



Impact of the Russia-Ukraine Conflict and Global Events on Beneficiaries of Microfinance Services: A Comparative Study of Romanian Small Companies

Denisa HENEGAR*, Felix H. ARION

Faculty of Horticulture and Business in Rural Development, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, 3-5 Mănăștur Street, Cluj-Napoca, 400372, Romania

* Corresponding author: D. Henegar e-mail: denisa.popa@student.usamvcluj.ro

RESEARCH ARTICLE

Abstract

Recent global events, notably the COVID-19 pandemic, and the conflict between Russia and Ukraine led to unprecedented challenges for companies worldwide. This study examines the impact of the Russia-Ukraine conflict on small companies in agriculture, animal breeding, and the services sector in Romania. A survey was conducted among 110 beneficiaries of a microfinance company. The respondents evaluated the impact of the Russia-Ukraine war on income, expenses, and the economic situation using a set of 8 items, evaluated on a 5 points Likert scale type. The results revealed that the analyzed companies were most affected by the increase in fuel price and electricity price. Despite a moderate impact on income decrease, there were significant differences regarding the effect of the increase of interest rates, savings reduction, and liquidity reduction among different types of companies. Limited Liability Companies (L.L.C.s) were the most affected. Most companies are seeking solutions to reduce energy costs. These findings suggest a need for targeted interventions to mitigate the impact of crises situations on small companies.

Keywords: small companies, war impact, microfinance, crises situations

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INTRODUCTION

Recent global events, notably the COVID-19 pandemic, have presented unprecedented challenges for companies worldwide (Aktar et al., 2021). Despite efforts to mitigate its impact, the repercussions continue to be felt even after two years. Subsequently, the conflict between Russia and Ukraine further altered the financial and social landscape. While governmental and international responses have been tailored to address these challenges, the initial financial incentives intended to bolster pandemic-affected economies have inadvertently contributed to widespread inflation. For instance, in Romania, the annual inflation rate surged from 2.6% in 2020 to 13.8% in 2022, as reported by the National Institute of Statistics. Similarly, according to the European Central Bank, the inflation rate in Europe rose from 0.3% in 2020 to 9.2% in 2022, following a similar trajectory (European Central Bank, 2022). Romania was already grappling with urgent macroeconomic adjustments even before conflicts arose. Since the start of 2020, Romania has been subject to the EU's excessive budget deficit procedure, although it's presently on hold due to the pandemic. Efforts to shrink the significant structural budget deficit in the upcoming years might indirectly impede economic growth. Moreover, escalating inflation is anticipated to sustain pressure on nominal interest rates, diminishing consumers' purchasing power and constraining short-term economic expansion. Nevertheless, by endorsing suitable

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policies aimed at fostering investment and fostering long-term growth, Romania could navigate through this crisis more smoothly. Fully utilizing the funds accessible through the EU Recovery and Resilience Fund would significantly enhance prospects for economic growth (Bugheanu, 2022).

Commercial ties between Romania and Russia as well as Ukraine are relatively restricted. Based on data provided by the National Bank of Romania for the year 2021, direct imports from these nations accounted for 4.2% of Romania's total imports, while exports to Russia and Ukraine constituted 2.2% of Romania's overall exports. These statistics specifically illustrate Romania's direct engagement with these economies, without considering potential indirect involvement through trade intermediaries. Furthermore, notable potential adverse impacts are highlighted, particularly in the realm of imports encompassing mineral fuels, lubricants, and associated materials. In the case of Romania, Eurostat data reveals that approximately 46% of natural gas imports originate directly from Russia. Despite the remaining imports being facilitated through intermediaries like Bulgaria or Hungary, the primary exposure remains linked to Russia. Nevertheless, Romania boasts one of the lowest dependencies on Russian natural gas imports among European nations, with domestic production accounting for over 70% of consumption. A relatively similar situation can also be observed regarding Romania's exposure to imports of petroleum and petroleum products, although dependence on imports in this case is higher (Eurostat Energy Balance, 2022).

However, the indirect consequences might carry even more significant weight. Consequently, in the near future, the following outcomes are expected: the continuation of the energy crisis, rises in the costs of non-energy commodities, particularly agricultural and food items (such as grains and oilseeds), disruptions in global supply chains, including those in the distribution sector, which could impede international trade (United Nations, 2022). These elements could additionally impact the economic performance of Romania's trading allies, potentially resulting in reduced demand for the country's exports.

The rise in raw material and utility prices, coupled with declining consumption, has posed significant challenges for business chains in Romania's economy. However, another critical factor exacerbating the situation is the surge in oil prices due to the ongoing conflict between Russia and Ukraine. This growth has far-reaching implications for both the populace and the business landscape, as it fuels inflation, a major threat to any economy. For ordinary citizens, this translates to a decrease in purchasing power as energy, transportation, and food prices soar, while wage growth lags behind. The hasty and disorderly liberalization of the energy market since 2022 has contributed to substantial cost hikes, triggering a domino effect of price increases throughout the supply chain (Chiosea, 2023). The impact of the war in Ukraine is felt not only at a regional level but worldwide due to the significant contribution of the region to food and energy supply. Russia and Ukraine are major exporters of oil, natural gas, coal, wheat, as well as other resources on the world market. Regarding food, there are challenges related to production and export: these are already associated with reduced availability and price increases. Import bills for food and energy are already at record levels, and it appears that they will continue to rise. This will have widespread impacts that could be substantial, but the consequences for poor and vulnerable people will be particularly severe (United Nations, 2022). To our knowledge there is little information so far, regarding the impact of the conflict between Russia and Ukraine on the small companies from Romania. In the context the current research aims to identify to what extent this conflict affected the companies from the agricultural, animal breeding and services sector.

MATERIALS AND METHODS

The aim of this paper is to identify to what extent the war Russia – Ukraine affected the activity of small companies from: agriculture, animal breeding and services sector. In this purpose a research was conducted among 110 beneficiary of a microfinance company. The analysed companies were from: Bistrita-Nasaud, Mures, Alba, Suceava Counties. The survey was conducted in November 2022 via telephone by a group of researches, trained before regarding the aim of the research. The respondents had to evaluate 8 items related to income, expense, and economic situation, on a Likert scale from 1 to 5, where 1 means to a little extend and 5 means to a large extend. The collected data was analysed using descriptive statistics. Shapiro–Wilk test was employed to test the normality of the data. Kruskal-Wallis test was run to determine any significant difference among different groups, $p < 0.05$ was considerate statistically significant. Dunn's post-hoc test was run to compare the dependent variable across each pairing of the independent variable to identify any significant differences.

RESULTS AND DISCUSSIONS

The sample consisted of 110 respondents, out of which 43.6% were activating in the field of agriculture, 40% in the field of animal breeding and a small percentage 16.4, in services. Regarding the organizational status, around 60% were organized as sole proprietor (Table 1).

The analysis of the war's impact on the economic situation of the companies, at the level of the entire sample, revealed the fact that companies were more affected by the increase of the fuel price (4.34 ± 1.221) and electricity price (4.34 ± 1.221), around 70% declared that they were to a large extend affected by these consequences (Table

2), and the increased of the raw materials price (60.9%). The respondents were moderated affected by the decrease of the incomes (3.23 ± 1.554), and less affected by the increased of the interest rate (2.76 ± 1.642), and decreased of the savings (2.99 ± 1.684).

Table 1. Profile of the respondents

	Absolut frequencies	%	
Type of company	Sole proprietor	63	57.3
	Individual enterprises	21	19.1
	L.L.C:	26	23.6
Sector of activity	Agriculture	48	43.6
	Animal breeding	44	40.0
	Services	18	16.4

According to a study conducted by the National Council of Small and Medium Private Enterprises in Romania, the increase in energy prices puts significant pressure on company budgets, which will most likely lead to higher prices for the end consumer. Additionally, 76% of the companies participating in the study stated that they will postpone future investments. To reduce the impact of rising electricity price on companies, it has been proposed to regulate the entire energy chain market (producer-distributor-supplier), as well as for the state to adopt support measures for the development of in-house energy units, such as financing companies for the installation of photovoltaic panels (CMIPMMR, 2022).

Table 2. Evaluation of war's impact

Item	1	2	3	4	5	Mean±SD
	%					
Decrease in income	23.6	10.9	13.6	22.7	29.1	3.23±1.554
Fuel price increase	8.2	2.7	5.5	14.5	69.1	4.34±1.221
Electricity price increase	7.3	4.5	5.5	12.7	70.0	4.34±1.221
Increase in raw material expenses	8.2	7.3	9.1	14.5	60.9	4.13±1.314
Increase in bank interest rates	37.3	10.9	15.5	10.9	25.5	2.76±1.642
Savings reduction	34.5	8.2	10.0	18.2	29.1	2.99±1.684
Reducing spending on education	47.3	7.3	14.5	10.9	20.0	2.49±1.624
Liquidity reduction	41.8	10.0	13.6	13.6	20.9	2.62±1.620

Note: 1 means to little extend, 5 means to a large extend

Furthermore, was analysed to what extend the war Russia-Ukraine affected small companies from different filed activities (Table 3). The results indicated that no matter the sector of activity (agriculture, animal breeding, services) the companies were more affected by the increased of the fuel's price. The Kruskal-Wallis test indicated that the differences were statistically significant ($p < 0.05$). The most affect sector was the one of services (4.88 ± 0.485). The difference between the service sector was statistically significant compare with the agriculture sector (4.06 ± 1.479), or animal breeding sector (4.41 ± 1.041) ($p < 0.05$). However there was no statistically significant difference regarding the influence of the fuel's price increase between the agriculture and anima breeding sectors ($p > 0.05$).

Table 3. Evaluation of war's impact by sector of activity

Item	Agriculture	Animal breeding	Services	Kruskal-Wallis Test
Decrease in income	3.13±1.525	3.41±1.575	2.94±1.600	H(2)=1.727, p=0.422
Fuel price increase	4.06±1.479 ^{ab}	4.41±1.041 ^{ab}	4.88±0.485 ^c	H(2)=6.096, p=0.047
Electricity price increase	4.06±1.465	4.43±1.021	4.82±0.728	H(2)=5.518, p=0.063
Increase in raw material expenses	3.90±1.561	4.27±1.065	4.32±1.115	H(2)=0.958, p=0.620
Increase in bank interest rates	2.54±1.624	3.00±1.671	2.65±1.579	H(2)=1.895, p=0.388
Savings reduction	2.83±1.705	3.09±1.654	3.06±1.749	H(2)=0.422, p=0.810
Reducing spending on education	2.48±1.637	2.48±1.621	2.41±1.622	H(2)=0.010, p=0.995
Liquidity reduction	2.62±1.645	2.68±1.611	2.29±1.572	H(2)=0.619, p=0.734

Note: Scores within the same statement followed by different letters are significantly different (i.e., "a" is different from "b" but not from "ab").

At the same time, on a global scale, all companies have been affected by the increase in fuel prices, and consequently, the transportation sector, which is a significant energy consumer, has witnessed a whole chain of price hikes, both at the companies and individual consumer levels (Coface, 2022).

The results also indicated that the companies were moderated affected by the increased of the interested rate (2.54±1.624 – for agriculture, 3.00±1.671 – for animal breeding, 2.65±1.579 – for service), with no statistically significant differences (p>0.05). The decrease of incomes was perceived as a moderate impact of the war on the analysed companies, with average scores from 2.94 to 3.41.

Subsequently a comparative analysis of the war's impact on different types of companies was conducted. Statistically significant differences were noticed for interest rate, savings and liquidity of companies (p<0.05). The most affected by the increased of the interest rate were the limited liability companies (L.L.C.) (3.62±1.602), the difference being statistically significant compared with the sole proprietor companies (2.24±1.500). Also regarding the decreased of the savings the LLC were the most affected (4.04±1.311), with statistically significant differences compared to the sole proprietor companies (2.24±1.500). The findings of the study shed light on the differentiated impact of the Russia-Ukraine conflict on various types of companies, particularly in terms of interest rates and savings. The observed statistically significant differences highlight the necessity for tailored support measures, particularly for L.L.C.s, to alleviate the economic strain induced by the conflict. The heightened impact on L.L.C.s can be attributed to their operational structure and financial vulnerability. Limited Liability Companies are more dependent on external financing, making them particularly susceptible to fluctuations in interest rates. The rise in interest rates has significantly affected their financial health, leading to a notable decrease in savings.

Table 4. Evaluation of war's impact by type of company

Item	Sole proprietor	Individual enterprise	L.L.C.	Kruskal-Wallis Test
Decrease in income	3.14±1.446	2.86±1.621	3.73±1.687	H(2)=5.193, p=0.075
Fuel price increase	4.25±1.257	4.33±1.278	4.54±0.1.104	H(2)=1.328, p=0.515
Electricity price increase	4.27±1.260	4.14±1.459	4.65±0.846	H(2)=1.372, p=0.504
Increase in raw material expenses	4.16±1.298	3.71±1.521	4.38±1.134	H(2)=2.949, p=0.229
Increase in bank interest rates	2.24±1.500 ^c	3.29±1.711 ^{ab}	3.62±1.602 ^{ab}	H(2)=16.547, p=0.000
Savings reduction	2.51±1.1625 ^{bc}	3.14±1.711 ^{abc}	4.04±1.311 ^{ab}	H(2)=16.414, p=0.000
Reducing spending on education	2.24±1.500	2.48±1.692	3.12±1.751	H(2)=4.831, p=0.809
Liquidity reduction	2.32±1.479 ^{bc}	2.67±1.742 ^{abc}	3.31±1.692 ^{ab}	H(2)=6.637, p=0.036

Note: Scores within the same statement followed by different letters are significantly different (i.e., "a" is different from "b" but not from "ab").

However, it was noticed that the companies expenses with raw materials increased (table 2), and they were directly affected by the increased in the price of the fuel and energy, a limited number of companies (14.6%) take into consideration the decrease of the activity while just 2.4% are thinking of closing the activity. Most of them (41.5%) are looking for solutions in order to reduce the energy cost (Figure 1).

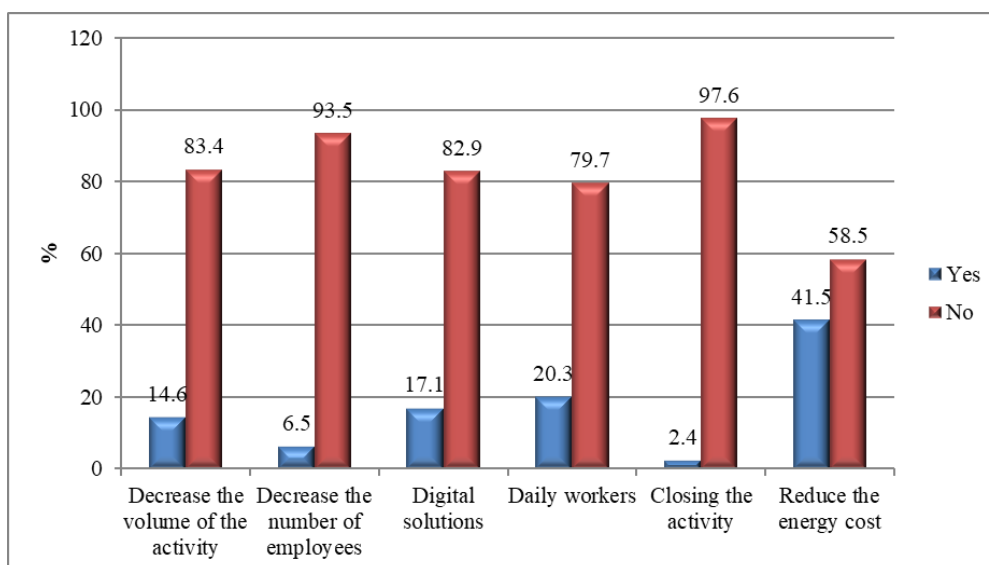


Figure 1. Types of solutions

The inflationary tendencies resulting from the war in Ukraine have led to an increase in prices for raw materials and a decrease in the purchasing power of the population. The agricultural sector has faced problems especially regarding the prices of fodder and fertilizers used, a fact attributed to the reduction in imports of corn, wheat, rapeseed oil, sunflower oil, and flour from Ukraine (Council of the European Union, 2022).

CONCLUSIONS

The study reveals that small companies in agriculture, animal breeding, and the services sector in Romania were significantly affected by the increase in fuel and electricity prices due to the Russia-Ukraine conflict, with limited liability companies (L.L.C.s) being the most affected by increased interest rates and savings reduction. No matter the sector of activity, companies were more affected by the increased fuel price, with the service sector being the most affected. Most companies are seeking solutions to reduce energy costs. However, the study's sample size is relatively small, the research was conducted via telephone survey, and the findings are specific to Romania, potentially introducing response bias and limiting generalizability. Additionally, other external factors beyond the Russia-Ukraine conflict may have influenced the economic situation of the companies, and the short-term nature of the analysis requires further research to understand the long-term impact and strategies for mitigating the consequences of the conflict on small companies.

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Conflicts of Interest

The authors declare that they do not have any conflict of interest.

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