



E Q U I T I E S

The Role of Shorting, Firm Size and Time on Market Anomalies

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The pervasiveness, robustness and magnitude of return premia associated with size, value and momentum has made them the focal point for discussions of market efficiency as well as critical inputs for describing the cross-section of expected returns. These anomalies have been shown to be robust in other stock markets, other time periods and other asset classes, and have led to empirical asset-pricing models that incorporate their returns. The vast literature on these anomalies has generated a debate as to the underlying reasons for these premia, which generally fall into two categories: rational risk-based models or behavioral theories. There is also a lack of consensus on whether the strategies can be executed in practice.

Given the disparate views in the literature, we take stock of the empirical evidence of these anomalies, to shed some light on these issues. We examine the role of shorting, firm size and time on the profitability of size, value and momentum strategies. We find that long positions comprise almost all of size, 60% of value and half of momentum profits. Shorting becomes less important for momentum and more important for value as firm size decreases. The value premium decreases with firm size and is weak among the largest stocks. In contrast, momentum profits exhibit no reliable relation with size.

The effects are robust over 86 years of U.S. equity data and almost 40 years of data across four international equity markets and five asset classes. We find little evidence that size, value and momentum returns are significantly affected by changes in trading costs or institutional and hedge fund ownership over time.

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