

Editor in Chief

Ewa Ziemba

Monika Eisenhardt (Managing Editor), Wojciech Gamrot (Statistical Editor)

Editorial Board

Michael A. Bournakis, Yuh-Wen Chen, Andrzej Cieřlik, Carla Curado, Marijana Ćurak, Dan-Cristian Dabija, Pietro Evangelista, Nitzza Geri, Luiz F. Aufran Gomes, Janina Harasim, Scott W. Hegerty, Krzysztof Jackowicz, Rob Law, Jerzy Michnik, Satu Parjanen, Jacek Pietrucha, Reiner Springer, Joanna Stavins, Bob Travica, Heinz Roland Weistroffer, Tsu-Ming Yeh

Editorial Advisory Board

Antonio Cartelli, Krzysztof Cios, Józef Dziechciarz, Günter Hofbauer, Alex Koohang, Jorma Larimo, Jay Liebowitz, Frédéric Le Roy, Heinz-Dietrich Steinmeyer

Publishing Editor

Patrycja Keller, University of Economics in Katowice, Poland

Language Editor


Ewa Grzelewska-Jędryka, University of Economics in Katowice, Poland

Technical Editor

Daria Liszowska, University of Economics in Katowice, Poland

e-ISSN 2719-9975

ISSN 1732-1948

© Copyright by Publishing House of the University of Economics in Katowice 2021
JEM is published with Sciendo, a part of De Gruyter academic publisher  sciendo



All articles of this journal are licensed under
a Creative Common Attribution-NonCommercial International License
(<https://creativecommons.org/licenses/by-nc/4.0/>).

BY – You may adapt, remix, transform, and build upon the material
when proper attribution to the original source is provided (Attribution).
NC – You may adapt, remix, transform, and build upon the material
only for any non-commercial purposes (NonCommercial).

Online & print edition. The original version of the journal is online one (from 2021).



Publishing House of the University of Economics in Katowice

ul. 1 Maja 50, 40-287 Katowice, tel. (32) 257-76-33

www.wydawnictwo.ue.katowice.pl/jem, e-mail: jem@ue.katowice.pl