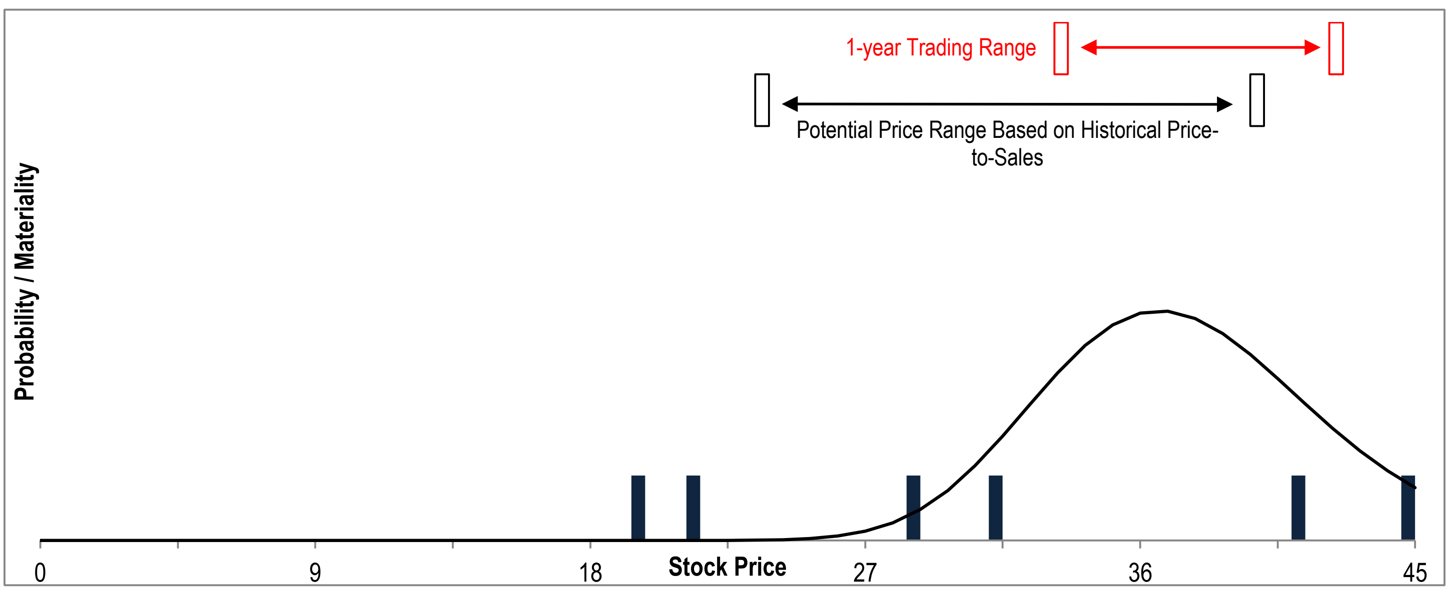


Figure 2. Source: CBOE, IOI Analysis

The two downside outlier valuations are both associated with negative medium-term growth scenarios. While these scenarios are possible, given historical data, we cannot assess their likelihood. Remaining scenarios imply a company whose cash flows are almost perfectly fairly valued by the market.

Valuation Drivers

Revenue Growth

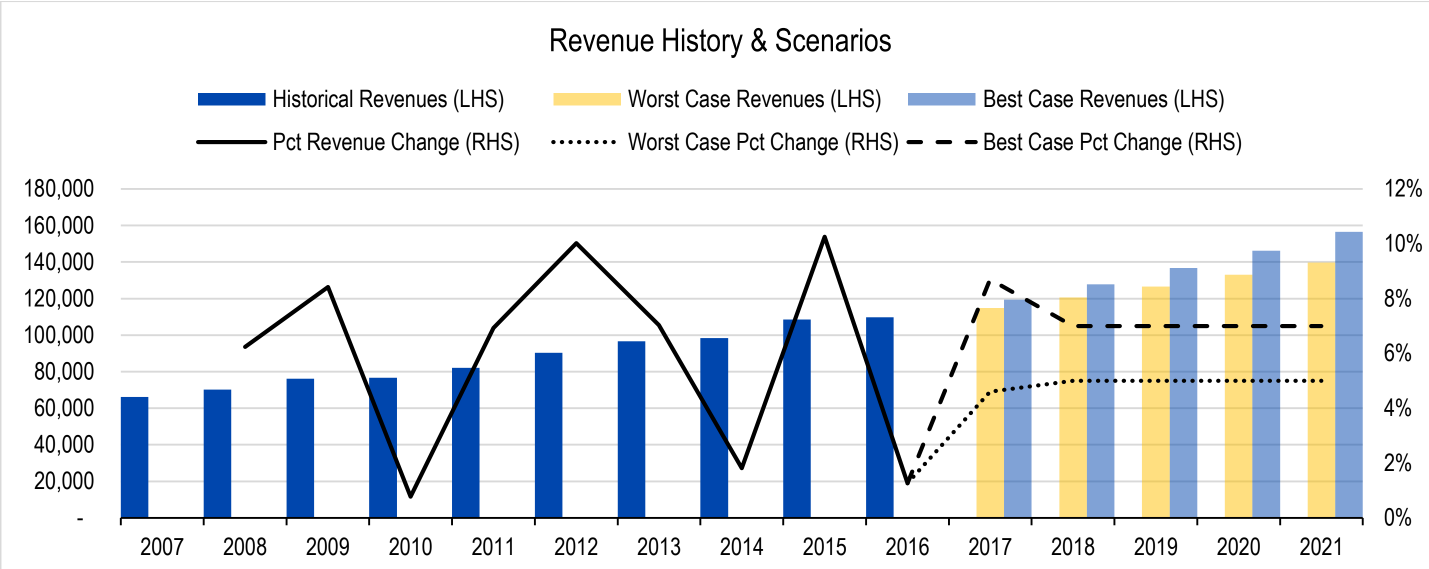


Figure 3. Source: Company Statements, IOI Analysis

The most notable feature of Kroger's year-over-year (YoY) change in revenues is the saw tooth pattern caused by several factors. First, about half of Kroger's supermarket locations sell fuel as well as groceries, so changes in fuel prices drive a zero-leverage increase in sales (i.e., cost of fuel rises as fuel sales increase, leading to higher revenues and unchanged profits). We don't think revenues from fuel sales is terribly important from a valuation perspective because of the lack of leverage from them.

In addition, Kroger has become more active in acquisitions since 2014 (Roundy's, 2014; Teeter Harris 2015) in a "fill-in" strategy – to increase its square footage and penetration in its existing markets. The firm missed out on purchasing The Fresh Market (TFM) earlier this year (losing out to a private equity fund), but we expect more acquisitions in the future. Ahold NV, which owns brick-and-mortar chains such as Northeastern Stop-and-Shop as well as the Peapod delivery service, is one potential target.

We think Kroger's fill-in strategy is very important, as is the increasingly plausible trend toward home delivery of groceries. With a dense network of stores and a highly-efficient inventory management system, the next step towards delivery on demand becomes a real possibility. Peapod, Amazon Pantry, and companies like Blue Apron provide, in our view, a glimpse at the future of food retail. A retail supermarket will become something more like a fast casual restaurant with an attached warehouse – shoppers can eat or pick up prepared or raw foods at the store, but will also be able to order from home and "shop" without ever setting foot in a shop.

The company has been able to turn in identical store sale growth (termed "ID" growth in conference calls) in the low- to mid-single digit percentages over the past few years. Inflation has something to do with this increase, but Kroger's expanded organic selections are, we believe, partially responsible for this increase (and for the softness in Whole Foods Markets' sales, as discussed in our ChartBook on WFM).

Note that since there are several quarters of FY 2017 already reported, we are using high and low Sell-Side estimates for our model's best- and worst-case revenue scenarios for this year.

Profitability

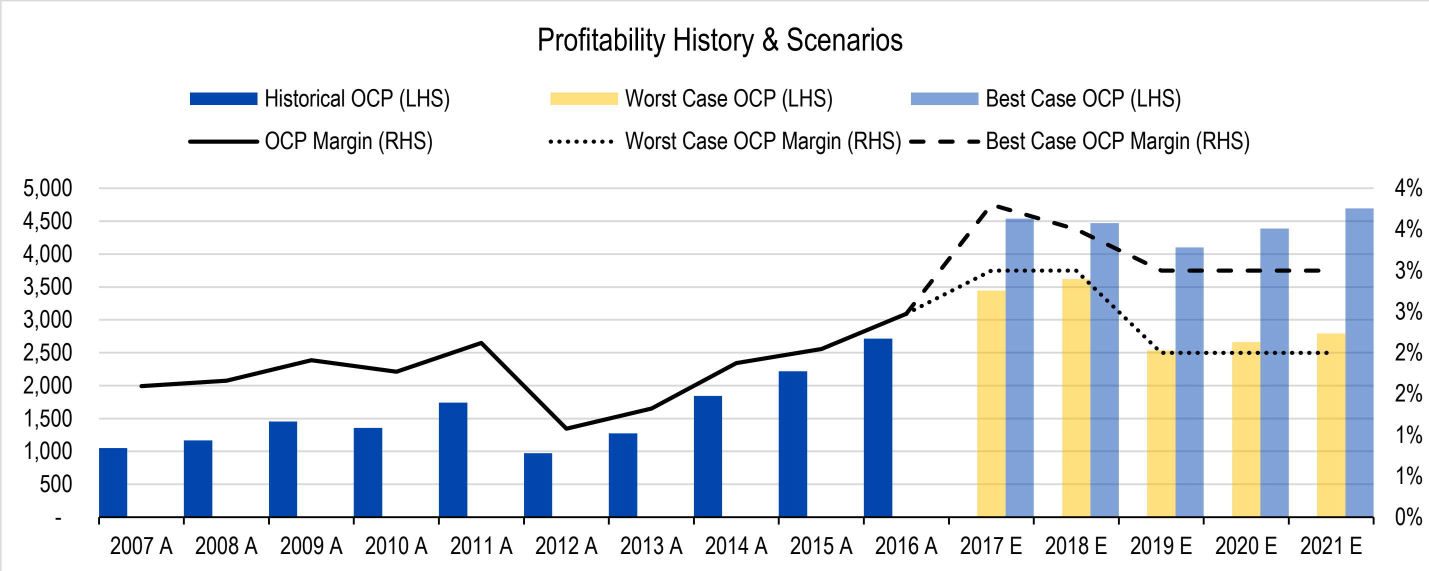


Figure 4. Source: Company Statements, IOI Analysis

Kroger has had a significant upturn in profitability over the past few quarters, and this fiscal year's results are really stupendous. We looked closely at the drivers for this improvement (discussed below), but cannot assess whether this improvement is durable or not. Both our best- and worst-case profitability scenarios assume that profitability will increase in the future as Kroger increases its sales of high-margin prepared food and generic organic items. Reading commentary related to fast casual restaurant chains (e.g., Panera, Chipotle), we see reference to increased competition not from other restaurant chains but from the deli sections of supermarkets. Chains like Wegman's and Mariano's (the latter acquired by Kroger in its Roundy's acquisition) have found success in this strategy, and we believe we will see this trend continue into the future.

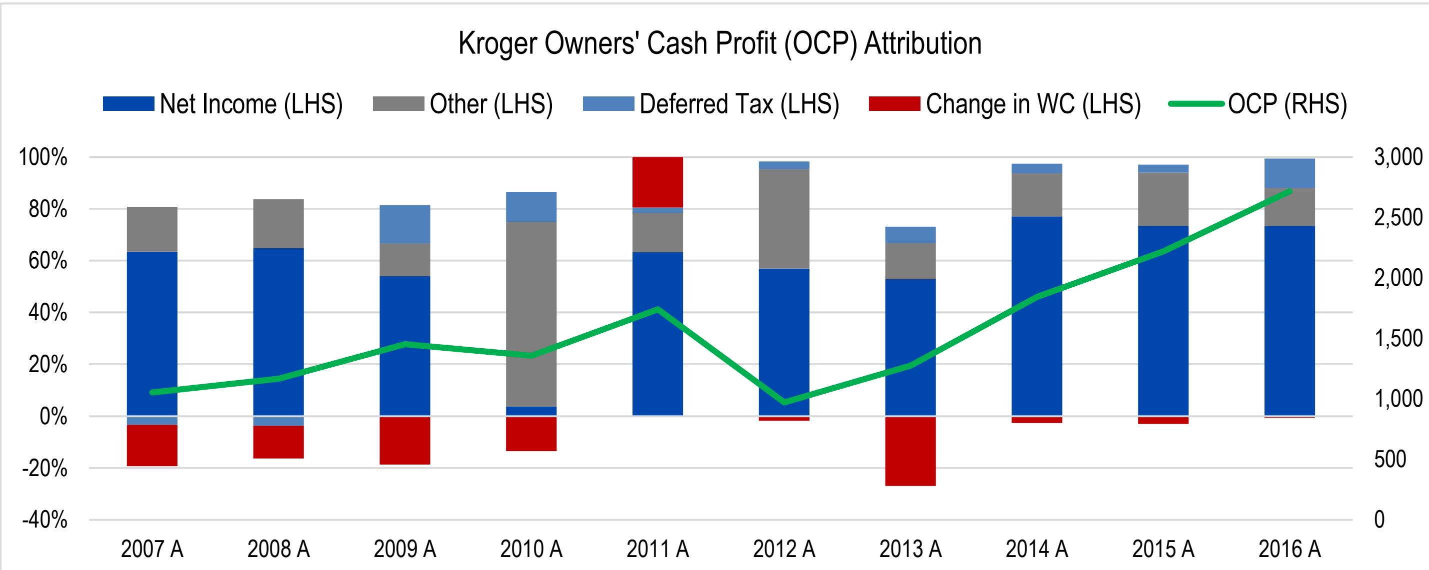


Figure 5. Source: Company Statements, IOI Analysis

In an attempt to find a root cause for the rise of Kroger's Owners' Cash Profits (OCP), we took a careful look at the Statement of Cash Flows. The two most important drivers seem to be 1) an increase in net income (discussed below) and 2) better working capital management. Note in the figure above that the red portion of the column – representing cash flows associated with working capital changes – has been much smaller since 2014 than it has been in most years prior. We believe that Kroger may be becoming more efficient with its inventory management, and view this as a good sign.

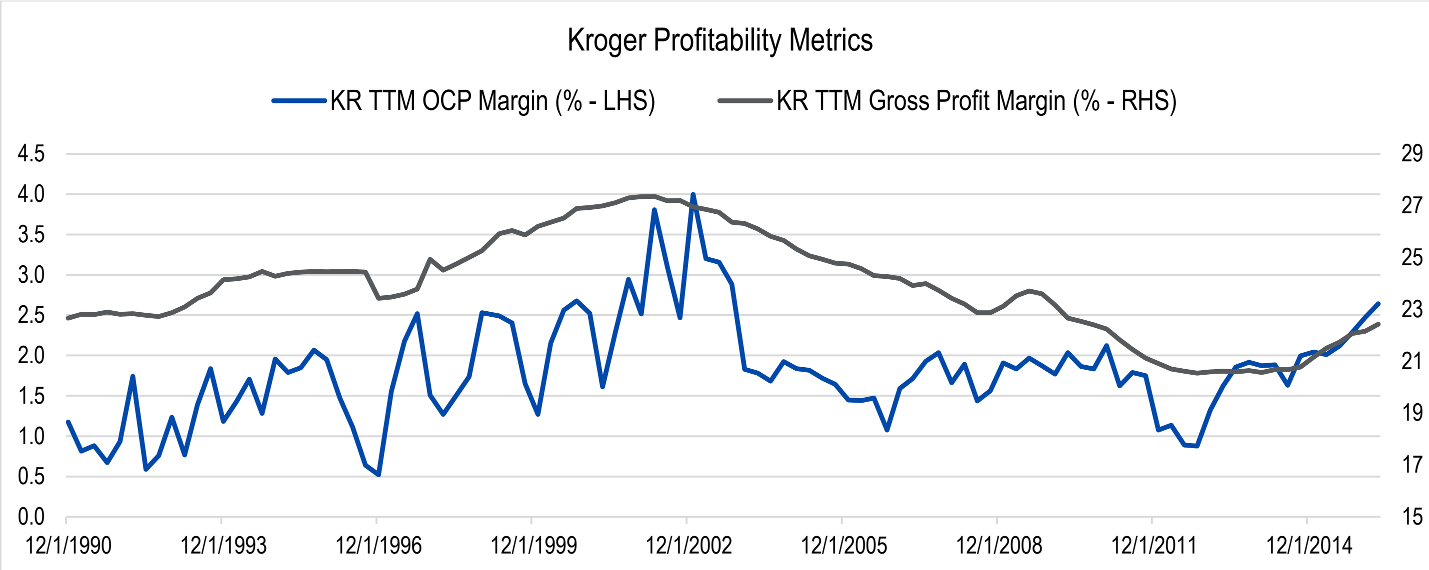


Figure 6. Source: Company Statements, IOI Analysis

In analyzing Kroger's profitability, we looked specifically at its gross profit and noted the long-cycle trend in the figure above. Gross profit has begun to head up again over the past several quarters, and we think it is likely to keep increasing. One possibility for the decrease in gross profitability after 2002 is that Kroger had tuned its supply chain to operate in what we'll call the pre-Whole Foods paradigm. As the company began to try to compete with Whole Foods' and other organic store offerings, its profitability dropped. This is an assumption on our part, but considering 1) the growing popularity of organic offerings over the last 10-15 years, 2) the tightness in organic supply which has started to reverse, and 3) the notable bump up in profitability corresponding to the period of the financial crisis (during which presumably consumers shifted temporarily away from more expensive organic products), we think it is a reasonable one to make. Deflation usually has a negative effect on supermarkets, and deflationary pressures since the Great Recession may also be partially to blame.

Investment Level

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

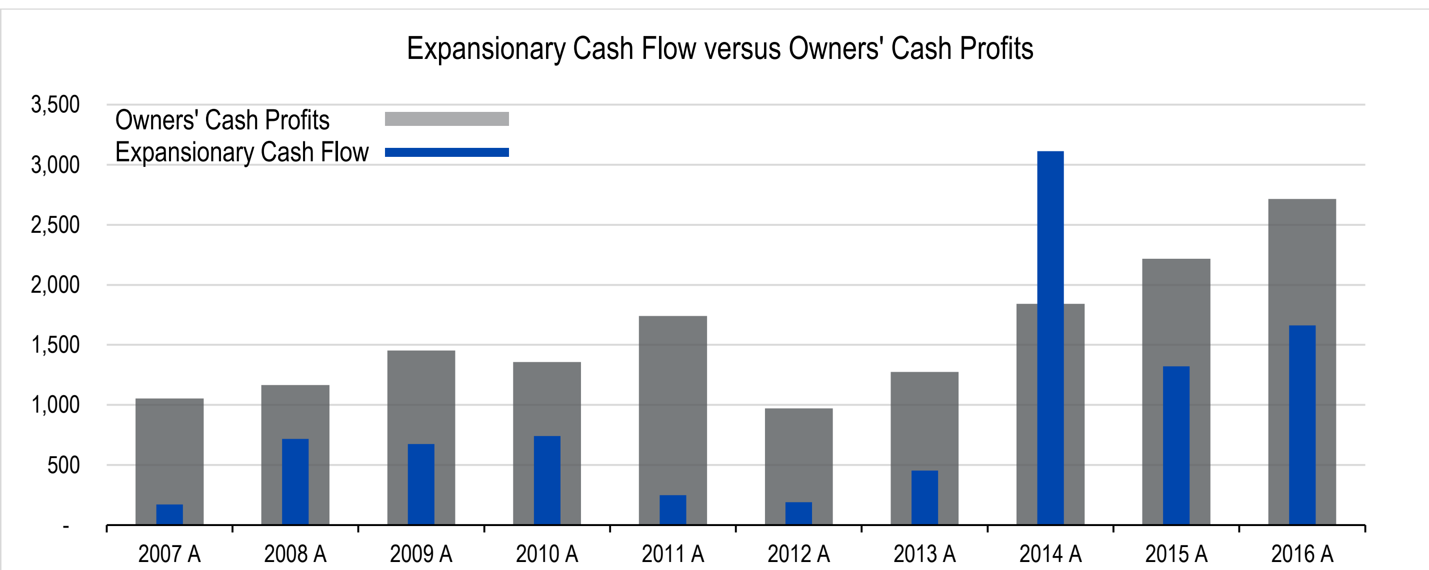


Figure 7. Source: Company Statements, IOI Analysis

Over the last 10 years, Kroger has spent a median 50% of its OCP on investment projects. This is very similar to the level of investment spending we saw for [Whole Foods Markets](). Both firms are spending roughly half their respective profits to keep on the leading edge of change in the retail world; Kroger simply has a much larger pool of profits from which to invest than does Whole Foods ($2.9 billion vs. $520 million over the trailing twelve months).

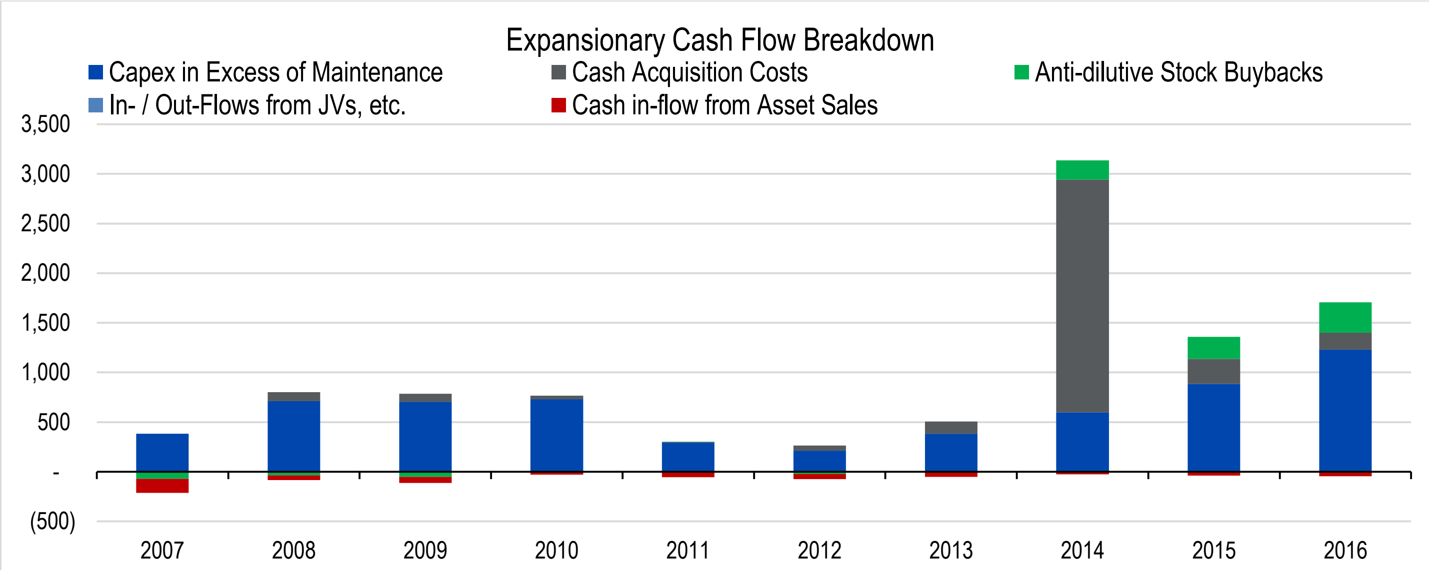


Figure 8. Source: Company Statements, IOI Analysis

Two things to note in the figure above. First, we can clearly see the company is spending more on capital expenditures in excess of our assumed level of maintenance capital expenditures. This is likely due to its incorporation of recent acquisitions and the build out of locations in its "fill-in" strategy. Also, we note that the company is issuing more shares as part of its compensation package, leading to what we term as "anti-dilutive stock buybacks." This effect may also be due to the acquisition activity.

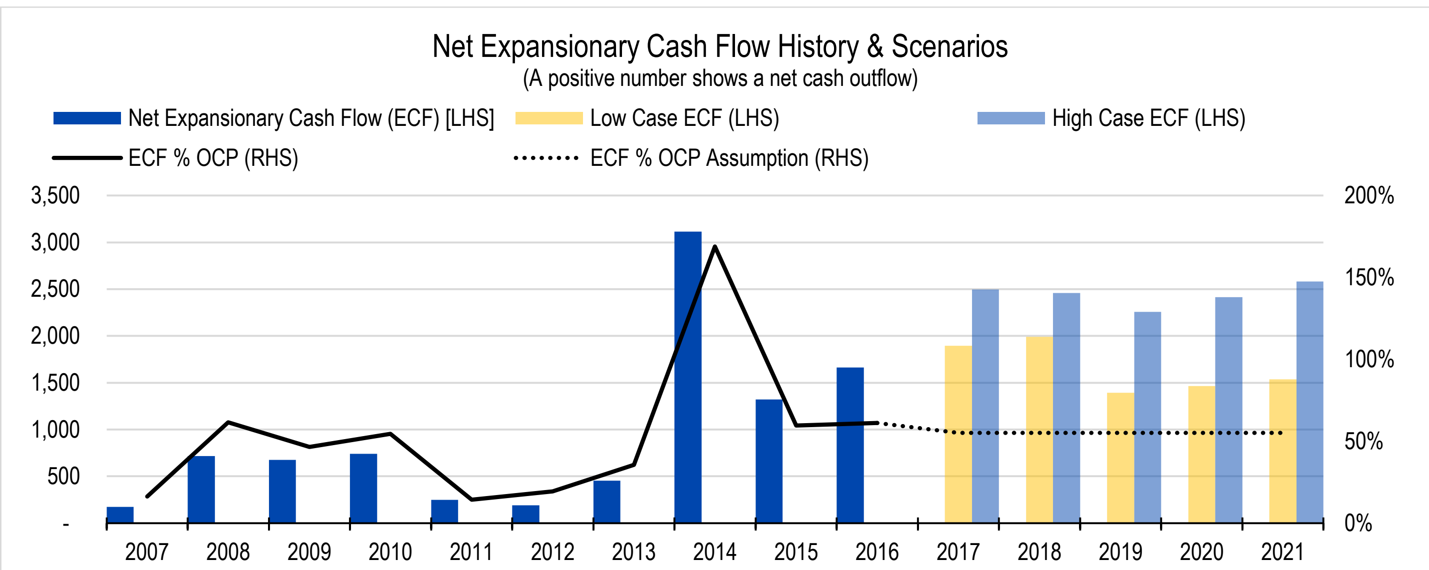


Figure 9. Source: Company Statements, IOI Analysis

As mentioned above, the grocery business typically spends a large proportion of its (small) profits on investments. We have modeled the firm as spending half of its profits on expansionary cash flows over the short-term (years 1-5 of our model).

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.

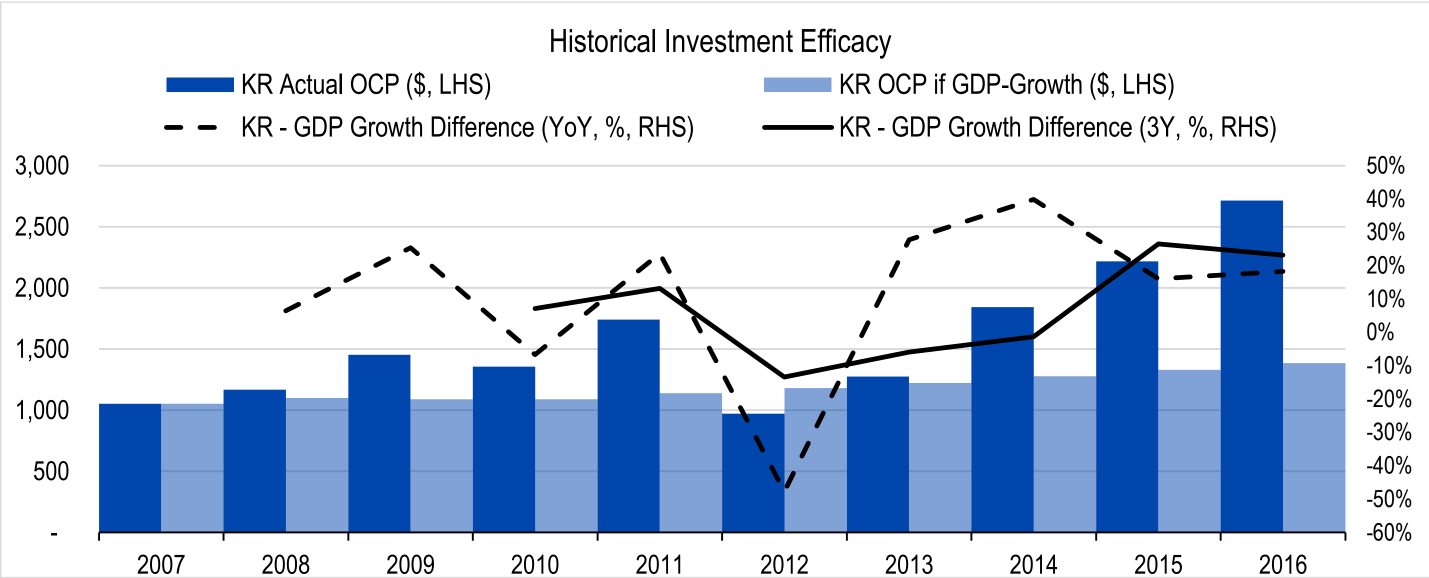


Figure 10. Source: Company Statements, Bureau of Economic Analysis, IOI Analysis

To us, the chart above speaks to the effectiveness of Kroger's business model and executive decisions. The firm has been able to expand its profits at a rate much better than nominal GDP, which seems like a difficult feat for a grocery store.

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.

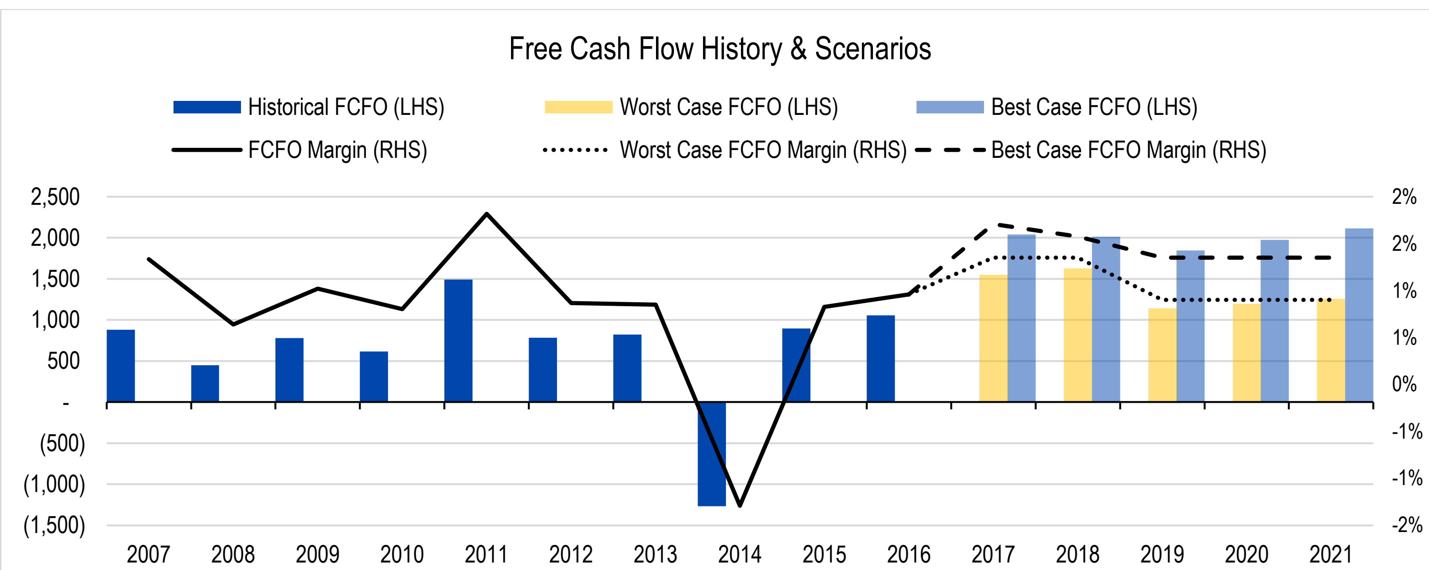
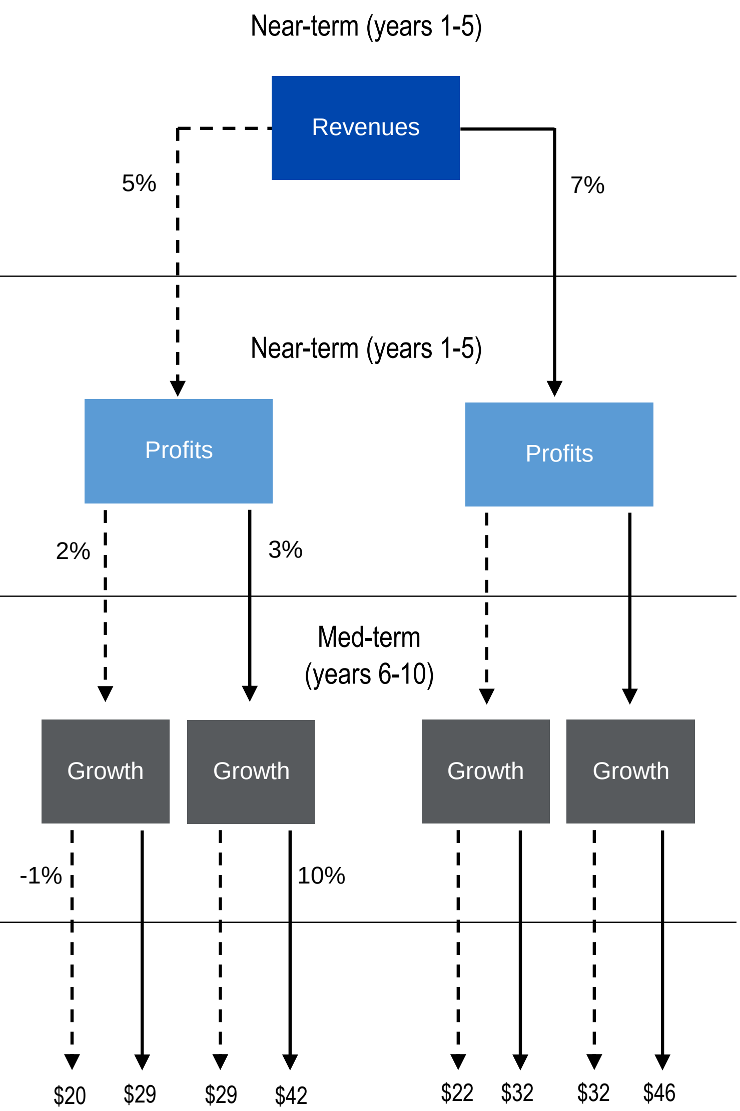


Figure 11. Source: Company Statements, IOI Analysis

The interaction of the three drivers above (revenue growth, profitability, and investment spending) generates our near-term free cash flow scenarios for Kroger. Best case, Kroger owners will enjoy a step-up in the cash flows as a proportion of revenues. Worst-case, they can expect roughly the same as Kroger's historical trend.

Valuation Waterfall



Revenue Growth

We see Kroger's growth being driven by its acquisitions, it's fuel sales, and by picking up increasing share of prepared food and organic sales from competitors with less dense retail networks.

Profitability (OCP Margin)

The firm has been doing a good job of converting revenues to profits and even our worst-case profitability assumption is higher than Kroger's historical average OCP margin. A deflationary environment near-term would likely pull profitability down, but we think Kroger's emphasis on higher margin business will at least partially offset this negative if it were to occur.

Medium-Term Cash Flow Growth

Supermarkets are notoriously competitive businesses. If, in the medium-term, a strong, market-share hungry competitor emerges (e.g., Amazon), Kroger's profits may suffer. As such, we cannot rule out a drop in profitability in the medium-term. Best-case, Kroger will stay ahead of the curve and continue to expand profits and cash flows as it has historically.

Fair Value Range

Kroger's valuation hinges on its ability to maintain profit levels in both the near- and medium-term. The difference between 2% OCP margin and 3% doesn't seem large, but indeed it is a 50% increase from the perspective of the former and a 33% decrease from the perspective of the latter. From what we can see at present, this firm is roughly fairly valued. We would be strong buyers at $20 / share.

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](#).

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