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# November 2011 Market Commentary

Thinking about the fair value of the S&P 500  
based on long-term growth and profitability



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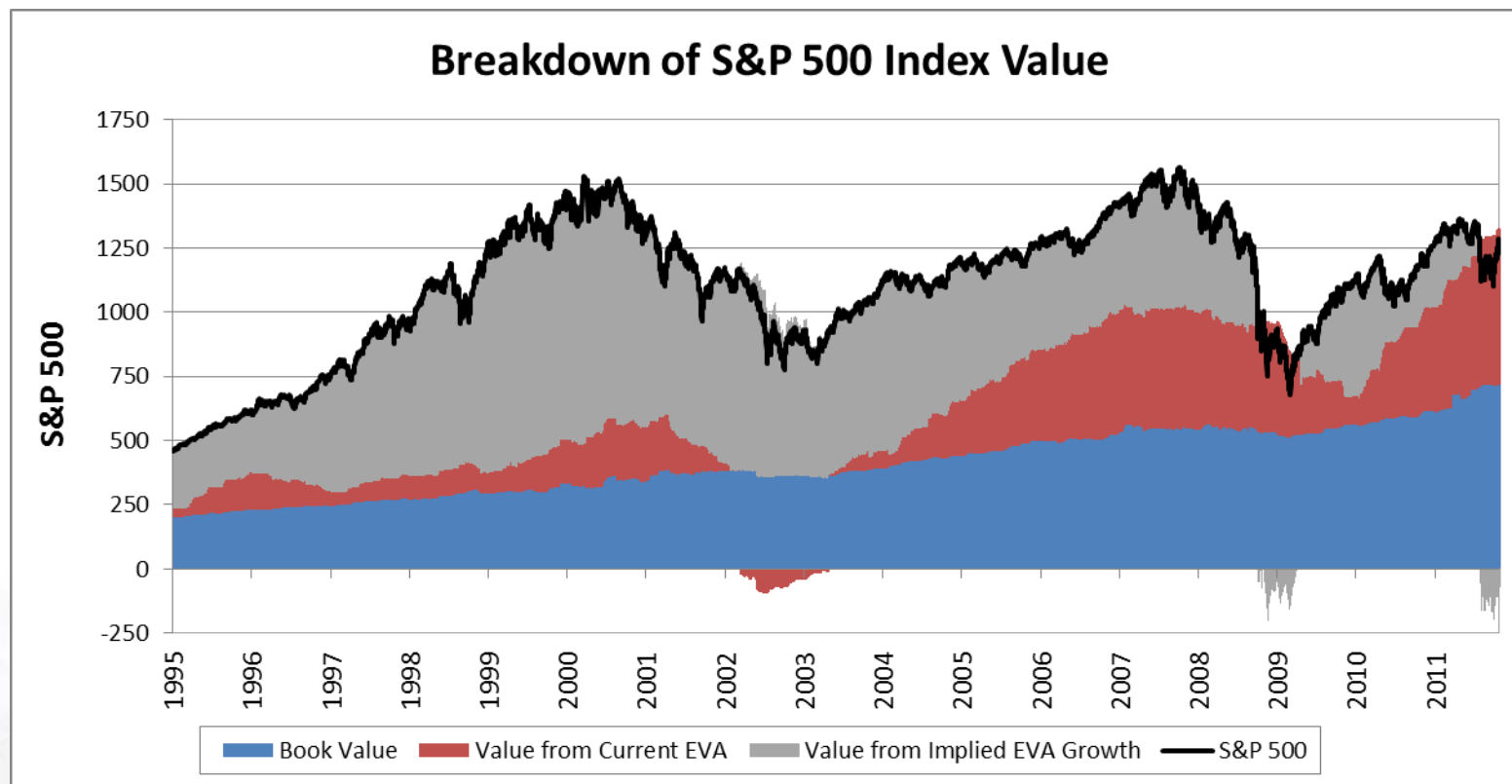
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## Summary

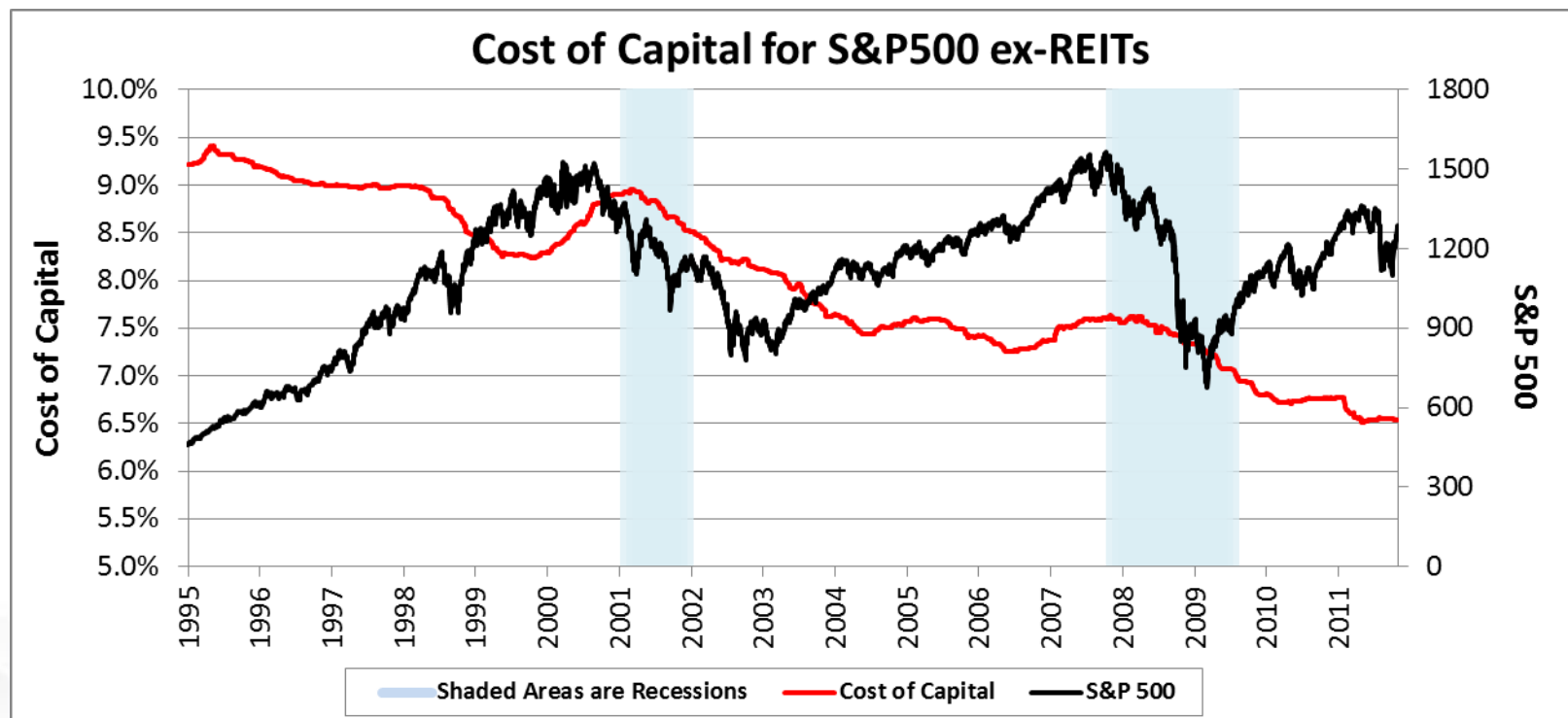
- Currently, the S&P 500 is trading below the sum of its Book Value and its Capitalized Current EVA. Since 1994, this has happened only once before, during the selloff of 2008-2009. At first glance, the market looks **exceptionally cheap**.
- Part of the perceived cheapness is due to the **cost of capital**, which falling interest rates have steadily driven down over the past decade...
- ...but part of the cheapness may also be explained by the fact that EVA growth levels are currently high and that investors are questioning whether such growth can be sustained. After the last recession, companies have been very successful both in improving their margins and in growing their top lines.
- This has driven the **EVA Momentum** of the S&P 500 to high levels. **EVA Momentum** the size-adjusted change in economic profit, driven by margin improvements and sales growth.
- It is very common to hear that the “market is cheap” these days, and that is true based upon current profitability levels. If current sales growth and profitability levels can be sustained over the long-term, our analysis suggests that the market is indeed somewhere between **10% - 25% undervalued**, depending on what happens in the short-term.
- However, considering long-term sales growth and profitability levels lower than current ones – which seem entirely possible given that those variables are at the top of their historical ranges – paints an entirely different picture. An extended bout of merely average growth would imply the index is **overvalued by between 10% - 20%**. Investors should carefully consider their long-term views before buying stocks based upon perceived cheap valuations derived from the current, high levels of growth and profitability.

# S&P 500 Value Breakdown



- The chart above breaks down the S&P 500 into **Book Value**, **Value from Current EVA** (current profitability), and **Value from Implied EVA Growth** (the 10-year **EVA Momentum** implied by the current market level).
- Currently, the S&P 500 is trading below the sum of its Book Value and its Value from Current EVA. Value from Implied EVA Growth is slightly negative. Since 1994, this has happened only once before, during the selloff of 2008-2009. Investors are pricing in essentially **zero growth in economic profit over the next 10 years**. At first glance, the market looks exceptionally cheap.

# Cost of Capital

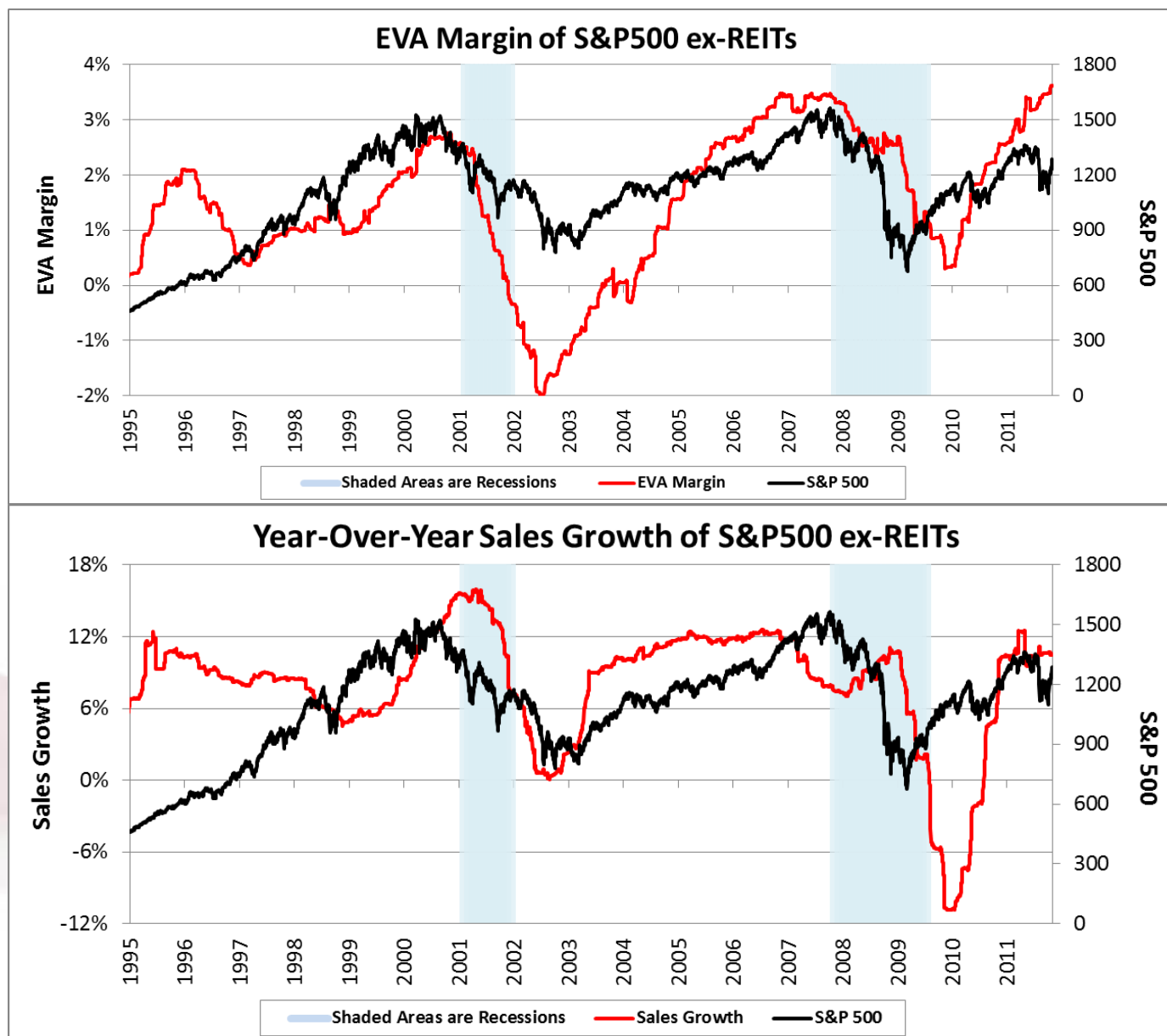


- Part of the perceived cheapness is due to the **cost of capital**, which falling interest rates have steadily driven down over the past decade. Lower costs of capital increase the amount one should pay for a future economic profit stream – they increase the **Value** of the index **from Current EVA** and lower the amount of **Implied EVA Growth** which is necessary to make the index fairly priced. If a given profit stream is presently more valuable due to a low cost of capital, a market multiple on (or spread above) that present value will appear to be lower.
- But part of the cheapness may also be explained by the fact that EVA growth levels are currently high and that investors are questioning whether such growth can be sustained. What could happen if EVA growth drops?
- Over the next few slides, we investigate the drivers of EVA growth. We then model various macro-economic scenarios and solve for the S&P 500 fair value.

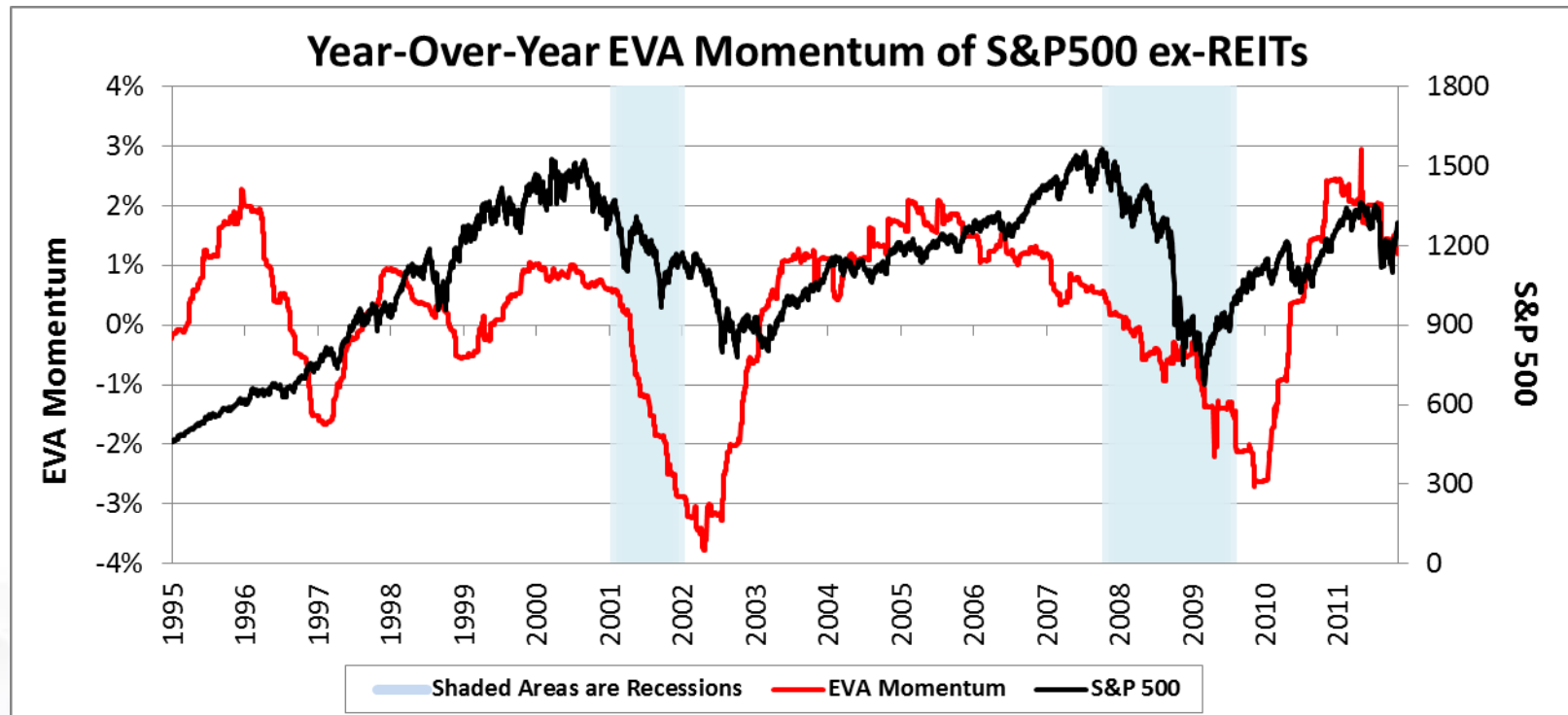
# EVA Margin and Sales Growth...

- EVA growth (**EVA Momentum**) is driven by two factors: **EVA Margin** (economic profitability) and **Sales Growth**. For a company to increase its EVA, it must either improve economic margins or grow sales in units which have positive margins.

- Currently, levels of both economic margins and revenue growth are high. After the last recession, companies have been very successful both in improving their efficiency and in growing their top lines. The current EVA Margin of the S&P 500 is **3.6%** and the current year-over-year Sales Growth rate is **10.5%**.



# ...Drive EVA Momentum



- **EVA Momentum** is the change in a firm's economic profit in a given period divided by its sales in the prior period. It is the size-adjusted change in economic profit, driven by margin improvements and sales growth.
- Rising margins and sales have driven the EVA Momentum of the S&P 500 to high levels, although the current level of **1.2%** is down from the recent peak.

# S&P 500 Targets

| S&P 500 Target Levels |             |              |      | LONG-TERM (Years 3-5) |        |        |      |
|-----------------------|-------------|--------------|------|-----------------------|--------|--------|------|
|                       | Scenario    |              |      | Very Strong           | Strong | Medium | Weak |
|                       |             | Sales Growth |      | 12%                   | 9%     | 6%     | 3%   |
|                       |             | EVA Margin   |      | 3.5%                  | 2.5%   | 1.5%   | 0.5% |
| SHORT-TERM (Year 1)   | Very Strong | 12%          | 3.5% | 1569                  | 1308   | 1086   | 899  |
|                       | Strong      | 9%           | 2.5% | 1522                  | 1272   | 1059   | 879  |
|                       | Medium      | 6%           | 1.5% | 1477                  | 1238   | 1033   | 861  |
|                       | Weak        | 3%           | 0.5% | 1434                  | 1204   | 1008   | 843  |
|                       | Recession   | -3%          | 0.0% | 1371                  | 1161   | 981    | 830  |

- The axes of the table to the right show hypothetical **Sales Growth** and **EVA Margin** levels for various short-term and long-term macro-economic growth scenarios. The proposed levels of the variables are based on their historical ranges.

- Starting with their actual current values, we assume that growth and margins move over the next year to the short-term targets – and then over the following two years to the long-term targets. We then hold levels constant for another two years until year five. We then take the present value of the economic profit (**EVA**) implied by the scenario and back out the implied S&P 500 level.
- It is very common to hear that the “market is cheap” these days, and that is true based upon current profitability levels. If current sales growth and profitability levels can be sustained over the long-term (the “**Very Strong**” scenario), the implied index levels above indeed suggest that the market is somewhere between **10% - 25% undervalued**, depending on what happens in the short-term.
- However, considering long-term sales growth and profitability levels lower than current ones – which seem entirely possible given that those variables are at the top of their historical ranges – paints an entirely different picture. The key is that a secular, longer-term shift in growth and profitability has far more influence on the present value of the S&P 500 than does what happens in the short-term. The market currently appears appropriately priced for “**Strong**” short- and long-term growth. But an extended bout of merely average (“**Medium**”) growth would imply the index is **overvalued by between 10% - 20%**; an extended bout of very bad (“**Weak**”) growth implies the index is **25% or more overvalued**. In our view, the “**Weak**” long-term scenario is unlikely, but the “**Medium**” one may be as likely as the “**Very Strong**” one. Investors should carefully consider their long-term views before buying stocks based upon perceived cheap valuations derived from the current, high levels of growth and profitability.

# Further Information

- Visit [www.evadimensions.com](http://www.evadimensions.com) and download resources
- Read *The Investor's Guide to EVA and The Empirical Case for EVA and PRVIt*
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EVA, or economic value added, is a special way to measure profit that is better than all others. It measures "economic profit" as opposed to accounting profit. It is measured after

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Case studies in value creation from using EVA

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