File name: FID-011.txt

Result: PLAGIARISM NOT DETECTED

Plagiarism percentage: 0%

Text to analyze:

Statistical arbitrage powered by Explainable Artificial Intelligence Machine learning techniques have recently become the norm for detecting patterns in financial markets. However, relying solely on machine learning algorithms for decision-making can have negative consequences, especially in a critical domain such as the financial one. On the other hand, it is well-known that transforming data into actionable insights can pose a challenge even for seasoned practitioners, particularly in the financial world. Given these compelling reasons, this work proposes a machine learning approach powered by eXplainable Artificial Intelligence techniques integrated into a statistical arbitrage trading pipeline. Specifically, we propose three methods to discard irrelevant features for the prediction task. We evaluate the approaches on historical data of component stocks of the S&P500 index and aim at improving not only the prediction performance at the stock level but also overall at the stock set level. Our analysis shows that our trading strategies that include such feature selection methods improve the portfolio performances by providing predictive signals whose information content suffices and is less noisy than the one embedded in the whole feature set. By performing an in-depth risk-return analysis, we show that the proposed trading strategies powered by explainable AI outperform highly competitive trading strategies considered as baselines.

Sentence analysis:

Original sentence (file FID-011.txt):
'Statistical arbitrage powered by Explainable Artificial Intelligence Machine learning techniques have recently become the norm for detecting patterns in financial markets.'

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