

EMPIRICAL DIAGNOSIS OF CHANGES IN THE FINANCIAL PARAMETERS OF UKRAINIAN LOGISTICS ENTERPRISES DURING SYSTEMIC CRISES

YAROVENKO Volodymyr

Postgraduate Student of the Department of Management

Odesa State Agrarian University

ORCID ID: <https://orcid.org/0009-0009-1585-6796>

Abstract. *Using panel data on 18,877 Ukrainian logistics enterprises for 2021–2025, the study examines changes in liquidity, profitability and financing structure. The findings reveal that rising median liquidity coexists with widespread financial vulnerability and highlight differences across logistics segments.*

Key words: *financial management, logistics enterprises, crisis situations, panel data.*

The purpose of the article is to identify major trends and differences across logistics segments in the financial parameters of Ukrainian enterprises during systemic crises.

Research results. The study uses an unbalanced panel of 63,386 firm-year observations covering 18,877 enterprises in 2021–2025. It examines road freight transport, warehousing, cargo handling and other transportation support activities. Financial statements are used to assess profitability, liquidity, cash holdings, leverage, working capital and financial vulnerability. The dataset also incorporates indicators of territorial war exposure and changes in exchange rates, interest rates and fuel prices.

Median liquidity and the net working capital to assets ratio increased over the period, while financial vulnerability remained widespread. Among observations with all three vulnerability indicators available, 47.43% showed at least one adverse condition: a loss, insufficient current assets to cover current liabilities, or negative equity. Warehousing had the highest incidence of vulnerability, whereas road freight transport recorded the highest median return on assets.

The contribution of the study lies in combining distributional analysis, changes over time and comparisons across logistics segments within a single empirical framework. The findings show that improvements in median indicators can coexist with substantial financial difficulties among individual enterprises.

The results support differentiated financial monitoring, with particular attention to liquidity and working capital in warehousing. They are descriptive and do not establish causal effects. Further research will examine the links between prior financial conditions, crisis exposure and subsequent outcomes. This can guide financial decisions.

Reference:

1. Fahlenbrach, R., Rageth, R., & Stulz, R. M. (2021). How valuable is financial flexibility when revenue stops? Evidence from the COVID-19 crisis. *The Review of Financial Studies*, 34(11), 5474–5521. <https://doi.org/10.1093/rfs/hhaa134>
2. Atayah, O. F., Dhiaf, M. M., Najaf, K., & Frederico, G. F. (2022). Impact of COVID-19 on financial performance of logistics firms: Evidence from G-20 countries.

Journal of Global Operations and Strategic Sourcing, 15(2), 172–196.
<https://doi.org/10.1108/JGOSS-03-2021-0028>

3. Karaś, D., Wielechowski, M. W., & Zajac, A. (2025). Financial performance of road freight transport companies bordering Ukraine in Central and Eastern Europe: The impact of the COVID-19 pandemic and the Russia–Ukraine war. *Transportation Research Interdisciplinary Perspectives*, 34, Article 101668.
<https://doi.org/10.1016/j.trip.2025.101668>

4. Ivanov, D. (2024). Cash flow dynamics in the supply chain during and after disruptions. *Transportation Research Part E: Logistics and Transportation Review*, 185, Article 103526. <https://doi.org/10.1016/j.tre.2024.103526>

5. Derzhavna sluzhba statystyky Ukrainy. Finansova zvitnist pidpriemstv (richna) URL: <https://data.gov.ua/dataset/7436ae83-dfc1-4836-9962-8af3e831c522> [in Ukrainian]

6. Ministerstvo finansiv Ukrainy. Pro zatverdzhennia Natsionalnoho polozhennia (standartu) bukhhalterskoho obliku 1 “Zahalni vymohy do finansovoi zvitnosti” URL: <https://zakon.rada.gov.ua/laws/show/z0336-13#Text> [in Ukrainian]

7. Natsionalnyi bank Ukrainy. <https://bank.gov.ua> [in Ukrainian]

8. Derzhavna sluzhba statystyky Ukrainy. Zminy tsin (taryfiv) na spozhyvchi tovary (posluhy) URL: <https://stat.gov.ua/uk/datasets/zminy-tsin-taryfiv-na-spozhyvchi-tovary-posluhy> [in Ukrainian]

9. Ministerstvo z pytan reintehratsii tymchasovo okupovanykh terytorii Ukrainy. Pro zatverdzhennia Pereliku terytorii, na yakykh vedutsia (velysia) boiovi dii abo tymchasovo okupovanykh Rosiiskoiu Federatsiieiu URL: <https://zakon.rada.gov.ua/laws/show/z1668-22#Text> [in Ukrainian]

10. Ministerstvo rozvytku hromad ta terytorii Ukrainy. Pro zatverdzhennia Pereliku terytorii, na yakykh vedutsia (velysia) boiovi dii abo tymchasovo okupovanykh Rosiiskoiu Federatsiieiu. URL: <https://zakon.rada.gov.ua/laws/show/z0380-25#Text> [in Ukrainian]

11. Derzhavnyi komitet Ukrainy z pytan tekhnichnoho rehuliuвання ta spozhyvchoi polityky. Klasyfikatsiia vydiv ekonomichnoi diialnosti DK 009:2010. URL: https://kved.ukrstat.gov.ua/KVED2010/kv10_i.html [in Ukrainian]

12. Derzhavna sluzhba statystyky Ukrainy. Finansova zvitnist pidpriemstv za 2021 rik (podana u period z 2026-01-01 po 2026-08-10). URL: <https://data.gov.ua/dataset/6456ef0c-985c-4bb7-bf9d-16831161b416/resource/2f24df98-79ea-443f-9b89-e8cd3f1b9ae2> [in Ukrainian]

13. Ding, W., Levine, R., Lin, C., & Xie, W. (2021). Corporate immunity to the COVID-19 pandemic. *Journal of Financial Economics*, 141(2), 802–830. <https://doi.org/10.1016/j.jfineco.2021.03.005>

14. Phan, T. D., Nguyen, M. H., Le, H. T. H., & Ngo, T. T. N. (2025). Working capital management and profitability: Cash threshold effects in Vietnam’s transportation sector. *Investment Management and Financial Innovations*, 22(3), 293–306. [https://doi.org/10.21511/imfi.22\(3\).2025.22](https://doi.org/10.21511/imfi.22(3).2025.22)

15. Derzhavna sluzhba statystyky Ukrainy. Kodyfikator administratyvno-terytorialnykh odynts ta terytorii terytorialnykh hromad (KATOTTH). URL: <https://stat.gov.ua/uk/page-contents/kodyfikator-administratyvno-terytorialnykh-odynts-ta-terytoriy-terytorialnykh-hromad> [in Ukrainian]

Дата надходження статті: 23.08.2026

Дата прийняття статті: 07.09.2026

Дата публікації статті: 30.09.2026