Value Adjustments & Timing

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Investors should and do continuously search for systematic enhancements to achieve superior investment results. These efforts can produce impressive backtested performance. But are the backtests robust and likely to withstand the challenges of real-world implementation? Historical returns can be noisy, and even small changes to an experiment can produce very different outcomes. New developments require a comprehensive research framework to determine whether the discoveries are truly new and can benefit investors going forward.

Value Metrics

The recent underperformance of the value vs. growth style has prompted many investors to search for ways to improve their process of pursuing the value premium. Some have adjusted the metric used to define value versus growth. Adjusting book values for intangible assets—such as patents, copyrights, brands, and reputation—represents one possible adjustment.

Over the 10-year period ending December 2018, using a price-to-book ratio adjusted for internally developed intangibles would have substantially narrowed the annualized return difference between value and growth, but not entirely eradicated value's underperformance.[1] The easy thing to do? Adopt the fix immediately. The right thing to do? Take a step back and ask: "Are internal intangibles a new phenomenon? If not new, have they grown in importance over time?"

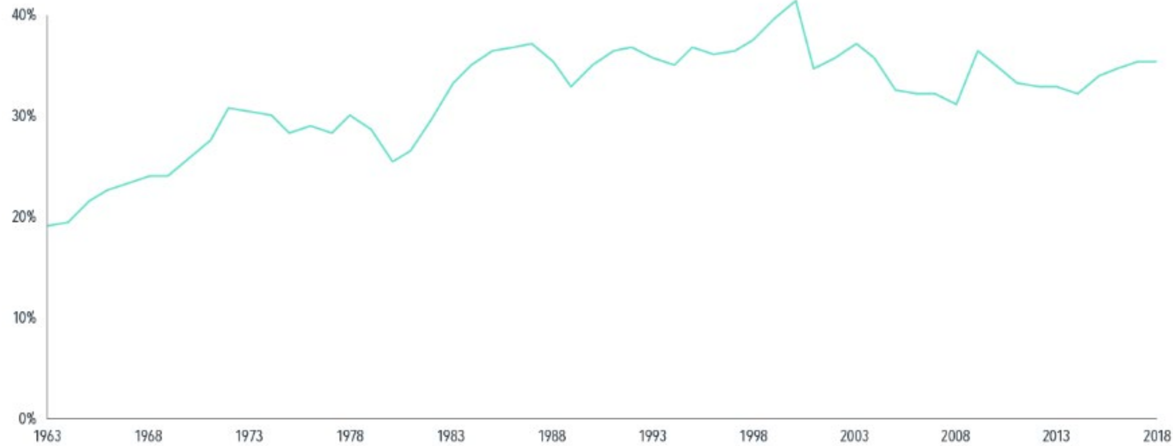
The answer to the first question is no. The US started issuing patents in 1790 and registering trademarks in 1870. Intangibles have been part of the economic landscape and capital markets for a long time.

To answer the second question, you first must estimate internally developed intangibles because they are generally expensed on the income statement under US accounting principles, rather than capitalized on the balance sheet. A recent paper finds that internally developed intangibles have been a stable fraction of company assets for a long time.[2] Exhibit 1 shows that they represent about 30% of US company assets in the 1980s, and about 30% recently.

[1] Rizova, Savina and Namiko Saito (2020), "Intangibles and Expected Stock Returns".
[2] https://www.mydimensional.com/intangibles-and-expected-stock-returns

Exhibit 1: Internally Developed Intangibles

Weighted Average Internally Developed Intangibles as a Percentage of Assets, US Market, 1963–2018



The series shown in the line graph above is a ratio. The weighted average characteristics are evaluated annually, assuming zero when the data are missing. Total assets are unadjusted for internally developed intangibles. See "Intangibles Research" in the Appendix for additional information.

Dimensional Fund Advisor's deep dive into intangibles identified challenges in measuring internally developed intangibles that require subjective judgments. The US value premium over the past decade benefited from these adjustments to book value. However, further inspection of the results shows that different sector exposures primarily drove the improvement in performance. The past decade was a good one for technology stocks, and technology had a higher weight in a value strategy formed on adjusted price-to-book.

Looking over the longer term and assessing the addition of Dimensional's profitability measure, the impact from the intangibles adjustments becomes minimal. Specifically, the value premium gets a little larger while the profitability premium gets a little smaller. The net effect is near zero. Dimensional did not find compelling evidence that an investor can more effectively pursue higher expected returns by adjusting the value and profitability metrics for internally developed intangibles.

In summary, the easy thing to do in response to the recent dismal performance of the value premium is to immediately adopt an intangibles adjustment. The right thing to do is to evaluate thoughtfully and fully the impact of such an adjustment. Dimensional's thorough analysis concluded that the empirical results from this adjustment are not compelling.

Timing the Value Premium

The recent underperformance of the value style has also motivated investors to find ways to predict and avoid disappointing performance by timing their allocation to value vs. growth stocks. Substantial research has been conducted on various market timing strategies. These strategies try to forecast bull and bear market conditions for the broad equity market and specific styles.

Dimensional back tested 680 strategies to identify ones that outperform a buy and hold strategy.[3] As illustrated by the excess returns for all 680 strategies in Exhibit 2, underperformance was by far the most

[3] Wei Dei, "Premium Timing with Valuation Ratios" (white paper, Dimensional Fund Advisors, 2016),

likely outcome for these approaches to timing premiums. The small number of successful outcomes on the far right often turnout attractive at first glance, but not robust to further testing.

Exhibit 2: Tribulations of Timing

Excess Returns for 680 Simulated Strategies that Time Premiums

Simulated/backtested performance, is no guarantee of future results, and there is always the risk that a client may lose money. In USD. Excess returns computed versus buy-and-hold indices.

You have a high probability of eventually finding a timing strategy that worked in the past if you pore through the data long enough. The inputs to a timing strategy include: the premium being pursued, the indicator used for timing (e.g., valuation ratios or past performance), and the threshold for switching (in both directions), to name a few. The vast number of potential combinations of these inputs is ripe for data mining that produces ephemeral results.

Realized premiums can be negative even for long stretches of time. Varying exposure to premiums in accordance with the output of a model that appears successful in a backtest offers an alluring option. Unfortunately, rigorous research casts doubt on this approach effectively reducing the downside risks of the equity, size, value, or profitability premiums—"time in the market beats timing the market."

Important Disclosure Information

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