It's Alive! Behold, the Resurrection of (Balance Sheet) Value Investing

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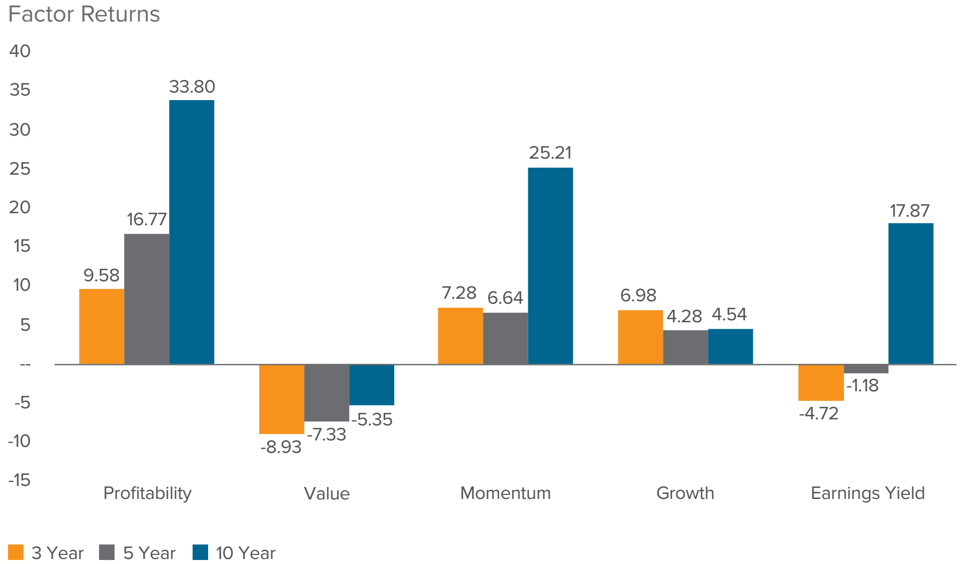
The underperformance of value stocks over the past decade has many practitioners wondering when - if ever - valuation factors will work again for active stock selection. Even academics have begun to debate whether their longstanding workhorse of valuation factors, book-to-price, has actually delivered a risk premium. In a recent paper in the Journal of Financial Economics, Ray Ball et al. (2020)[1] went as far as to suggest that any such premium-to-book value could be fully explained by a cyclically adjusted earnings yield factor, effectively raising the question of whether a company's balance sheet *might be irrelevant* for valuation purposes. This would be a drastic deviation from traditional valuation techniques.

Considering the performance of the price-to-book factor, it is easy to understand why academics and practitioners are questioning its validity in today's markets. As Figure 1 shows, the factor has underperformed significantly, especially when compared to other factors. However, Figure 1 also shows how *alternative definitions* of value—such as price-to-earnings—have held up much better. While not always stellar, their performance is within the historically normal cyclicality range for factor returns. Specifically, earnings yield outperformed price-to-book over the trailing three and five years, while earnings yield was one of the top performers over the trailing decade.

Figure 1. The *Undead* Factor, Price-to-Book Underperforms Itself into the Grave



Source: FactSet, Axioma

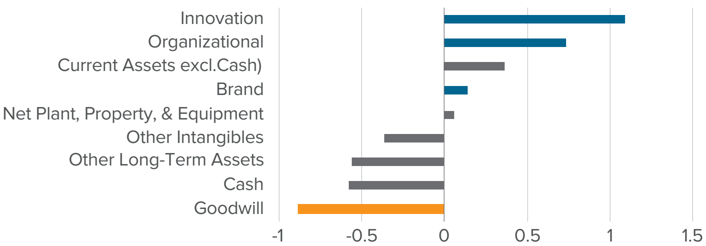
At Voya, we believe that valuation is an intrinsic part of active management. As such, we are working on enhancing our suite of value factors to identify the strongest metrics. Thus, we push back against the notion that value - in its traditional definition - is *dead*. We believe that while value still matters, a more holistic approach that includes the nature of the assets of a firm is more appropriate. How value is measured makes a difference, and in our view it is imperative to use a fundamental lens to move beyond rigid accounting standards. Below, we discuss our findings on why the balance sheet matters, how we evaluate value, and the impact this can have on performance.

The investment rationale: balance sheets are important, and growth assets can be diversifying

The biggest mistake investors make when determining book value is, they do not properly evaluate a company's intangible assets, whether they are recognized on the balance sheet or omitted as "expenses." In particular, investments in "stakeholder capital" (e.g., innovation, brand, and talent) often go unrecognized both on the balance sheet and by investors. In contrast, the "goodwill" premium paid for past acquisitions, which *is* included on the financial statements, tends not to deliver to shareholders. In other words, intangibles that do add value are excluded from the balance sheet, while those that are included tend to be overappreciated, per Figure 2.

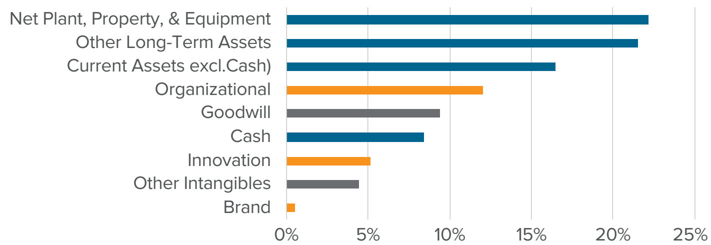
Figure 2. Intangibles: The Phantom Value of the Recognized Versus the Real Value of the Unrecognized

Investors Misjudge Intangibles: Undervalue Stakeholder Capital (Innovation, Organizational, Brand) and Overvalue Goodwill



Covariance of monthly excess return to % of assets by category (sector relative, in %, Jan 1995-Sept 2020, R1K, statistically significant at 95% confidence is colored blue or orange.

Intangibles Make Up About a Third of Companies' Balance Sheet, Just Over Half of Which is Not Recognized on the Balance Sheet



Avg. percent of company total assets, including intangibles (Jan 1995-Sept 2020, R1K, brand, innovation, and organizational capital represent capitalized trailing 5Y cumulative advertising, R&D, and 30% of SG&A expenditures) (intangibles are color-coded orange).

Source: FactSet

It may be surprising to see "innovation" included in this list, as it is a measure generally focused on by growth investors. Given that it is seen as a catalyst for growth, it also provides a hedge for value exposure, doing well as valuation factor lags. In other words, "growth assets" should be part of valuation-driven models to get the full picture.

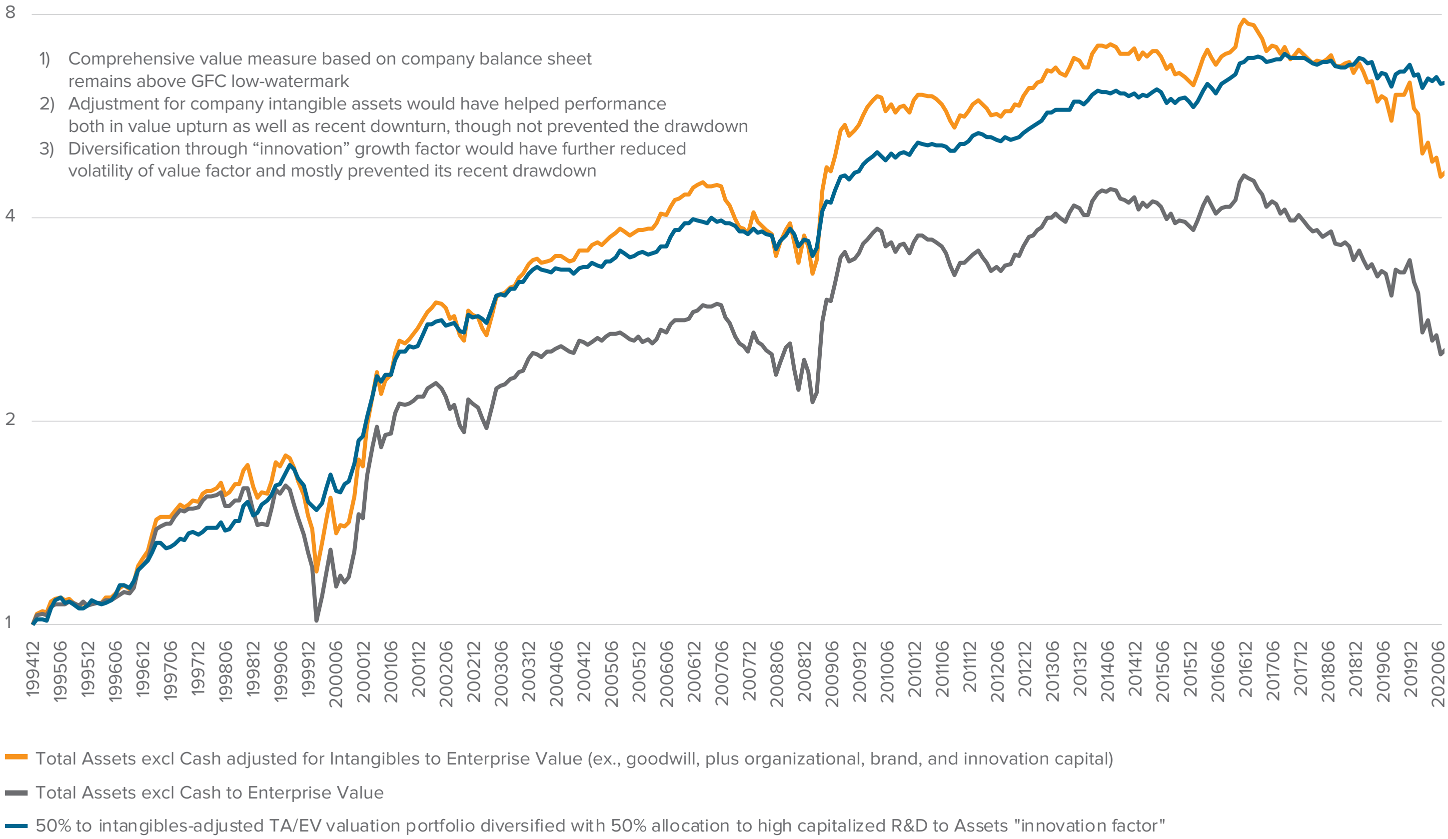
The performance rationale: recognizing intangibles boosts performance

In addition to Voya's empirical research, there are numerous academic studies that evaluate the use of intangibles as a measure for value. While this approach is a long-known shortcoming of accounting standards, it is one that has recently become topical again. For example, Lev and Sougiannis (1996)[2] found that capitalizing R&D spending as innovation capital improved the value factor, particularly in innovation-driven sectors such as Healthcare, Communication Services and Information Technology. Writing in the Journal of Finance, Eisfeldt and Papanikolaou (2013)[3] proposed capitalizing past SG&A spending as "organizational capital," i.e., investment in employees, benefits, training, etc. In another article in the Journal of Finance, Chan et al. (2001)[4] found that advertising-spend contributes to brand value, which does pay off for investors. Ironically, more recent research by Liu et al. (2019)[5] in the same journal found that the intangibles that *are* recognized on the balance sheet, such as goodwill, are overvalued by investors. Recently, Park (2019)[6] in a Critical Finance Review article showed that adjusting the book-to-price factor accordingly would have continued to improve its performance even in recent years.

In Figure 3, we see how the inclusion of intangibles can improve the value factors (calculated by Total Assets excluding Cash to Enterprise Value). Over the past 20 years, the inclusion of intangibles provided stronger returns than the traditional TA/EV ratio. Moreover, the use of intangibles helps minimize drawdowns, especially when diversifying measures such as innovation are included.

Figure 3. Intangible Factors Have Provided Very Tangible Results

Value of $1 invested on 12/31/1994 in Total Assets to Enterprise Value factor (R1K constituents, monthly rebalanced, long top 20% e/w on sector-neutral basis, short bottom 20%, log-scale)



Source: FactSet. Comprehensive value measure based on company balance sheet remains above GFC low-watermark. Adjustment for company intangible assets would have helped performance both in value upturn as well as recent downturn, though not prevented the drawdown. Diversification through "innovation" growth factor would have further reduced volatility of value factor and mostly prevented its recent drawdown.

To be clear, this is not a novel concept, as fundamental analysts have been incorporating intangibles into valuations for decades. However, it is something often missed by quantitative models. With the introduction of new data sets, we can access information such as on patents, brand values, and employee talent metrics that shed greater light, directly and indirectly, by measuring the effectiveness of these varying expenditures. We also recognize that certain measures are stronger in one sector versus another, and our sector-specific factor models reflect this.

Value investing lives on by properly accounting for the right intangibles

While we believe that the rumors of the death of value have been exaggerated, we do acknowledge that it will have to shape-shift in order to remain relevant in a stakeholder-driven environment. Even in just recognizing these intangibles, the valuation spread by any measure—balance sheet or earnings based—remains elevated, which has historically pointed at investment opportunities for value stocks, given the right catalyst for investors. However, to help minimize drawdowns and maximize potential, the use of a more holistic, fundamentally based value measure is key.

In our view, it is no coincidence that the best intangibles for a company are in a broad sense related to ESG: Innovation helps society, brand shows awareness among customers, and organizational capital invests in talent and employee benefits. With new "stakeholder focus" for companies advocated in 2019 by the American Business Round Table, as well as the disruption we have seen to traditional working practices and the economy from COVID-19, we believe capturing a company's inherent strengths to adapt is increasingly important to gauge its prospects. While value investing is no longer as simple as buying the cheapest price-to-book stock in the universe, it is most certainly not dead.

[1]Ball, R., Gerakos J., Linnainmaa, J.T., and V Nikolaev (2020) "Earnings, retained earnings, and book-to-market in the cross section of expected returns," Journal of Financial Economics| Vol. 135 No 1, pp. 231–254

[2]Eisfeldt, A.L. and D. Papanikolaou (2013) "Organization Capital and the Cross-Section of Expected Returns," The Journal of Finance, Vol. 68, No. 4 pp. 1365-1406

[3]Lev, B. and T. Sougiannis (1996) "The capitalization, amortization, and value-relevance of R&D," Journal of Accounting and Economics, Vol. 21, No 1, pp. 107-138

[4]Park, H. (2019) "An Intangible-adjusted Book-to-market Ratio Still Predicts Stock Returns," Critical Finance Review (forthcoming)

[5]Liu, X., C. Yin, and W. Zheng (2019) "The Invisible Burden: Goodwill and the Cross-Section of Stock Returns," Behavioral Finance Working Group Conference, Queen Mary University of London. [6]Chan, L.K.C., Lakonishok, J. and T. Sougiannis (2001) "The Stock Market Valuation of Research and Development Expenditures," Journal of Finance, vol. 56(6), pp 2431-2456