

# Role of anomaly discovery and arbitrageurs for asset pricing

December 7 2022

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Asper Professor Dr. Lei Lu is interested in anomalies in asset pricing and patterns that are inconsistent with what one would expect from existing benchmark models.

Lu, the Bryce Douglas Chair in Finance, along with co-authors Xi Dong, Qi Liu, Bo Sun, and Hongjun Yan dive into these inconsistencies in their paper entitled "Anomaly Discovery and Arbitrage Trading." This paper, which examines role of anomaly discovery and arbitrageurs for asset pricing, is published in the *Journal of Financial and Quantitative Analysis* (JFQA), which covers theoretical and [empirical research](#) in [financial economics](#).

In their paper, Lu and co-authors construct a model with two assets and two different types of investors. The first investors, "consumers," find the first asset riskier and give it a [lower price](#) and higher expected return than the second one. The authors consider this return pattern a discovered anomaly. The second type of investors are the "arbitrageurs" who become aware of the pattern and find it worth exploiting. They trade on the first asset, which alters the equilibrium and leads to the discovery effect.

This "model has implications on asset prices and arbitrageurs' trading" and the authors analyze it further within the larger context of trading activities of [hedge funds](#). They are also able to ascertain that [anomalies](#) that are highly cited in academic literature are stronger and attract arbitrage trading.

The analysis in this paper brings to light the interesting "role of anomaly discovery and arbitrageurs for asset pricing in general" and asserts that its "discovery effect implies that we should not expect a single asset pricing model to explain asset returns in the entire sample of the modern stock market. As anomalies are discovered over time, asset pricing factors also evolve, and therefore cannot be explained by the same known factors throughout the entire sample." It also expands current understandings of the role of arbitrageurs throughout the literature.

Lu, whose research interests at the Asper School of Business include

asset [pricing](#), behavioral finance and international finance noted that investors can use the findings in his study to potentially improve investment outcomes.

"The discovery of a return anomaly in financial markets by arbitrageurs (i.e., hedge funds) reduces the correlation between the returns of long- and short-leg portfolios, and hedge funds increase their positions that exploit the [anomaly](#)," said Lu.

This is the second time in less than three years that Lu has published his work in the *Journal of Financial and Quantitative Analysis*. His paper, titled "[Two Trees with Heterogeneous Beliefs: Spillover Effect of Disagreement](#)" was published in JFQA in 2020.

**More information:** Anomaly Discovery and Arbitrage Trading.  
[jfq.org/2022/10/30/anomaly-di...d-arbitrage-trading/](https://jfq.org/2022/10/30/anomaly-discovery-and-arbitrage-trading/)

Provided by University of Manitoba

Citation: Role of anomaly discovery and arbitrageurs for asset pricing (2022, December 7) retrieved 23 June 2024 from <https://phys.org/news/2022-12-role-anomaly-discovery-arbitrageurs-asset.html>

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