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PERSPECTIVES
VIEWPOINTS FROM THE ACADIAN TEAM

Crisis and the Active Opportunity Set

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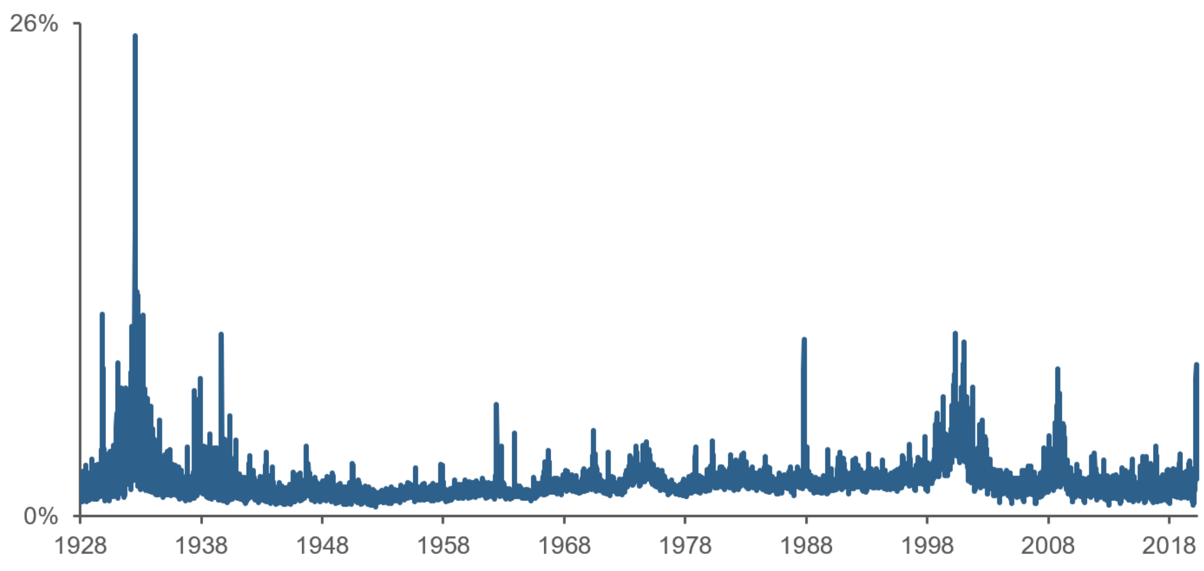
One of the principle objectives of systematic investing is to maintain a dispassionate and disciplined approach through periods of market stress so as to benefit from mistakes that other investors make in the heat of the moment. They include behavioral errors reflecting the influence of emotion, herding, and perceptual biases associated with highly uncertain conditions, as well as price-insensitive trading triggered by margin calls and other forms of forced deleveraging. Does the COVID crisis bear hallmarks of such an environment? Evidence suggests that it does.

How Attractive is the Current Opportunity Set?

Figure 1 shows that the recent market turmoil generated a high degree of cross-sectional divergence in stock returns.

Figure 1: Returns Dispersion among Large-Cap U.S. Stocks*

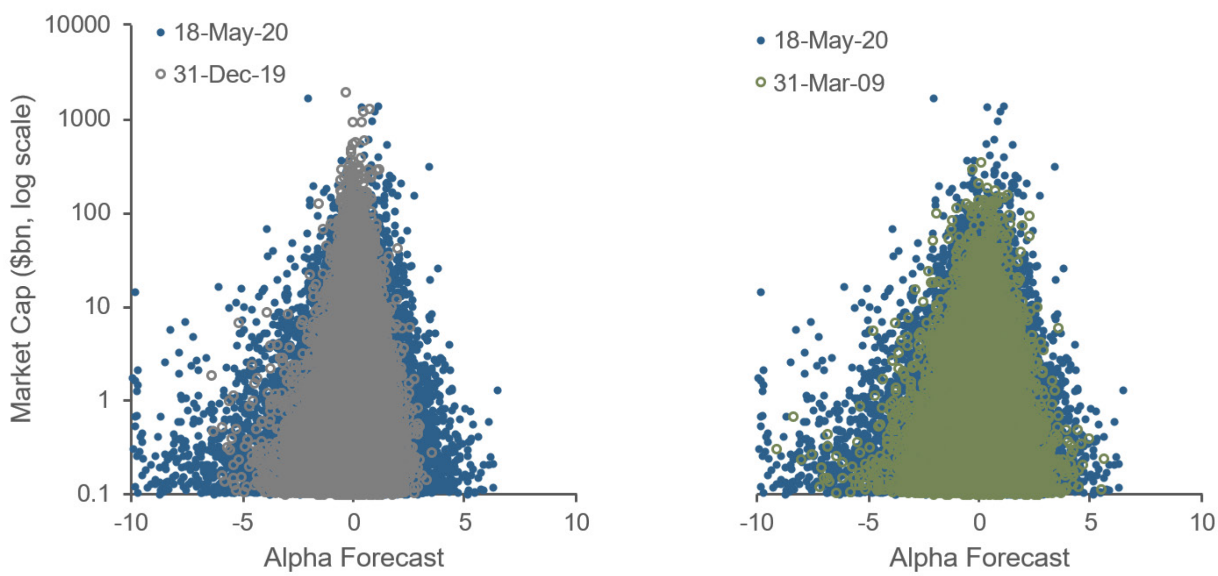


Cross-sectional standard deviation of daily returns of largest quintile of U.S. NYSE, AMEX, NASDAQ common stocks with a $2 price floor with clipping of the returns distribution to reduce the effect of outliers. Source: Acadian Asset Management LLC. Based on prices from CRSP® *(Center for Research in Security Prices. Graduate School of Business, The University of Chicago. Used with permission. All rights reserved.* Crsp.uchicago.edu.). For illustrative purposes only. Past results are not indicative of future results. Investors have the opportunity for losses as well as profits.

* A prior version of the paper contained an incorrect chart. This version has been corrected for clarity and accuracy.

Figure 2: Acadian Alpha Forecast Dispersion — Now vs. Year-End 2019 (left) and GFC (right)

Stocks within Acadian's All-Country Investment Universe



Stock forecasts are based on Acadian proprietary models. X-axes are truncated at -10/+10. Excludes China A-shares. Min cap of USD100m. Source: Acadian Asset Management LLC. The information provided is for illustrative purposes only based on proprietary models. There can be no assurance that forecasts will be achieved.

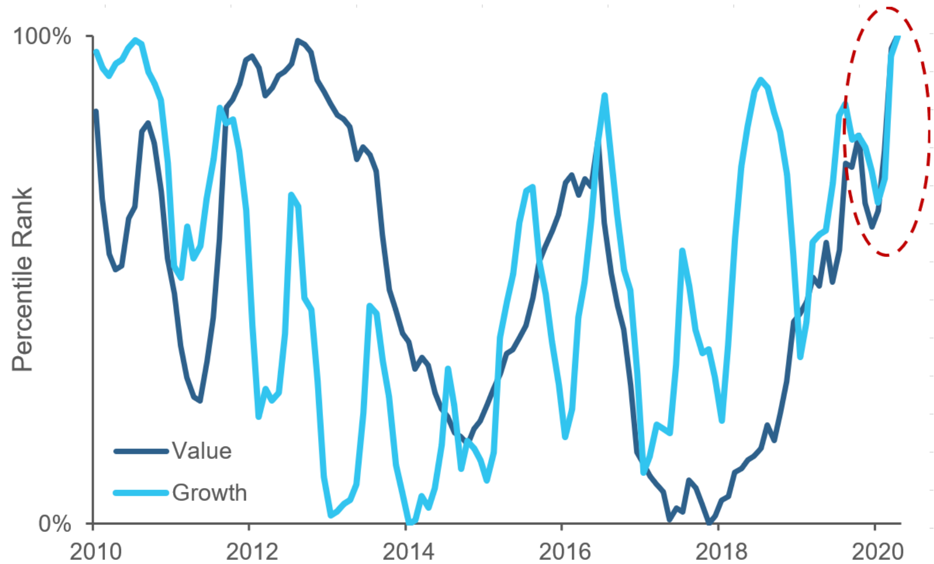
Returns dispersion, in and of itself, doesn't necessarily imply an attractive opportunity set, however. Although unlikely, it might be that returns dispersion entirely reflects rational, informed, precise pricing of the crisis's divergent impact on earnings prospects and risk across industries, countries, and companies.

But our stock return forecasts, a direct measure of the opportunity set, also show significant dispersion. The forecasts reflect market pricing *relative to* various fundamental indicators. They also control for industry and region effects, i.e., identifying aberrant prices within reasonably homogeneous peer groups. Figure 2 shows greater cross-sectional range in our forecasts now than at year-end 2019 (left panel) or in March 2009, shortly after the nadir of the GFC (right panel).

Looking more closely at the sources of this increased forecast dispersion, Figure 3 shows that distributions of value and growth characteristics, each measured on a peer-relative basis, have widened out considerably. This is consistent with heightened uncertainty regarding the crisis's impact on companies' earnings generation potential. Value, in particular, shows a considerably more attractive opportunity set than that which typified the post-GFC environment, when many value-focused strategies struggled. The COVID crisis has had less of an impact on dispersion of technical and quality attributes.

Figure 3: Dispersion at the Signal Level — Value and Growth Factor Spreads

Acadian's All-Country Investment Universe; percentile ranks from 2010 – Apr 2020



During the COVID crisis, cross-sectional dispersion in value and growth signals has widened considerably, reaching the most attractive levels since the end of the GFC.

Based on Acadian proprietary models. Percentile ranks for each factor spread are calculated within each factor's own history. Source: Acadian Asset Management LLC. The information provided is for illustrative purposes only based on proprietary models. Investors have the opportunity for losses as well as profits.

Even when forecast dispersion suggests that the opportunity set looks attractive, though, it is always possible that reverberations of noise or additional shocks could temporarily diminish signals' effectiveness. Nevertheless, based on long-term empirical evidence, we expect that as markets calm and uncertainty abates, investors will focus more clearly on fundamentals, including valuation, balance sheet quality, cash flows, and prospective growth opportunities, correcting mis-pricings. In the interim, awareness of transaction costs in portfolio construction can help to limit costly churn.

Concentration vs. Quant: Contrasting Relationships with Active Risk

Sophisticated quantitative processes target active risk by taking into account a broad range of market circumstances.[1] This implies trading off the amount of active risk taken during "normal" market environments in order to be able to remain fully engaged throughout periods of market stress.

In contrast, during the relatively subdued post-GFC environment, some asset owners who were starved for excess returns in a low interest rate environment turned to concentrated equity strategies. Under a premise that stock pickers who make outsized bets on a few "best ideas" can generate higher absolute returns, concentrated strategies take on higher levels of active risk under ordinary market conditions.

As a result, during crises, concentrated strategies are vulnerable in two respects. First, high levels of active risk that appeal in quiet times may become alarming or unacceptable amid market turmoil. Concentrated managers who pull back under such circumstances to stem losses on individual positions, to reduce risk, or to boost liquidity may miss out on especially attractive opportunity sets.

Second, concentrated strategies, by their nature, have less flexibility to control their exposure to myriad risk factors, including the market, industries, countries, sentiment, and interest rates, just to name a few, and they often don't seek to measure, let alone manage, such risk factors in the first place. Crises have a knack for revealing unintended positioning, however. So before crises occur, investors who own collections of concentrated strategies would be wise to carefully monitor the overall composition of their holdings for material risk factor exposures.

Conclusion

Our view of quantitative investing is predicated on a dispassionate and long-term investing perspective. It's naturally well suited to benefit from the mistakes of investors who overextend themselves in quiet periods, creating opportunities for more disciplined investors during crises. Doing so isn't easy, however. It requires a nuanced and market-aware approach to successfully manage portfolio risk and avoid unintended exposures, to distinguish stock-level mispricings from the appropriate discounting of uncertainty, and to weight signals based on available opportunities. We believe those challenges are well worth embracing.

[1] This characterization would apply to strategies that don't try to aggressively time markets or factors. Such approaches would generally test signals across a broad range of market conditions.

BIOGRAPHIES

Mark Roemer

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Mark joined Acadian Asset Management U.K. in 2017 and is a member of the Portfolio Management Team. Prior to Acadian, he was a portfolio manager and director with Allianz Global Investors where he managed and conducted research on a number of quantitative equity strategies as part of the firm's Systematic team. He previously worked at Barclays Global Investors as a principal and U.S. equity product manager, and at Kleinwort Benson Investment Management of London. Mark has a B.S. in mechanical engineering from Virginia Tech, an M.S. in engineering from Stanford University in their joint master's program between the College of Engineering and Stanford Business School, and a M.S. in finance from the London Business School.

Seth Weingram, Ph.D.

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Seth heads Acadian's Client Advisory function, working closely with the firm's Investment Team and the Global Client Group. Prior to joining Acadian in 2014, Seth was a managing director in Equity Derivatives Trading at UBS. Previously, he was a researcher at Barclays Global Investors, focusing on options and volatility. He also helped to establish and later ran Deutsche Bank's award-winning Equity Derivatives Strategy Group. Seth holds a Ph.D. in economics from Stanford University and a B.A. in economics from the University of Chicago.

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