FINANCIAL EQUILIBRIUM ANALYSIS OF ROMANIAN AND POLISH LISTED COMPANIES: EVIDENCE FROM 2019–2024

Kinga Emese Zsidó[1*],
Zuzanna Ostraszewska[2],

[1] George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Gh. Marinescu 38, 540142, Mureș, Romania
[2] Czestochowa University of Technology, Management Department, J.H. Dąbrowskiego 69, Częstochowa, Poland

Rezumat: *Obiectul principal al acestui studiu este analiza echilibrul financiar (ca condiție a sustenabilității financiare) al companiilor românești și poloneze listate la Bursa de Valori din București și Varșovia, care operează în sectoare cu diferite niveluri de vulnerabilitate la pandemia de COVID-19: HoReCa (puternic afectată), Transport & Logistică și Industrie & Producție (mai puțin afectate). Echilibrul financiar a fost evaluat pe baza unor indicatori de lichiditate și solvabilitate în perioada 2019–2024. Rezultatele analizei arată că companiile românești prezintă o lichiditate mult mai ridicată decât companiile poloneze, se bazează predominant pe finanțarea internă și mențin niveluri scăzute a datoriei. În contrast, companiile poloneze demonstrează o poziție optimă de lichiditate, folosesc mai mult finanțarea externă comparativ cu companiile românești, dar rămân în limitele recomandate. În ambele cazuri, sustenabilitatea financiară a companiilor analizate este asigurată de stabilitatea financiară.*

Cuvinte cheie: *Echilibru financiar, lichiditate, solvabilitate, companii listate pe bursă.*

Abstract: *The main object of this study is to analyze the financial stability (as a condition of financial sustainability) of Romanian and Polish companies listed on the Bucharest Stock Exchange and the Warsaw Stock Exchange, operating in sectors with different levels of vulnerability to the COVID-19 pandemic: HoReCa (highly affected), Transport & Logistics, and Industry & Manufacturing. Financial equilibrium was assessed using liquidity and solvency indicators over the period 2019–2024. The results of the analysis reveals that Romanian companies have much higher liquidity than Polish companies, rely predominantly on internal financing, and maintain very low debt levels. In contrast, Polish companies demonstrate an optimal liquidity position, make greater use of external financing compared to Romanian companies, yet remain within recommended limits. In both cases, financial sustainability is ensured by the overall financial stability of the analyzed companies.*

Keywords: *Financial equilibrium, liquidity, solvency, listed companies.*

JEL Classification: G32, G33

* *Corresponding author: Kinga Emese Zsidó*
e-mail: kinga.zsido@umfst.ro

1. INTRODUCTION

During centuries, population of world have been facing different dangers, threats, challenges, risks, wards and disasters. It seems that they are appearing from time to time and population has to learn how to combat and survive them. We can mention just the most relevant ones, such as the cholera epidemic in France in the early 1830s, the Spanish flu in the beginning of 1900s (Belitski et al., 2022), the two world wars, and currently the Covid-19 pandemic and the war in Ukraine. All of them shock population, society, national economies, general atmosphere, economic, social and political stability.

The most recent shock was the spread of the Corona virus, which affected the entire world, starting with Asia, Europe, but with global effects. With the awareness of the serious situation, the local authorities adopted various measures to stop, to limit the spread of the virus (Ardolino et al., 2022; Chamola et al., 2020) measures that affected not only the population itself, but also with negative effects on national economies, and companies performance/company survival. These restrictions have not only disrupted companies production and sales activities, but also resulted in factory closures and material shortages due to the global breakdown in goods distribution (Tang et al., 2021). The measures targeted the economic sectors differently, identifying the most essential and non-essential sectors, respectively. Thus, some sectors have been more or less affected both by the pandemic and government measures. At European Union level, introduction of government measures were closely the same in most countries, their timing and duration may differ from country to country (Herby et al., 2025).

2. DEFINING THE RESEARCH PROBLEM

The appearance, the rate, the government measures introduced and the effects of the pandemic are quite similar in Poland and Romania, two European countries, similar in many ways: communist history and Soviet influence, membership of the European Union, mixed economies with important sectors in industry, agriculture and services, similar demographic problems such as emigration, population aging and declining birth rates, etc. (Lu & Staehr, 2025; Lazar & Litan, 2024).

Romania and Poland's national economies were both highly affected by the COVID 19 crisis. The crisis has had a notable impact on Romania, which experienced an economic downturn in the first half of 2020, marked by declines in the hospitality industry, manufacturing, non-consumer goods distribution, and transport sectors (Rădoi & Panait, 2021). Poland also face serious difficulties both socially and economically. The industrial sector was less affected than the service sector (Dominiak &Rachwal, 2022). Differences can be observed not only on economic sectors, but along companies too: large enterprises cope better with the effects of the crisis than small and medium sized enterprises (Spoz et al., 2021).

As it can be seen in Table no. 1 and Fig. 1, the pandemic year, negatively influenced national economies, recording a significant decrease in economic activity. The GDP growth rate has shown a positive trend in the last 8-10 years, both in Romania (RO), Poland (PL) and European Union EU) level, with the exception of 2020.

Table no.1. GDP growth rate in European Union, Poland and Romania (%)

	2016/ 2015	2017/ 2016	2018/ 2016	2019/ 2018	2020/ 2019	2021/ 2020	2022/ 2021	2023/ 2022	2024/ 2023
EU	102,68	104,20	103,49	103,63	96,15	108,94	109,31	106,73	104,39
PL	98,88	109,68	107,44	106,84	98,77	109,62	113,50	113,63	112,84
RO	104,50	111,29	109,86	109,06	98,43	109,62	116,51	114,53	109,97

Source: own calculations, based on Eurostat database
(https://ec.europa.eu/eurostat/databrowser/view/nama_10_gdp/default/table?lang=en&category=na10.nama10.nama_10_ma)

GDP per capital shows stagnation in 2020 compared to the previous year, but starting from 2021 the indicator begins to increase again.

Fig. 1. Evolution of GDP per capita in Poland and Romania (current prices, euro/capita)
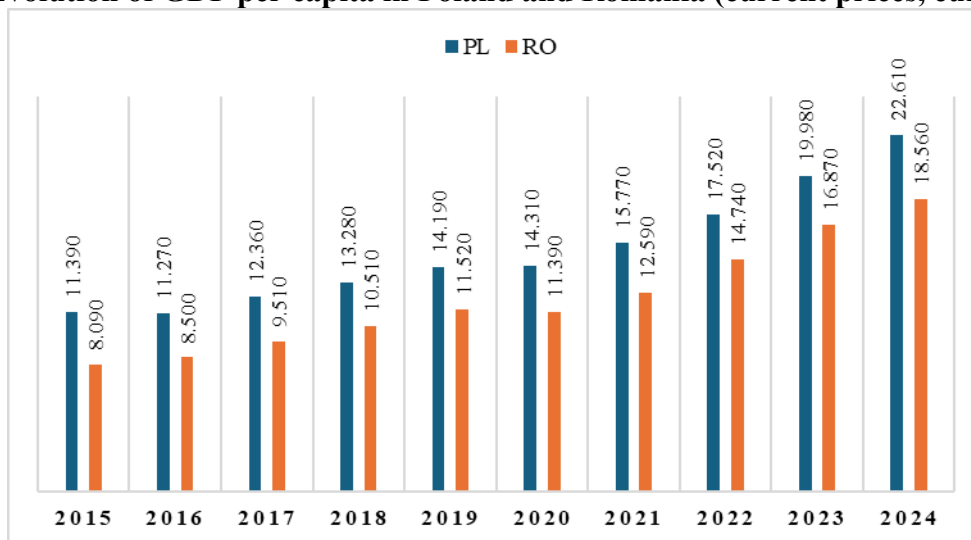
Source: Edited by authors, based on Eurostat database
(https://ec.europa.eu/eurostat/databrowser/view/nama_10_pc/default/table?lang=en&category=na10.nama10.nama_10_ma).

Another very representative macroeconomic indicator is the unemployment rate, its evolution being presented in Fig. 2. As it can be seen, both Poland and Romania recorded a downward trend in the unemployment rate before the pandemic, with a slight increase during the crisis, but recovering, in fact stagnating in the post-pandemic period. It is important to note that throughout the analyzed period (2015-2024) the unemployment rate was below the EU average, which means an efficient use of the workforce, in the conditions of economic growth.

Fig. 2. Unemployment rate (%)
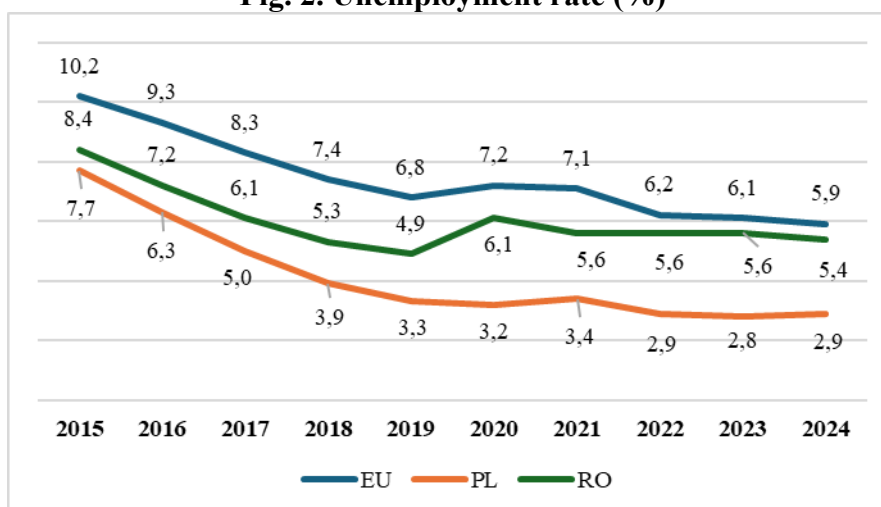
Source: own editing, based on Eurostat database
(https://ec.europa.eu/eurostat/databrowser/view/une_rt_a/default/table?lang=en&category=labour.employ.lfsi.une)

Analysing the most important macroeconomic indicators (presented above), we can say that the pandemic hit two economies (the economy of Poland and Romania) quite similar: in terms of GDP per capita the two countries are very close, respectively also in terms of the labor market, both countries had a lower level of unemployment rate than the European Union average.

The comparison between the two countries is justified.

The purpose of this article is to analyze how Polish and Romanian companies managed to survive in terms of financial stability after the pandemic. We selected the most known and used financial indicators, which can best characterize the financial health, the financial equilibrium/stability of companies.

2.1. Brief literature

The sustainability of companies depends on their ability to adapt to the changes that have occurred (especially the unexpected ones), a capacity that depends a lot on the state of financial health, stability, financial balance of the companies. The literature considers that financial sustainability can be ensured, not only through financial performance, but together with financial stability (Herman & Zsido, 2023), which is why the indicators that characterize the financial equilibrium of companies were analysed.

Short-term financial equilibrium is reflected by liquidity indicators—such as the current, quick, and cash ratios - which assess a company's ability to meet short-term obligations using its current assets. High liquidity ratios generally signal strong short-term solvency and may indicate favourable growth prospects in the market. Conversely, long-term financial equilibrium is captured by solvency indicators, which measure the company's capacity to cover long-term liabilities with its net assets, thereby reflecting its financial stability over time (Bătrâncea, 2021).

According to Anghel et al., financial equilibrium "is the expression of solvency and liquidity" (Anghel et al., 2022, p. 101), or "the degree to which a company manages to covers its short-term and long-term liabilities from its assets" (Cocis et al., 2021, p. 2). The main indicators that can characterize financial equilibrium are the liquidity indicators (which reflect the ability to pay in a short term) and the solvency indicators (reflecting the long-term ability to pay).

2.2. Methodology

To gain deeper insights, we compared sectors with varying levels of vulnerability to the pandemic: highly impacted sectors such as HoReCa/Food Services, and moderately impacted sectors such as Industry/Manufacturing and Transport & Logistics (Carletti et al., 2020; Ghaleb, 2024; Chetty et al., 2023; Dominiak & Rachwal, 2022). For each sector, we collected financial data from 2-3 companies listed on the Warsaw Stock Exchange and the Bucharest Stock Exchange and analysed their average values.

In order to assess the financial equilibrium/stability of Romanian and Polish listed companies, we used four indicators:

1. Current Ratio $= \dfrac{Current\ Assets}{Current\ Liabilities}$

2. General Financial Solvency Ratio $= \dfrac{Total\ Assets}{Total\ Debts}$

3. Debt to Equity Ratio $= \dfrac{Total\ Debts}{Total\ Equity}$

4. Debt Ratio $= \dfrac{Total\ Debts}{Total\ Assets} * 100$.

3.   PRESENTING THE RESEARCH FINDINGS

The financial balance was analysed on the basis of liquidity (short-term financial balance) and on the basis of solvency indicators (the one that characterises the long-term financial balance).

The companies' liquidity was analysed with Current Ratio indicator. The average values of this indicator are presented in Fig. 3, for companies in Romania and Poland, structured on the three analysed areas: HoReCa, Transport&Logistics and Industry/Manufacturing.

The data clearly show important differences between Romanian and Poland companies:

1. In all three sectors, the liquidity indicator has much higher values in case of Romanian companies;
2. In case of the HoReCa sector, Romanian values can be considered even too high, which can mean an excess of liquidity (Anghel et al., 2022), the fact that companies have money available much too high compared to payment obligations, so we can talk about an inefficient use of them;
3. In case of Polish companies in the Industry/Manufacturing sector, the Current Ratio values are below 1 (or =1), which, according to the recommendations (1.2) (Anghel, et al., 2022), do not reach the recommended level.

Fig. 3. Current Ratio
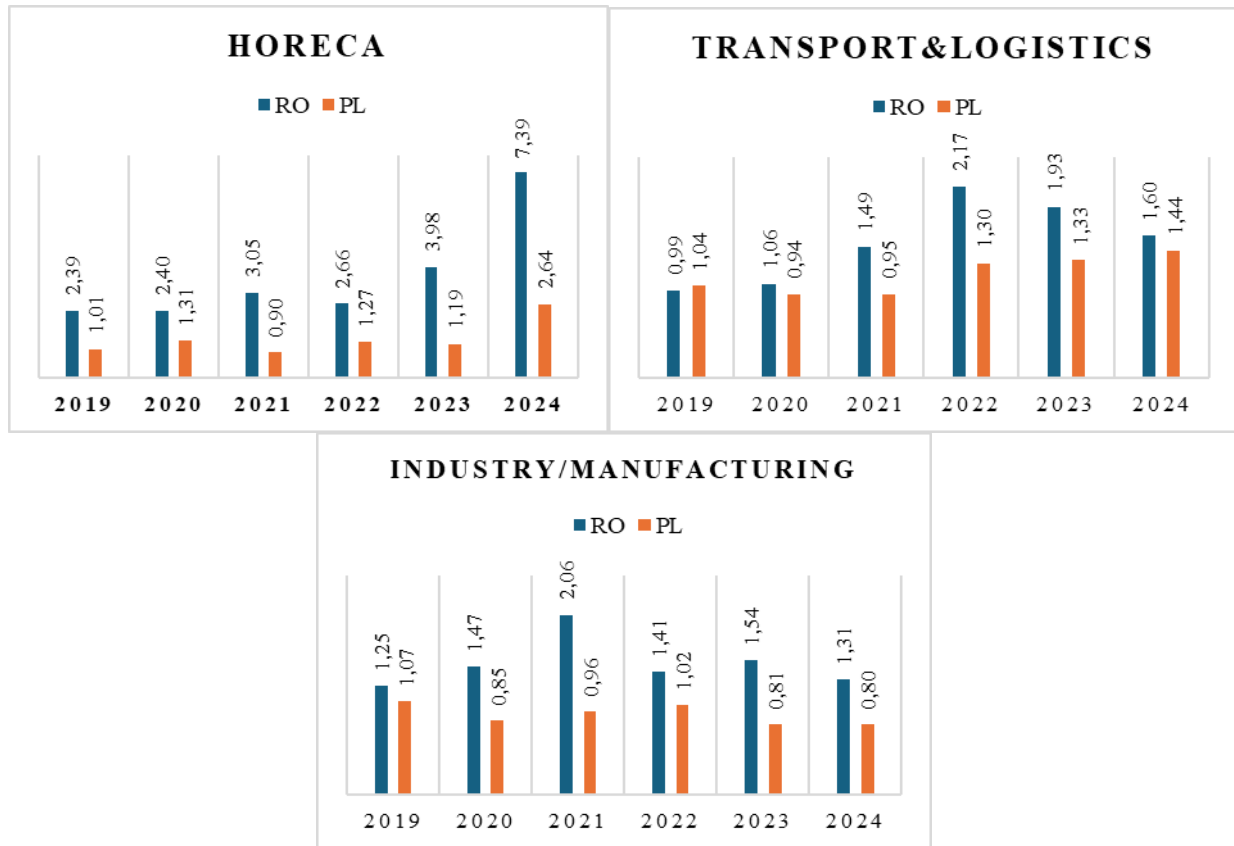
Source: authors' own calculation, based on financial data

Regarding the solvency of companies, which reflects the long-term financial balance, we analysed General Financial Solvency Ratio (Table no. 2), Debt to Equity Ratio (Fig. 4) and Debt Ratio indicators (Fig.5).

General Financial Solvency shows the extent to which the company's debts are covered by assets. The recommended level is 1.6 (Anghel et al., 2022).

Table no 2: General Financial Solvency Ratio

	Romanian companies					
	2019	**2020**	**2021**	**2022**	**2023**	**2024**
Average HoReCa/Foodservice	10,52	9,42	19,95	16,48	15,27	13,70
Average Transport &Logistics	2,75	3,42	4,41	3,73	3,40	4,46
Average Industry/Manufacturing	3,24	3,10	3,85	2,93	3,00	2,86
	Polish companies					
	2019	**2020**	**2021**	**2022**	**2023**	**2024**
Average HoReCa/Foodservice	1,45	1,42	1,49	1,45	1,44	1,54
Average Transport&Logistics	1,78	1,70	1,67	2,09	2,11	1,87
Average Industry/Manufacturing	1,91	1,88	1,90	1,98	1,82	1,86

Source: authors own calculations, based on financial data


Fig. 4. Debt to Equity Ratio
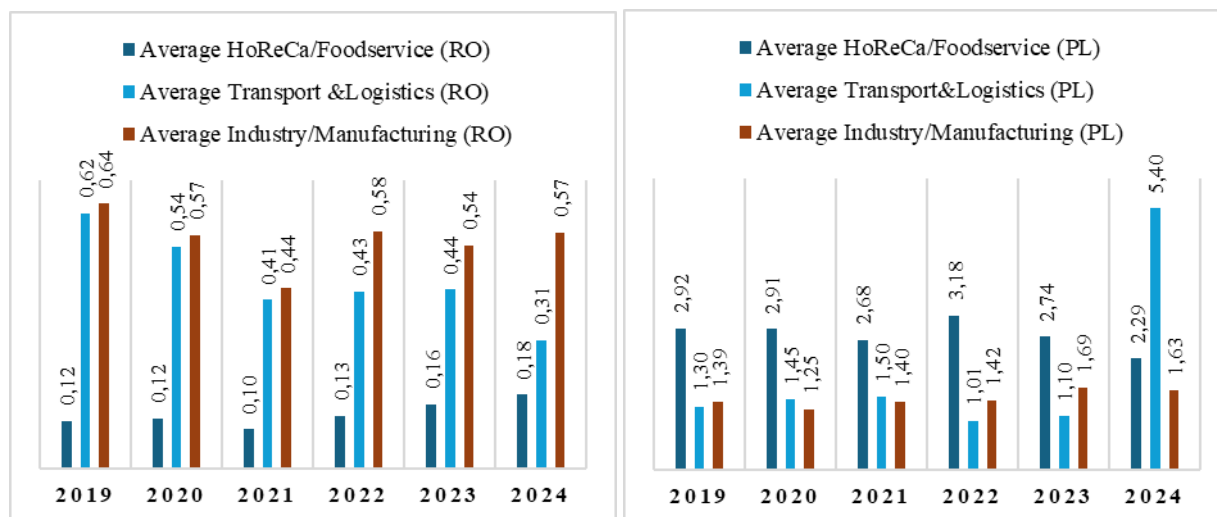
Source: authors own calculations, based on financial data.

Debt to Equity Ratio shows leverage, the proportion of debt financing compared to equity. A lower value indicates less reliance on borrowed funds and more equity-based financing. In this regard also a significant difference can be observed between companies from Romania and Poland: companies from Romania have much lower values than companies from Poland, up to 0.60, which means very low debts compared to their own sources (for every 1 leu of their own capital, they use 0.60 lei from external sources; in the case of the HoReCa sector, these values are even lower); in the case of companies from Poland, the indicator has average values between 1-3 (1 means that a company has debts equal to equity, and 3 means that debts are 3 times higher than equity). Companies from Poland are highly leveraged, meaning they rely more on debt than equity to finance its operations, which indicates a higher financial risk.

These situations are also confirmed by the analysis of the Debt Ratio indicator, presented in Fig. 5.

Fig. 5. Debt Ratio (%)
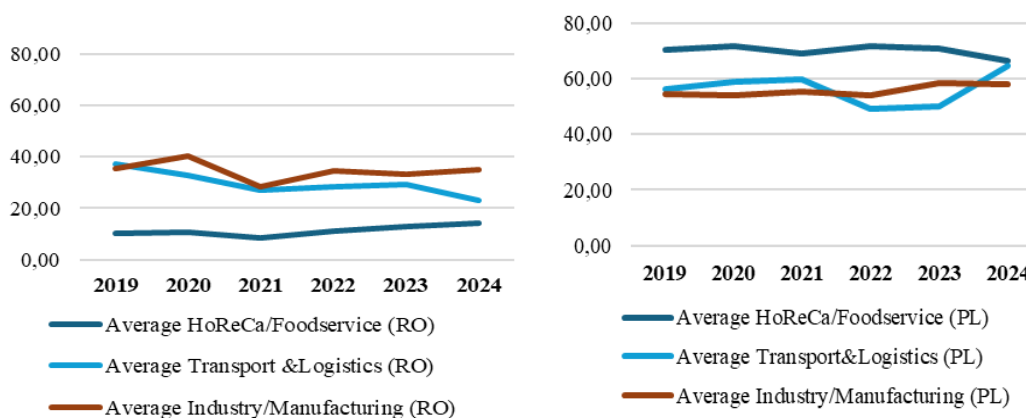
Source: authors own calculations, based on financial data

Debt Ratio indicates what percentage of total assets is financed by debts. A lower value means a lower financial risk and a higher asset coverage by equity. Anghel et al., (2022) considers that the structure of financing sources is optimal if the debt ratio does not exceed 70%. Taking this recommendation into account, we see that Romanian companies have a very low debt ratio, which means that they finance their activity mostly from their own sources, while Polish companies take advantage of loans and have debts at approximately the maximum recommended level.

4. CONCLUSIONS

Analysing the financial balance of some Romanian and Polish listed companies in different economic sectors, based on liquidity (Current Ratio) and solvency (General Financial Solvency, Debt to Equity Ratio and Debt Ratio) indicators, we observe significant differences:
1. Romanian companies work with much higher liquidity than Polish companies (in some cases we can even talk about an excess of liquidity);
2. The liquidity of Polish companies is optimal, it means that they manage their assets efficiently;
3. The General Financial Solvency of Romanian companies is above the values recommended by the literature; this means that companies' assets cover 3-4 times (or in the case of the HoReCa sector even more than 10 times) the company's debts;
4. In the case of Polish companies, the General Financial Solvency is at an optimal level (between 1.4-2);
5. The level of debts (Debt Ratio) is very low in the case of Romanian companies, which means that these companies do not resort to external financing, try to finance their activity from their own sources; thus has a high financial stability, without any risk of indebtedness or non-coverage of debts;
6. Polish companies resort to debts, to financing their activity from debts, but the debt volume is still at the acceptable level and the financial risk is medium.

Summing up the above elements, we can formulate the following conclusions:
1. The analysed companies from Romania have a higher Current Ratio (can pay current obligations easily), lower Debt to Equity Ratio (lower leverage), respectively lower Debt Ratio (their assets are less encumbered by liabilities), mean that they have a more stable financial stability/balance, greater financial autonomy, vulnerability and much lower financial risk; possibly more conservative financial management;
2. The analysed companies from Poland, which have lower (but optimal) liquidity, Debt to Equity Ratio and much higher Debt Ratio, but still within the recommended limits, might indicate a more efficient use of resources (less idle cash), these companies may have better access to credit at low cost, making debt less risky;
3. Romanian companies present stability and autonomy, Polish companies present performance through leverage, but with higher financial vulnerability. In both cases, these situations can ensure the financial sustainability of companies.

Bibliography:

Belitski, M., Guenther, Ch., Kritios, A.S.&Thurik, R. (2022). Economic effects of the COVID-19 pandemic on entrepreneurship and small businesses, *Small Bus Econ,* 58:593–609, https://doi.org/10.1007/s11187-021-00544-y.

Ardolino, M., Bacchetti, A. & Ivanov, D. (2022). Analysis of the COVID-19 pandemic's impacts on manufacturing: a systematic literature review and future research agenda. Oper Manag Res 15, 551–566, https://doi.org/10.1007/s12063-021-00225-9.

Chamola, V., Hassija, V., Gupta, V. & Guizani, M. (2020). A Comprehensive Review of the COVID-19 Pandemic and the Role of IoT, Drones, AI, Blockchain, and 5G in Managing Its Impact. *IEEE Access*, 8:90225–90265, https://doi.org/10.1109/ACCESS.2020.2992341.

Tang, C-H., Chin, C-Y. & Lee Y-H. (2021). Coronavirus Disease Outbreak and Supply Chain Disruption: Evidence from Taiwanese Firms in China. *Res Int Bus Financ*, 56:101355, https://doi.org/10.1016/j.ribaf.2020.101355.

Herby, J., Jonung, L. & Hanke, S.H. (2025). Were COVID-19 lockdowns worth it? A meta-analysis. *Public Choice* 203, 337–367, https://doi.org/10.1007/s11127-024-01216-7.

Lu, M. & Staehr, K. (2025). Revisiting economic growth and real convergence in the post-communist countries. Eurasian Econ Rev 15, 89–123, https://doi.org/10.1007/s40822-024-00308-5.

Lazar, D. & Litan, C.M. (2024). Inequality, Growth, and Structural Transformation: New Evidence from a Post-communist Economy. Comp Econ Stud 66, 236–260, https://doi.org/10.1057/s41294-023-00214-w.

Eurostat database (2025, November 10). *Gross Domestic Product and main components*, https://ec.europa.eu/eurostat/databrowser/view/nama_10_gdp/default/table?lang=en&category=na10.nama10.nama_10_ma.

Eurostat database (2025, November 10). *Gross Domestic product and main components per capita*, https://ec.europa.eu/eurostat/databrowser/view/nama_10_pc/default/table?lang=en&category=na10.nama10.nama_10_ma.

Eurostat database (2025, November 10). *Unemployement rate*, https://ec.europa.eu/eurostat/databrowser/view/une_rt_a/default/table?lang=en&category=labour.employ.lfsi.une.

Rădoi, M. & Panait, N. (2021). The Impact of Coronavirus Pandemic on Romania's Economic Development, *Global Economic Observer*, Bucharest Vol. 9, Iss. 1, 7-12, (https://www.globeco.ro/wp-content/uploads/vol/split/vol_9_no_1/geo_2021_vol9_no1_art_001.pdf (Accessed on: 07.11.2025).

Dominiak, J. & Rachwal, T. (2022). Changes in industry and services sectors in poland during the covid-19 pandemic, *Quaestiones Geographicae* 41(4), https://doi.org/10.14746/quageo-2022-0040.

Spoz, A., Skibinska-Fabrowska, I., Kotlinski, G., Zukowska, H. (2021). The Impact of the Covid-19 Pandemic on the Financial Performance of Public Companies in Poland, *European Research Studies Journal*, Volume XXIV, Issue 4 - Part 1, 955-976, DOI: 10.35808/ersj/2645

Herman, E. & Zsido, K.E. (2023). The Financial Sustainability of Retail Food SMEs Based on Financial Equilibrium and Financial Performance, *Mathematics*, 11(15), 3410, https://doi.org/10.3390/math11153410.

Bătrâncea, L. (2021). The Nexus between Financial Performance and Equilibrium: Empirical Evidence on Publicly Traded Companies from the Global Financial Crisis Up to the COVID-19 Pandemic, *J. Risk Financial Manag*. 14(5), 218, https://doi.org/10.3390/jrfm14050218.

Cocis, A.D.; Batrancea, L.; Tulai, H. (2021). The link between corporate reputation and financial performance and equilibrium within the airline industry. *Mathematics*, 9, 2150, https://doi.org/10.3390/math9172150.

Carletti, E., Oliviero, T., Pagano, M., Pelizzon, L., Subrahmanyam, M.G. (2020). The COVID-19 Shock and Equity Shortfall: Firm-Level Evidence from Italy, *The Review of Corporate Finance Studies*, Volume 9, Issue 3, p. 534–568, https://doi.org/10.1093/rcfs/cfaa014.

Ghaleb, B.D.S. (2024). The Impact of the COVID-19 Pandemic on Sectors: A Comprehensive Review, *Journal of Research and Development/Longdom Group SA*, https://doi.org/10.35248/2311-3278.24.12.245.

Chetty, R., Friedman, J.N., Stepner, M., Opportunity Insights Team (2024). The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data, *The Quarterly Journal of Economics*, Volume 139, Issue 2, Pages 829–889, https://doi.org/10.1093/qje/qjad048.

Anghel, I.; Robu, V.; Lala-Popa, I.; Ștefea, P.; Mironiuc, M.; Achim, M.V.; Siminică, M. (2022). *Tratat de Analiză Economico-Financiară,* 1st ed.; Editura Academiei Române: Bucharest, Romania.