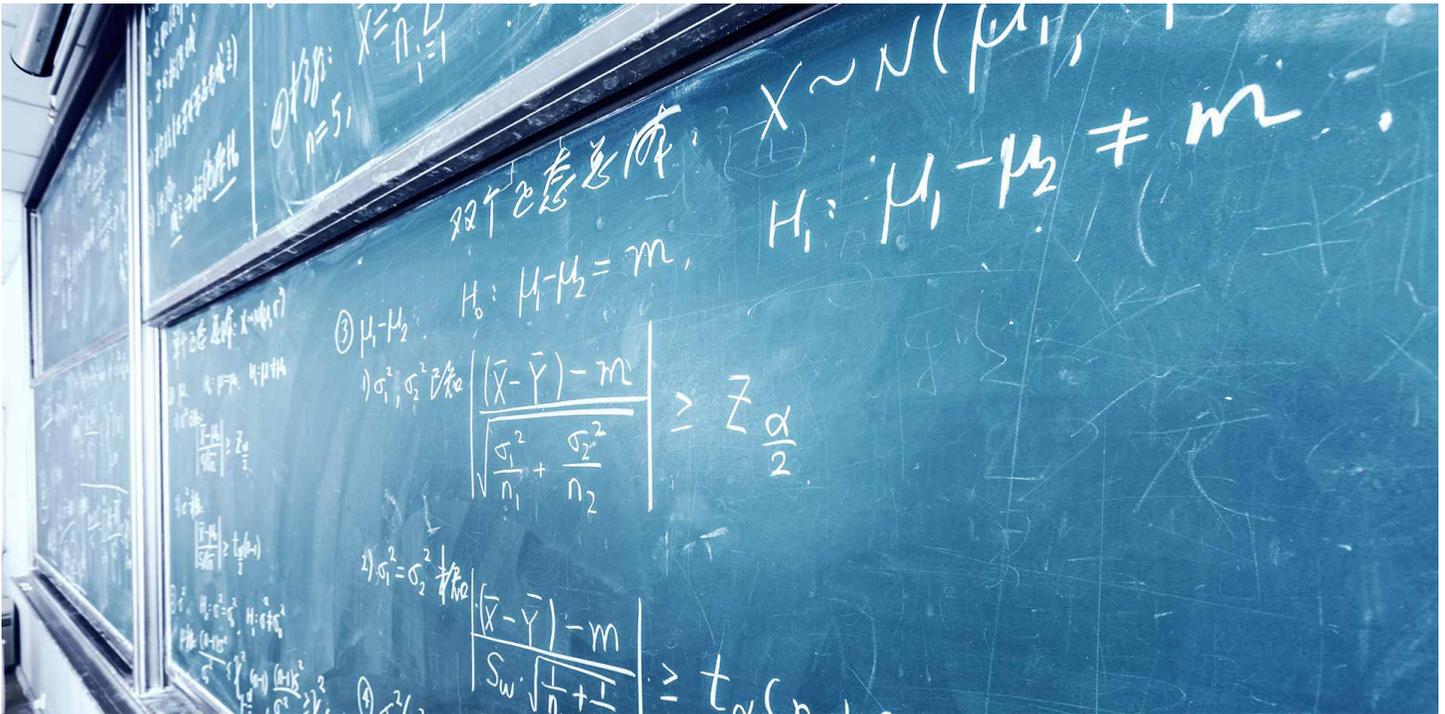




Value and Growth: Moving Beyond the Old Formulas

*The shifting investment landscape has upended previous assumptions about the two equity styles.
How might allocators adapt to the changed environment?*

By Brian Foerster, CFA and Joseph Graham, CFA



The empirical research on the long-term performance of value equities seemed overwhelming when it first appeared in the early 1990s, sparking a revolution in asset allocation and earning one of its progenitors a Nobel Prize.¹ So why hasn't value worked in recent years? We believe the reason is that markets adapt, and the pace of adaptation in the real economy and the stock market is likely faster than ever. In this paper we will propose:

- Why we believe formulaic value is unlikely to work going forward;
- Why formulaic growth never did make sense as an investment strategy; and
- How allocators can best navigate equity styles today.

The Death of Formulaic Value

What makes a value company cheap? The definition has evolved over the years, but the original metric, as outlined by Eugene Fama and Kenneth French in their influential research,² was price-to-book value (P/B). Companies have built up or bought assets and retained earnings that get tallied as book value. Some are poised

to do a lot with that store of value going forward, and some are not. When the market judges that there are risks to a company's capital stock, and that the book value won't be productive in the future, that company is assigned a low price-to-book ratio and is considered a value stock.

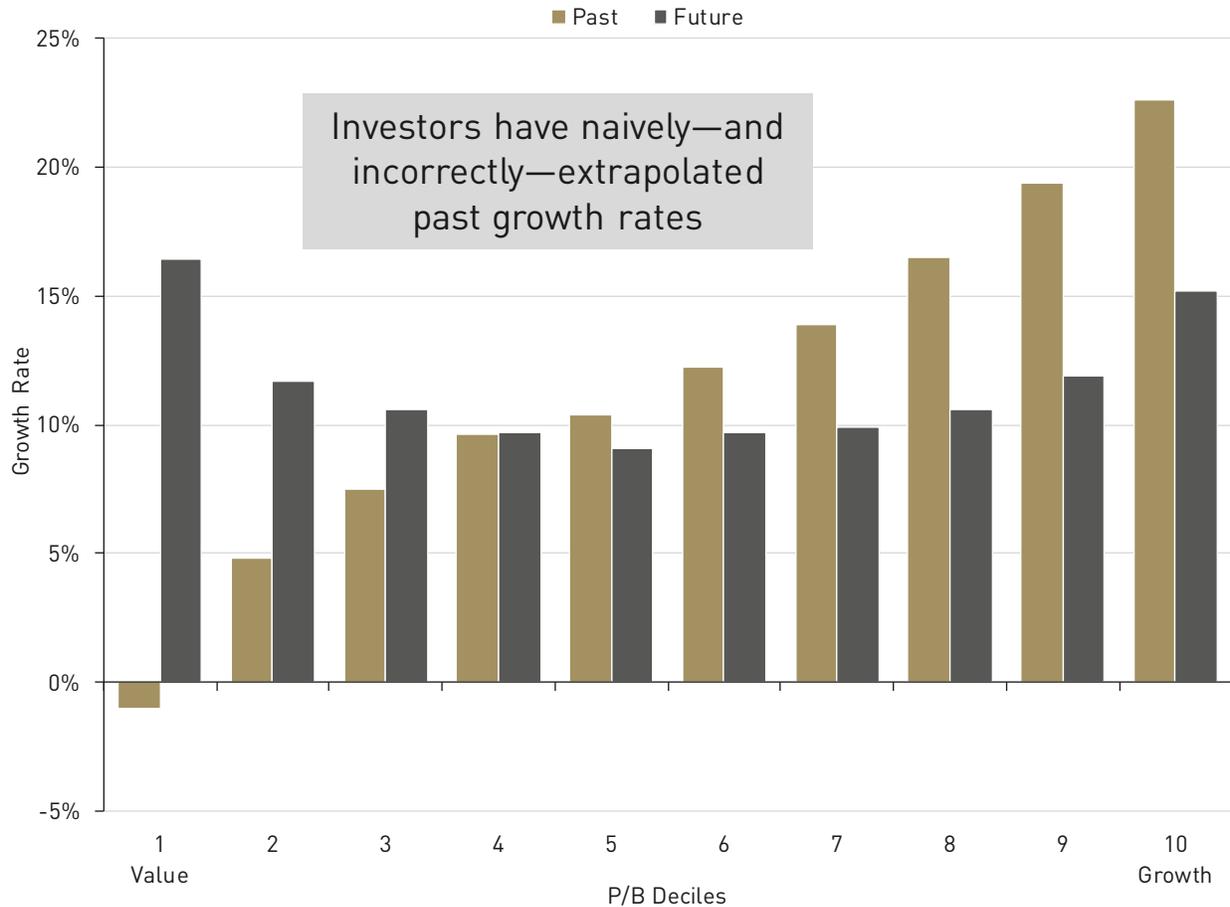
In Figure 1, we show a chart from a famous study using data from 1967 to 1991³—a great period for value. When the researchers ranked companies by P/B from the lowest on the left to the highest on the right and then plotted their past earnings growth rates in gold, they found that the market was naively extrapolating past growth to what it was paying for future growth in a P/B multiple. Slow growers got a low P/B and fast growers got a high P/B.

How did that turn out? The grey bars in the same plot show future earnings growth for each P/B decile. It turns out that the market was a lot more competitive than investors expected. Slow growers with low P/B learned how to compete and actually grew a bit more quickly than the fastest historical growers. It can be concluded that a good part of why value has outperformed in the past was this underestimation of competitive dynamics.



Figure 1. Some Explanation for the Value Premium — I

Data for the years 1967-1991



Source: P.M. Dechow, R.G. Sloan, "Return to Contrarian Investment Strategies: Tests of Naive Expectations Hypotheses," Journal of Financial Economics 43 (1997). Data are based on a historical study and are the latest available. The study ranked companies by price-to-book value (P/B) in deciles from the lowest (on the left) to the highest (on the right) and then plotted their past earnings growth rates (gold bars). The grey bars in the same plot show future earnings growth for each P/B decile.

The historical data are for illustrative purposes only, do not represent the performance of any specific portfolio managed by Lord Abbett or any particular investment, and are not intended to predict or depict future results. Due to market volatility, the market may not perform in a similar manner in the future. **Past performance is not a reliable indicator or guarantee of future results.**

What do investors do when faced with an anomaly like that? They adapt. Growth flows kept going for a few more years after 1991, but when value outperformed dramatically again after the tech bubble burst in 2000, that was the end of growth's favor with investors. Armed with past return data and a buy-cheap mentality, investors flocked to value and fled growth.

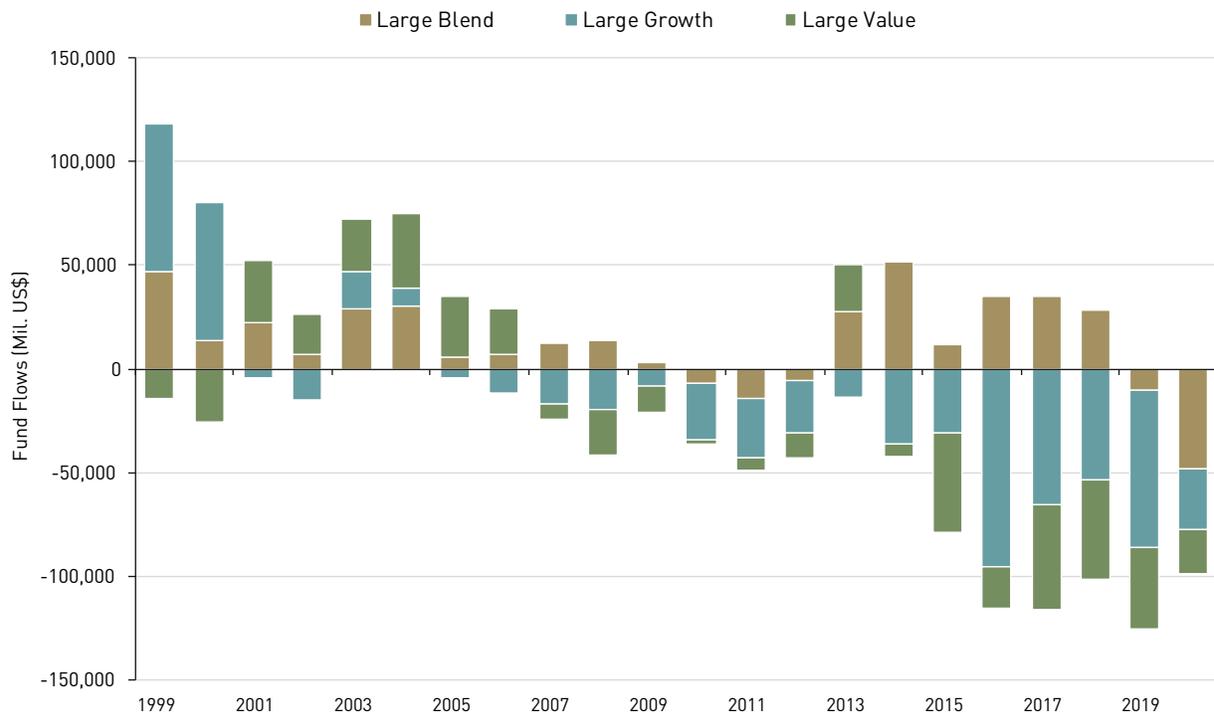
In Figure 3 we examine the effects of this shift in investor flows on valuation by the close of 2016, the last year for which we have forward three-year earnings per share (EPS) growth rates. The relationship of past growth (the blue bars) to P/B deciles in 2016 was not nearly as clear as it was in the 1990s. The market's

determination of P/B in 2016 was incorporating more information than just past growth. Interestingly, the top P/B companies did end up growing very quickly over the subsequent three years, as shown by the historical three-year growth as of the end of 2019. The promise of growth was delivered on with new technologies and more displacement of existing businesses. It appears that the market had gotten better at predicting growth with P/B by 2016 – but what we know is that past growers are not universally lauded anymore, and past troubled companies are not universally cheap. The power of competition, you might say, is better priced today.



Figure 2. Mutual Fund Flows Show a Multi-Year Exodus from Growth

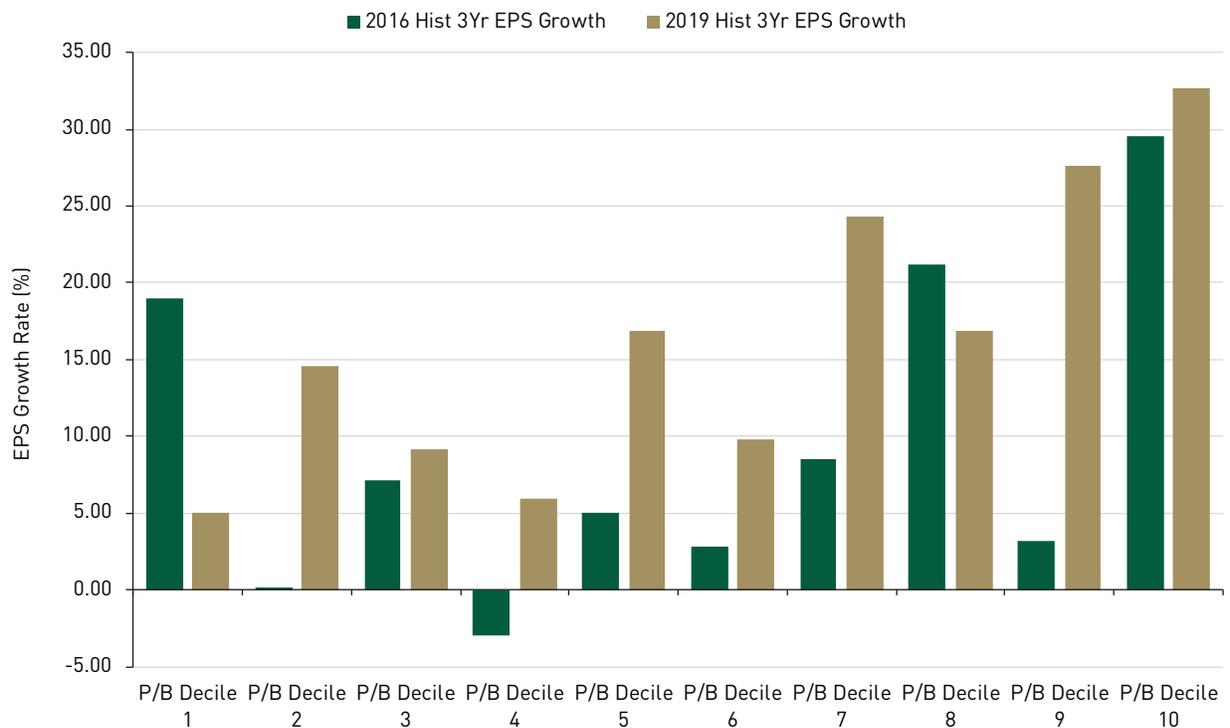
Mutual fund flows by category for the years 1999–2020 (through June 30)



Source: Simfunds. Data as of June 30, 2020. For illustrative purposes only and does not represent any specific portfolio managed by Lord Abbett or any particular investment.

Figure 3. The Relationship of Past Growth to Valuation Has Become More Complex Recently

Historical earnings per share growth by price/book value decile for the indicated periods



Source: FactSet and Lord Abbett. As of 12/31/2019 (latest available annual data). For illustrative purposes only and does not represent any specific portfolio managed by Lord Abbett or any particular investment.



Just because the “free lunch” of formulaic value investing is over doesn’t mean value investing itself is a waste of time. Plenty of managers will be successful at predicting which companies will compete better in the future, grow faster than expectations, or will be resistant to disruption. It’s just that the “throw money at everything cheap” strategy isn’t set up for another golden period, in our view.

Fundamentals Continue to Work Against Value

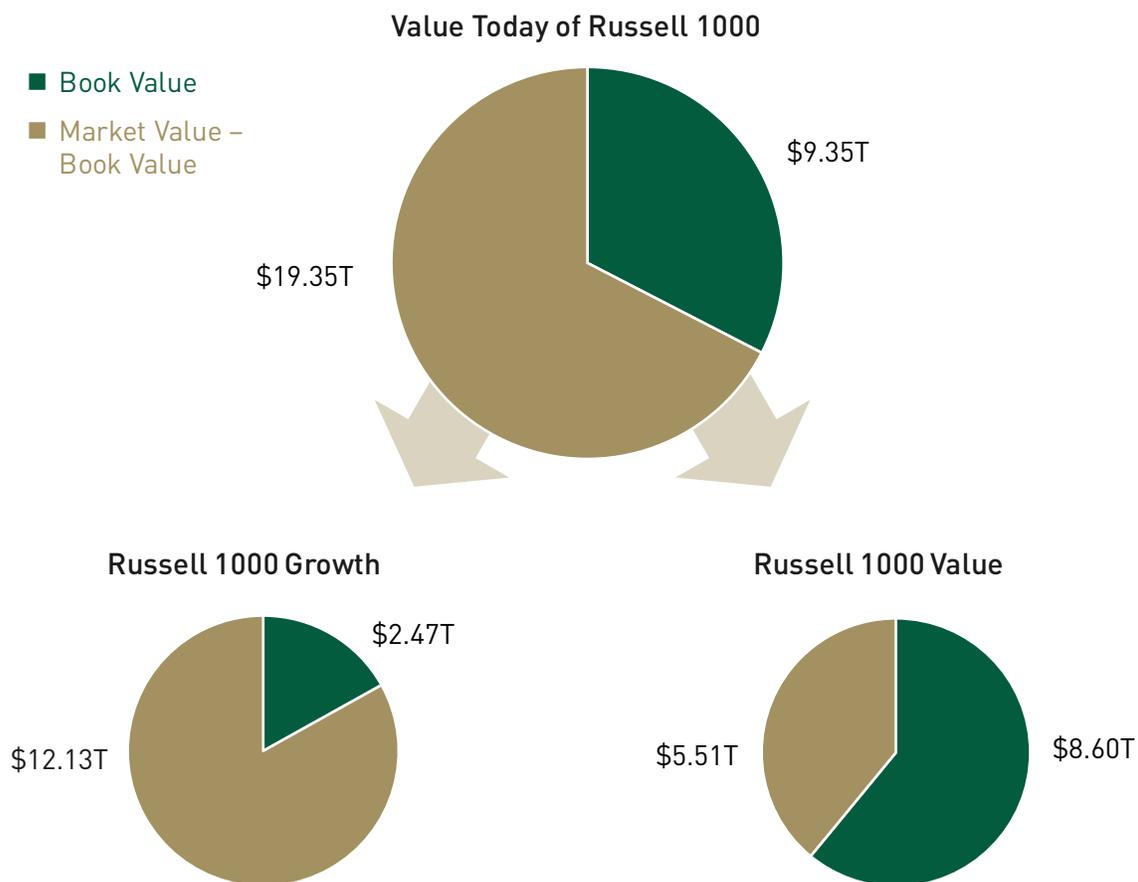
While the pricing of value has become more complex, competitive dynamics have also turned against lower valuation stocks. Value companies are cheaper because they are at risk of displacement by more innovative competitors.

We depict this in Figure 4, breaking down book value and market value among stocks in the Russell 1000® Index and its growth and

value subsets. The value index has built up a cache of retained earnings and assets (\$8.6 trillion as of June 30, 2020), and the market judges that to be at risk of disruption—or of being on the wrong end of innovation—so it only adds about \$5.5 trillion of premium versus \$12.1 trillion of premium for growth companies. The potential disruption is given some probabilistic weight—if it happens, the value companies likely will underperform. If it doesn’t, they likely will outperform.

That framework provides another important “explanation” to why value has underperformed for so long lately—the displacement feared is occurring: computing, biotechnology, distributed workforces, global supply chains, and information availability are tearing down the value of entrenched assets. Events like the COVID-19 crisis can serve to speed up the rate of displacement of existing business models, so it’s not surprising to us that value has struggled even more in the first half of 2020.

Figure 4. Some Explanation for the Value Premium — II



Source: Bloomberg. Data as of 06/30/2020. T=Trillions of U.S. dollars.

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Formulaic Growth Never Made Sense

It's been well documented that equity returns have positive skew—with one researcher finding that all wealth creation over U.S. Treasuries in the U.S. stock market can be attributed to only 4% of listed companies. Finding those companies that are disrupting entrenched business models and existing book value is the allure of growth investing. In the last few decades, we intuitively see that the pace of innovation is increasing in the world, and the prospect of owning a stock as its market value catches up to its disruption potential is enticing.

The problem is growth indexes are not tasked with identifying those kinds of equities. They usually do contain companies that fit that description, but they also harbor many other companies that simply do not fit the value profile. Growth index construction mechanisms rely on a blend of the following: “lack of value” metrics like high price to book, historical growth, or consensus earnings growth. Figure 5 displays a recent roster of the top 20 weights in the Russell 1000 growth universe, and while many of these companies are disruptors with potential to be part of that elite, positive-skewed return group, many others, in our view simply do not possess this growth potential.

Figure 5. Growth Indexes Fail to Represent Growth and Innovation

Characteristics of the top 20 stocks by market capitalization in the Russell 1000 Growth Index as of June 30, 2020

Company	Dividend Yield (%)	Historical 3-Year Sales Growth (%)*	Price to Earnings FY1
Microsoft Corporation	1.0	14.9	35.8
Apple, Inc.	0.9	7.6	29.5
Amazon.com, Inc.	--	25.4	147.3
Facebook, Inc. Class A	--	30.3	31.1
Alphabet, Inc. Class A & C**	--	21.8	33.8
Visa, Inc. Class A	0.6	14.8	38.4
Mastercard Incorporated Class A	0.5	16.5	45.1
UnitedHealth Group Incorporated	1.5	9.7	18.1
NVIDIA Corporation	0.2	16.0	46.6
Adobe, Inc.	--	22.8	44.6
PayPal Holdings Inc.	--	17.9	52.1
Netflix, Inc.	--	28.1	70.5
Merck & Co., Inc.	3.0	5.7	14.6
AbbVie, Inc.	4.6	9.8	9.3
Tesla, Inc.	--	54.8	289.9
salesforce.com, inc.	--	27.2	63.6
Amgen, Inc.	2.6	1.2	15.2
Eli Lilly and Company	1.7	2.2	24.1
Accenture Plc Class A	1.8	7.3	28.1
PepsiCo, Inc.	2.9	2.2	24.9

Source: FactSet. Top 20 companies in the Russell 1000 Growth Index, by market capitalization.

*Historical 3-Year Sales Growth data as of 06/30/2020. **Alphabet, Inc. Class A and Class C share holdings have been combined. Price to earnings FY1 ratio shown is an average of the two share classes.

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Finding Alpha in Today's Market: Change as the New Fulcrum

Diversifying the risk present to value and growth companies requires looking beyond existing ways of doing business, investing in the innovative companies that give impetus to disruption, or finding companies that will be able to defend a competitive advantage or resist disruption.

The dichotomy of value and growth developed in an era when physical assets and capital were the keys to production-based competitive advantage. What researchers found was that stocks of companies with low prices relative to book value performed better going forward, essentially due to an underestimation of the ability of those kinds of companies to utilize assets for earnings power in future periods.

We propose that value and growth were always measuring the market's assessment of the beneficiaries of change. When low P/B

value stocks outperformed, those companies were better at adapting to change and disruption than the market anticipated. Sometimes, as in the last decade, the pace of change and innovation was greater than the market anticipated, and those gains accrued to growth companies.

Further, with the declining importance of book value in an information- and service-driven economy, we believe it's likely that there are better ways to differentiate companies that are in a position to defend against change, and companies that will drive it. The metrics that define this differentiation are often qualitative, requiring an understanding of complex competitive dynamics, but some are quantitative, such as investment in intellectual property and price and operating momentum. Our growth investment teams at Lord Abbett are focused on disruption and change; they are seeking underappreciated opportunities through quantitative metrics like momentum and durability and through targeted fundamental research on disruptive industries and companies.

¹Eugene Fama was the 2013 Nobel laureate in economic sciences.

²Fama, Eugene and French, Kenneth, "The Cross-Section of Expected Stock Returns," *The Journal of Finance*, Vol. 47, No. 2 (June 1992).

³Dechow, P. M. and R. G. Sloan, "Return to Contrarian Investment Strategies: Tests of Naive Expectations Hypotheses," *Journal of Financial Economics*, Vol. 43, No. 3 (1997).

A Note about Risk: The value of investments in equity securities will fluctuate in response to general economic conditions and to changes in the prospects of particular companies and/or sectors in the economy. While growth stocks are subject to the daily ups and downs of the stock market, their long-term potential as well as their volatility can be substantial. Value investing involves the risk that the market may not recognize that securities are undervalued, and they may not appreciate as anticipated. Smaller companies tend to be more volatile and less liquid than larger companies. Small cap companies may also have more limited product lines, markets, or financial resources and typically experience a higher risk of failure than large cap companies. The value of an investment in fixed-income securities will change as interest rates fluctuate and in response to market movements. As interest rates fall, the prices of debt securities tend to rise. As rates rise, prices tend to fall.

No investing strategy can overcome all market volatility or guarantee future results.

Forecasts and projections are based on current market conditions and are subject to change without notice. Projections should not be considered a guarantee.

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Statements concerning financial market trends are based on current market conditions, which will fluctuate. There is no guarantee that markets will perform in a similar manner under similar conditions in the future.

Glossary and Index Definitions

Earnings per share (EPS) is a company's earnings divided by the number of shares outstanding. EPS can also be computed for an index such as the S&P 500.

Formulaic value refers to investment strategies that use ratios of common fundamental metrics (e.g., book value, earnings) to market price to determine the perceived attractiveness of an equity investment.

The **price-to-book ratio** compares a company's market value to its book value. The market value of a company is its share price multiplied by the number of outstanding shares. The book value is the net assets of a company.

Price-to-Earnings Ratio: Stock analysts calculate a price-to-earnings ratio by dividing a stock's current price by its earnings per share on a trailing 12-month basis. A forward price-to-earnings ratio is calculated by dividing a stock's current price by estimated future earnings per share.

The **Russell 1000® Index** measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 92% of the total market capitalization of the Russell 3000 Index.

The **Russell 1000® Growth Index** measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

The **Russell 1000® Value Index** measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

Indexes are unmanaged, do not reflect the deduction of fees or expenses, and are not available for direct investment.

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