

9th International Conference on MANAGEMENT, ECONOMICS & FINANCE

25 - 27 April 2025 Madrid, Spain

Higher Education in Crisis: The Impact of COVID-19 Across European Countries

Teodora-Cătălina DUMITRA

Bucharest University of Economic Studies, Romania

ABSTRACT

The COVID-19 outbreak caused significant changes in the European higher education sector. The present research examines the effects of the crisis on higher education in Europe from 2015 to 2023. The analysis examines several indicators related to education, digitalization, governance, and socioeconomic vulnerability, utilizing data obtained from the World Bank. The study is structured into three distinct phases: the pre-pandemic period (2015–2019), the pandemic years (2020–2021), and the post-pandemic recovery phase (2022–2023). A wide range of quantitative techniques were utilized, encompassing exploratory data analysis, principal component analysis, and cluster analysis. The results indicated that the placement of the indicators changed a lot during the time studied, leading to the creation of three main groups of countries: high-performing, transitioning, and vulnerable. This paper's novelty lies in its longitudinal principal component analysis and cluster analysis over a decade. The study concludes that the COVID-19 crisis significantly reshaped the landscape of higher education in Europe, with measurable shifts in key indicators and the emergence of distinct country groupings over time.

Keywords: Cluster Analysis, Digitalization, Pandemic, Principal Component Analysis, Socioeconomic Vulnerability