# FINANCIAL SCIENCES

# NAUKI O FINANSACH

2023, Vol. 28, No. 1

Publishing House of Wroclaw University of Economics and Business
Wroclaw 2023

Copy-editing: Elżbieta Macauley, Tim Macauley, Aleksandra Śliwka
Layout: Małgorzata Myszkowska
Proof-reading: Aleksandra Śliwka
Typesetting: Beata Mazur, Małgorzata Myszkowska
Cover design: Beata Dębska

Information on submitting and reviewing papers is available on websites
www.wydawnictwo.ue.wroc.pl
https://journals.ue.wroc.pl/e21



ISSN 2449-9811

Publication may be ordered in Publishing House:
Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu
ul. Komandorska 118/120, 53-345 Wrocław
tel. 71 36-80-602; e-mail: econbook@ue.wroc.plwww.ksiegarnia.ue.wroc.pl

## Contetns

**Introduction** .......... V

**Piotr Nawrocki:** Effectiveness of Monte Carlo Simulations of the S&P 500 Index before and after the Outbreak of the SARS-COV-2 Pandemic / Efektywność symulacji Monte Carlo indeksu S&P 500 przed ogłoszeniem i po ogłoszeniu pandemii SARS-COV-2 ..... 1

**Ulyana Zaremba:** Strong ESG Risk Management as a Way to Improve Organisational Resilience in Times of Crisis: An Analysis of WIG-ESG Index Constituents / Mocne zarządzanie ryzykiem ESG jako sposób na zwiększenie odporności organizacji w czasach kryzysu: analiza składników indeksu WIG-ESG .......... 17

**Anissa Ouelhadj, Mehdi Bouchetara, Messaoud Zerouti:** Transfer Pricing and Financial Performance: The Case of Algerian Companies / Ceny transferowe a wyniki finansowe: przypadek spółek algierskich .......... 32

# Dear Readers of Financial Sciences,

We are delighted to present to you Issue 1/2023 of Financial Sciences. This edition features three compelling articles, each delving into distinct realms of finance, all substantiated by rigorous empirical research. We extend our sincere gratitude to our anonymous reviewers, whose invaluable insights have consistently elevated the quality of our journal's publications.

In this issue:
Piotr Nawrocki's article explores the profound impact of the COVID-19 pandemic on the behaviour of the U.S. market and evaluates the efficacy of the Monte-Carlo method both before and after the outbreak of the pandemic. His findings not only offer potential enhancements to Monte-Carlo simulations, aligning them more closely with market dynamics during economic turbulence, but also provide crucial insights for market analysts seeking efficiency in such simulations during crisis periods.

Anissa Ouelhadj, Mehdi Bouchetara, Messaoud Zerouti investigated the influence of transfer pricing on the financial performance of corporate groups in Algeria. This article examines key transfer pricing variables (tax burden, company size, and leverage) across a sample of 60 companies operating in diverse sectors. The authors discover a significant and positive correlation between transfer pricing has a significant and positive impact on those companies. the authors concluded that the bigger the company, the more it should pay attention to its transfer prices and their declarations to avoid any tax adjustment which can hinder its financial performance.

Ulyana Zaremba, the author of the third paper, takes a deep dive into the newly minted WIG-ESG index. Her analysis thoroughly examines its constituents and explains its performance and organizational resilience concerning ESG (Environmental, Social, and Governance) risk exposure and management. Her research has unveiled compelling findings: firstly, advocating for a revision of the index's inclusion criteria to spotlight companies committed to robust ESG risk management while excluding those with minimal ESG efforts. Secondly, the crucial question of eligibility for inclusion is explored. By considering ESG testing as a prerequisite for inclusion, the rotation of the index's components can be reduced, opening avenues to investigate the connection between a company's evolving ESG score and its long-term performance.

This issue marks my inaugural appearance as Editor-in-Chief, and I am excited with the prospect of steering the journal forward. I extend my heartfelt gratitude to Marek Pauka, who, as Associate Editor and an esteemed member of our Editorial Board, has dutifully held the position of Editor in Chief since 2020. His unwavering commitment to delivering high-quality scientific articles has significantly contributed to the advancement of financial science.

We hope you find this issue to be a source of inspiration and enlightenment in your financial research journey.

Happy Reading!

*Dominika Hadro*
Editor-in-Chief