## **EDITORIAL**

## **Open Access**



# Editor's introduction

Gang Kou<sup>1\*</sup>

\*Correspondence: kougang@swufe.edu.cn

<sup>1</sup> Southwestern University of Finance and Economics, Chengdu, China The 45th issue of Financial Innovation (FIN), Volume 11, No.3 (2024) presents 34 papers contributed by authors and co-authors from 29 countries: Australia, Austria, Canada, China, Egypt, Finland, France, Germany, Ghana, Greece, Iran, Italy, Kuwait, Lebanon, Oman, Pakistan, Portugal, Republic of Korea, Romania, Russia, Saudi Arabia, Singapore, Spain, Tunisia, Turkey, United Arab Emirates, United Kingdom, United States, Vietnam. These papers are primarily categorized into two sub-themes: Investment Strategy and Portfolio Management, and Cryptoeconomics and Financial Markets.

## Investment strategy and portfolio management

Yousaf et al. (2024) find that NFTs weakly connect with conventional currencies using TVP-VAR model, suggesting diversification benefits, and reveal that NFTs are net transmitters of return and volatility spillovers, especially during crises like COVID-19. Li et al. (2024) examine dynamic connectedness and hedging opportunities of the commodity and stock markets in China, and reveal that copper is a key volatility transmitter in China's markets, while gold and soybean are net recipients, with gold serving as a safe-haven during the Russia-Ukraine war. Vega-Gámez and Alonso-González (2024) find that longer investment horizons reduce loss likelihood and emphasize the importance of US stock market investments for medium- and long-term goals. Zhu et. al (2024) develop a multistage dynamic programming model for institutional investors using extended trading (ETC) close to reduce execution costs and extreme price movements, recommending delayed ETC trading to avoid revealing intentions. Long et al. (2024) develop a hybrid model integrating market data and financial news for stock price trend prediction, demonstrating superior performance over traditional models in terms of accuracy, robustness, and profitability in trading strategies. Pabuccu and Barbu (2024) present a machine learning-based method for forecasting stock and cryptocurrency markets, showing that feature selection with annealing improves prediction accuracy and outperforms other models in most cases. Wang (2024) indicate that neural network models predict stock returns more effectively when incorporating macroeconomic factors, revealing significant variable importance and interaction effects, especially in Fama-French model-derived abnormal returns. Bagci and Soylu (2024) introduce a high-frequency rebalancing algorithm and show it outperforms periodic and threshold rebalancing strategies, particularly in high-volatility, upward-trending markets, providing substantial returns for larger portfolios. Tilica et al. (2024) propose a novel index



© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

for market frictions in post-communist East European capital markets, employing grey clustering analysis to categorize them and recommend Hungary as the most favorable investment option. Chun et al. (2024) show that machine learning models like Elastic Net and LASSO improve forecasting accuracy for KRW/USD exchange rates and stock market returns, leading to superior performance in global asset allocation portfolios compared to traditional methods. Arpaci et al. (2024) develop a new Investment Strategies Scale (ISS) that reliably measures both short-term and long-term investment strategies among individual investors, indicating that long-term investment strategies significantly predict long-term orientation. Xi et al. (2024) analyze the biopharmaceutical sector during COVID-19, identifying growth in medical devices, services, biological products, and chemical pharmaceuticals, while Chinese medicine and pharmaceutical commerce declined.

#### **Cryptoeconomics and financial markets**

Radanliev (2024) delves into blockchain role in the Metaverse, focusing on cryptocurrency investments and trading, and evaluates its economic and cybersecurity risks, machine learning applications, and impact on global economies, affirming blockchain's enduring value and potential risks. Vlahavas et al. (2024) use an unsupervised clustering algorithm with novel features to classify Bitcoin transactions, finding that most transactions follow common usage patterns while few are potentially illicit, and suggest future improvements with new features and correctly labeled datasets for enhanced machine learning accuracy. Khaled et al. (2024) explore the time-varying market efficiency of Bitcoin and Ethereum using daily data and quantile regression, finding that global financial stress and liquidity significantly influence efficiency, with the COVID-19 pandemic notably impacting market inefficiencies. Trozze et al. (2024) explore the identification of securities violations in DeFi using machine learning to analyze tokens' smart contracts, achieving high model accuracy and contributing a novel dataset to enhance legal enforcement efforts. Mensi et al. (2024) examine the connection between cryptocurrencies and NFTs, finding increased risk transmission from cryptocurrencies to NFTs at extreme market conditions, with Bitcoin potentially mitigating risks in other digital assets. Guo et al. (2024) use a TVP-VAR model to show that cryptocurrency markets are highly sensitive to climate and financial uncertainties, highlighting the need for global regulation that accounts for interconnected market risks and climate impacts. Sadorsky and Henriques (2024) investigate the impact of economic uncertainty on NFT coin prices, revealing strong correlations during volatile periods in 2020 and 2022 and identifying external factors like COVID-19 as influences on market bubbles. Wu et al. (2024) analyze volatility spillovers across four exchanges and six cryptocurrencies, finding distinct roles for Ripple and varying spillover effects from Bitfinex and Binance, and identify determinants that explain interlinkages between markets. Foroutan et al. (2024) assess gold and crude oil as safe havens for major cryptocurrencies during COVID-19, revealing their varying effectiveness and shifts in market influence, with implications for risk management in economic crises. Maghyereh and Ziadat (2024) investigate tail risk connectedness among major cryptocurrencies, finding that investor sentiment, economic conditions, and uncertainty significantly predict dynamic risk transmission, especially during crises. Brini and Lenz (2024) analyze high-frequency data from 2020 to 2022, finding that positive market returns and signed volatility increase future

cryptocurrency volatility, indicating structural differences from mature equity markets. Mirzaee et al. (2024) analyze daily return series from crude oil markets, stock indices, and benchmark cryptocurrencies during the COVID-19 pandemic, revealing that correlations in returns are generally stronger than in volatilities, with significant increases in both during the pandemic, although Bitcoin and Ethereum exhibit distinct behaviors. Bossman et. al (2024) use a spillover connectedness model to analyze market interactions and find that cryptocurrencies amplify risks during financial downturns, while stablecoins offer a "flightto-cryptosafety" for investors seeking stability. Bouri et al. (2024) investigate asymmetric volatility spillovers among major conventional and Islamic cryptocurrencies, finding that bad spillovers are more pronounced, with Ethereum and Stellar being key transmitters of positive and negative volatilities, respectively. Lahmiri (2024) finds that during the COVID-19 pandemic, cryptocurrency prices became more stable with changed variances in nonlinear features, while transaction volumes remained unaffected. Alamaren et al. (2024) reveal that the COVID-19 pandemic intensified volatility spillovers among cryptocurrencies, energy companies, and tech giants, with short-term spillovers being more impactful and Alphabet and Amazon as major shock transmitters. Ghaemi Asl and Roubaud (2024) study the volatility connections between FinTech, IoT, AI, and cryptocurrencies like Bitcoin and Stellar, revealing complex, quantile-dependent causality relationships that offer important insights for investors and regulators in tech and finance. Azimli (2024) analyzes high-frequency connectedness among major cryptocurrencies during key events, revealing varied roles in volatility and higher moments, which informs strategies for risk management and portfolio optimization. Ibrahim et al. (2024) show that Bitcoin's volatility impacts gold and major stock markets, especially during economic turmoil, emphasizing the need for risk management and the use of cryptocurrencies for hedging and diversification. Mayer and Bofinger (2024) apply Hayek's concept of currency competition to cryptocurrencies, finding intense competition among speculative and stable coins but less in their use as mediums of exchange. Ahmed (2024) investigates Bitcoin liquidity using high-frequency data and extreme bounds analysis, revealing that Bitcoin-specific factors such as volatility, trading volume, and search trends are the primary determinants of its liquidity. Guan et al. (2024) reveal that trading volume is a strong predictor of returns in Metaverse tokens, supporting the speed of adjustment hypothesis and highlighting lead-lag effects among 197 tokens.

#### Author contributions

The author read and approved the final manuscript.

### Declarations

**Competing interests** The author declares that he has no competing interests.

Published online: 01 July 2024

#### **Publisher's Note**

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.