A quant's eye view

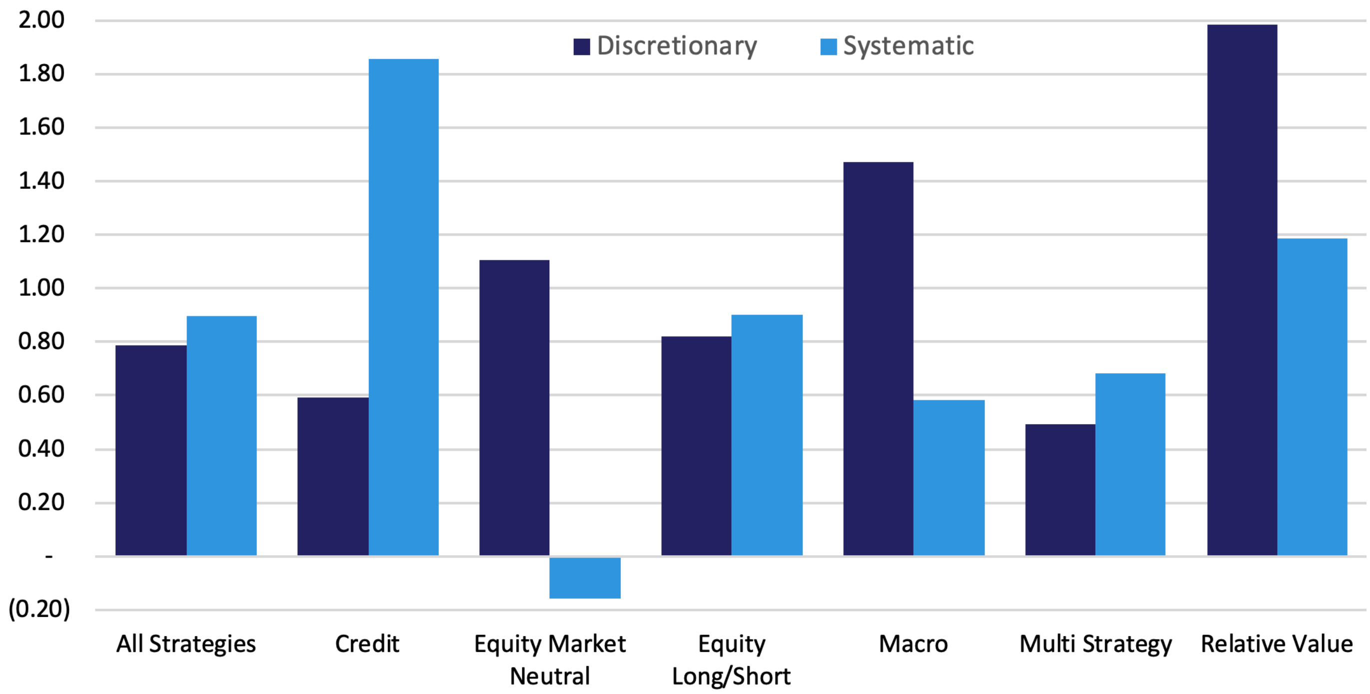
Teza Capital Management is a global quantitative asset management firm. We pride ourselves on attracting and retaining top talent, developing strategies with a data-driven and science-backed methodology, and continuously innovating in pursuit of alpha for our clients. Our Manager Insights pieces provide delve into our "quant's eye view" on markets, investment strategies, and industry developments.

Earlier this quarter, Ted Aronson shocked Wall Street with the announcement that he will shut down AJO, his renowned value investing firm, and return over $10 billion to investors. The Wall Street Journal, Institutional Investor, and Reuters chronicled the fall of this well-regarded quantitative firm, whose returns were among the best in institutional asset management for over 30 years. AJO has been named as an example of a quant firm that has struggled to navigate the current environment. However, we would caution investors not to look at the firm's closure as a failure of quant itself.

First, let's look more specifically at the circumstances around AJO's closure. Aronson articulated his motive quite bluntly in the Wall Street Journal – "our recent returns suck." It's no secret that value investors have underperformed their more growth-oriented peers over the past decade, missing out on booms in the technology and healthcare sectors. While AJO's focus is value-investing, their quantitative investment style means that instead of analyzing qualitative metrics such as customer loyalty or product quality, their investment process relies strictly on quantitative inputs such as net income, asset values, and earnings estimates. This is a form of factor investing, as the manager looks for and acts on quantitative factors to make trades.

In 2020, with many factor investors like AJO struggling, the question of whether quant is "broken" has dominated discussions about systematic investing. In a widely circulated Bloomberg article, Inigo Fraser-Jenkins, Bernstein's top quantitative researcher, declares that he no longer identifies as a quant and rebukes quantitative investing at large. He cites the inability of quantitative strategies, many of which rely heavily on backtests and mean reversion, to navigate regime switches.

3-Year Sharpe Ratio by Hedge Fund Category – 12/1/17 – 11/30/20



Source: Preqin HF Database; Teza Analysis

PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. See disclosures on p. 3.

With the onset of a global pandemic and a new volatility regime, certain quantitative models have failed to adapt. It's tempting to conclude from these specific adaptation failures that quant itself has, in full, failed. We vehemently disagree. We do not believe that quant can "break" any more than real estate can "break." The opportunities will change and evolve, and strategies themselves may fail as markets change. However, the existence of alpha in quant is as much a basic principle as the existence of investment opportunity in real estate.

The more relevant question to ask is, "which types of quant strategies are broken?" or, even better, "which quant strategies did successfully navigate the unpredictable regime switches of 2020?" We believe that many of the "quants" who rely solely on well-known fundamental factors (e.g., value) failed to generate alpha partially because their trades were often crowded (and therefore even when they work, they yield low margins) or periodically just plain wrong. On the other hand, a few quants who trade on much less popularized "structural factors"--in our case, the impact of capital flows identified through the study of market microstructure data--were able to capitalize on volatility and uncertainty and achieve solid returns in 2020.

As illustrated above, there has been significant dispersion in quant performance in recent history. It is rather reductive to declare the "death of quant," as there are numerous, uncorrelated approaches to quant. In evaluating quantitative strategies, it is crucial to consider not only their categorization, but also the nature of their inputs. Those strategies that rely on fundamental inputs are likely to continue to struggle as dislocations between prices and fundamentals grow, whereas strategies that trade on more granular, microstructure-level data may be better positioned for success in volatile, unpredictable markets.

Sources

Lee, Justina. "Top Quant Analyst Rebukes the Industry: 'I'm No Longer a Quant.'" Bloomberg, 5 October 2020.

Zweig, Jason. "'Our Recent Performance Sucks.' Here's Your $10 Billion Back." The Wall Street Journal, 23 October 2020.

 See disclosures on p. 3.

Teza's Edge

Teza has built an institutional-strength organization consisting of a highly talented group of world-class researchers and investment professionals driven by success.

- **HERITAGE:** Our endeavors in institutional asset management are based on our 10+ year tenure as a proprietary, algorithmic low-latency trading firm, as we strive to leverage the extensive synergies we've identified between the two models.
- **TEAM:** We have world-class talent with over 60 employees in 4 locations. Our 30+ accomplished researchers and investment professionals hold advanced degrees from renowned universities in science, technology, engineering, and mathematics.
- **APPROACH:** We follow a rigorous, scientific process and have deployed state-of-the-art portfolio construction and optimization.
- **EXECUTION:** We have highly developed futures execution capabilities given our quantitative trading roots.
- **RISK PHILOSOPHY:** We ensure controls and checks and every key step of research and operations.
- **INFRASTRUCTURE:** As a result of significant investments into our operational infrastructure, we have created a scalable, robust platform.

Founder Biography

Misha Malyshev has led Teza Group as the CEO since the company's founding in 2009. He earned his Ph.D. in Astrophysics from Princeton University in 1998. He also holds an M.S. in Theoretical Physics and a B.S. degree summa cum laude in Physics and Mathematics from Moscow Institute of Physics and Technology. Dr. Malyshev worked for Bell Labs conducting scientific research until 2000. From 2000 through early 2003, he worked as a consultant with McKinsey & Company, where he developed substantial experience working for asset management and investment banking clients. Dr. Malyshev joined Citadel Investment Group, L.L.C. in April 2003 as a member of its strategy group. In 2004, he moved to Citadel's Quantitative Analytics group, where he developed a quantitative trading business. Dr. Malyshev was rapidly promoted to the position of Managing Director and Global Head of High Frequency Trading at Citadel, which he held until he resigned in the winter of 2009. Dr. Malyshev is an avid supporter of education initiatives, and has partnered with organizations that inspire young people, particularly women and minorities, to pursue careers in science, technology, engineering and math. He is currently on the global leadership council of buildOn, an international nonprofit organization that runs youth service after-school programs in United States high schools and builds schools in developing countries.

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