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Collaboration and financial sustainability of business in rural areas

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Abstract

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The purpose of this paper is to explore the impact of collaboration with customers and business partners on the financial resilience of rural companies in the context of the impact of the pandemic (Co-19) and war in Ukraine. A key finding of the research is that the companies included in the study have gaps in terms of managing relationships with customers and business partners, with a significant proportion of businesses negatively impacted by the crises being highly dependent on a limited number of their customers. The study shows that companies› efforts to achieve financial stability should be linked to effective collaboration and diversification of the customer portfolio. The latter is related to CRM, which is perceived as a key tool for networking with customers and in this sense is part of companies' overall business model. In that context attention should focus both specifically on the role of collaboration and on the complex design and redesign of the business model.

Keywords: relationship management; cooperation; financial sustainability; rural regions

Introduction

Each organization chooses and implements a specific business model based on which it "designs its internal organization and creates value for the business" (Vangjel, 2021). In the process of selecting and then redesigning the business model of companies, many factors have an impact, such as: territorial localization of business, digital transformation; innovation; globalization processes, degree of development of value chains and supply chains, and many others. In the context of this paper, a business model is viewed as a system of interrelated components that firms develop in the process of creating, delivering and absorbing value (Ritter and Lettl, 2018). One of the key components of the business model is the establishment of networks and the development of cooperation. They have traditionally been considered as an effective approach to improve living standards, achieve growth, and foster change among microenterprises in rural regions (Hazudin et al., 2022). Furthermore, building strong relationships with stakeholders is deemed particularly important during times of crises (Alpaslan, C. et al., 2009), as such relationships can provide critical support and resources for businesses facing adversity, thereby influencing their ability to weather turbulent economic conditions.

In the context of the Co-19 pandemic and the ongoing war in Ukraine, the influence of collaboration with customers and business partners in rural areas of Bulgaria has become even more critical. These global events have introduced a level of complexity and uncertainty that necessitates a deeper examination of the role that collaboration plays in mitigating the ensuing challenges and driving economic recovery. In times of crisis, there are serious negative repercussions for "resource-constrained startups" (Kuckertz et.al., 2020) that are trying to overcome the negatives associated with their "small scale" (Gimenez-Fernandez et al., 2020). Given the structure of the rural economy with 99.6% micro, small and medium enterprises, significant market changes are expected to significantly influence the process of redesigning their business models.

Bulgaria, a country with a significant rural economy and the market infrastructure of the sector needs improvement, as well as the expansion of network structures to transform agricultural models across different regions (Dojchinova, J. et al., 2023). Rural areas in Bulgaria occupy 80.9% of the territory and include 232 municipalities, accounting for 87.5% of the total number of municipalities with a population share of 38%. The establishment and operation of cluster-type network structures in Bulgaria are among the lowest assessed factors for the economic aspects of regional competitiveness, with consistent estimates across all five studied areas (Dojchinova, J. and M. Stanimirova, 2022). In addition, there is little systematic research that investigates how SMEs address the particularities, and challenges of rural areas based on their strengths and weaknesses (Beckmann, M. et al., 2023). There is still uncertainty about how SMEs change their business model (Guckenbiehl, Corral de Zubielqui, 2022) and how they look for opportunities in times of crisis (Thorgren, Williams, 2020). Moreover, there is research demonstrating the positive impact of Covid-19 on companies that benefit from the acceleration of digital transformation (Nagel, 2020), from facilitated online communication in networking (Giones et al., 2020), and more. This leads us to the assumption that research regarding the effects of the Covid-pandemic (in their different dimensions) on micro, small and medium enterprises is still in its infancy.

The foregoing provides the basis for seeking answers to the following questions:

- What is the profile of the companies included in the study in terms of the impact of the crises on their financial performance?
- What is the dispersion of the customers of the surveyed companies in terms of the value of their purchases?
- Does cooperation with other companies have an impact on the financial performance of the companies?

The answers to the questions posed can guide managers in terms of the risk that is taken by concentrating purchases in a small number but larger customers. The presence/absence of a correlation between the effort and resources invested in developing collaborations with different stakeholders on the one hand, and the financial performance of companies on the other, also provides direction for managerial business decisions.

Methods and Data

The observed crises (Co-19, the conflict in Ukraine) in recent years undeniably influenced the market performance of companies. Different methodologies for analysing and evaluating companies' business model can be presented, with a focus on collaboration between companies that offer modelling of the relationship with their financial sustainability in period of crises. These include the Business Model Canvas (BMC; Osterwalder & Pigneur, 2010), the Business Model Navigator (BMN; Gassmann et al., 2014) and the Business Model Matrix (BMM; Bartels, 2021). The present study most closely approximates the linkage analysis in the business canvas model, which is associated with the identification of 9 components (blocks) that are interrelated: value proposition, key activities, key partnerships, key resources, customer relationships, channels, customers, cost structure, and cash flow. The aforementioned impact on companies' market performance is also influenced by crisis management efforts, such as government interventions and the use of direct/indirect support instruments for enterprises and households.

The study observes companies that can conditionally be divided into three groups: those with negative (128 firms), neutral (43 firms), and positive (58 firms) impacts of the mentioned crises on their business. A survey method has been employed, specifically a direct personal questionnaire. Data processing methods include descriptive statistics, correlation analysis, and hypothesis testing using Chi-square analysis.

The research is conducted in three segments (Figure 1):

1. Market performance of companies concerning direct competitors – "better collaboration with other companies," measured on a 4-point scale ranging from 1 – "definitely not applicable" to 4 – "definitely applicable."
2. Customer portfolio of companies (in terms of the customers' contribution to the value of purchases). Based on this criterion, customers are divided into five groups: (1) Less than 5% of customers account for over 50% of the value of purchases; (2) 10% of customers account for 50% of the value of purchases; (3) 20% of customers account for 50% of the value of purchases; (4) 20% of customers account for less than 50% of the value of purchases; (5) More than 20% of customers account for less than 50% of the value of purchases.
3. The impact of companies' financial results from efforts to enhance collaboration with other companies. The reflection of crises on the financial results of companies is measured on a 9-point scale: decrease by over 70%; decrease between 50–70%; decrease between 20–50%; decrease up to 20%; no substantial impact on our financial results; increase by up to 20%; increase between 20–50%; increase by over 50%; increase by over 70%.

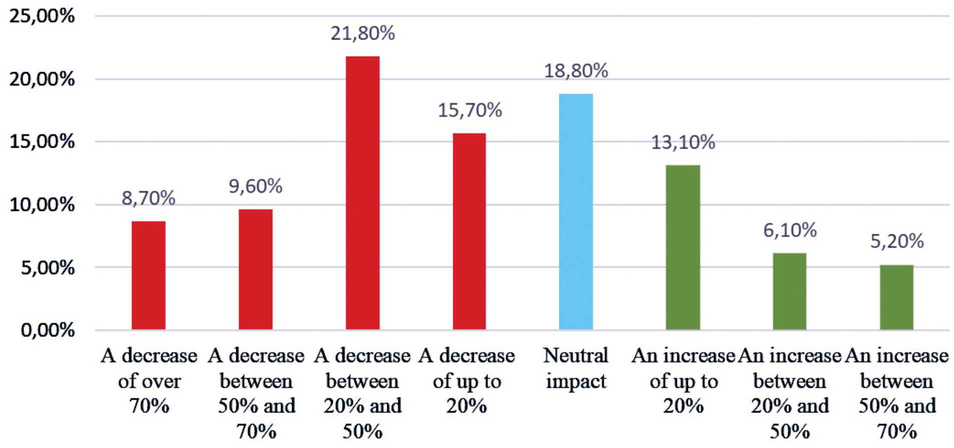

Fig. 1. Profile of Companies Regarding Crisis Impact

In the course of this study, two hypotheses were tested:

- Hypothesis 1 (H1): Examining the dispersion of customers in terms of their contribution to purchases among the three groups of companies (negatively, neutrally, and positively impacted by the crisis).
- Hypothesis 2 (H2): Investigating the presence or absence of a connection between improved collaboration with other companies and financial performance.

Regarding H1, a significant degree of customer dispersion was observed within a substantial portion of the companies. The Pareto principle (80:20) holds validity, although it is significantly modified. In 46% of the firms, less than 20% of customers account for less than 50% of purchases in value terms. In the remaining 54% of the companies, a high degree of concentration in a few customers was evident. Notably, in 23% of the supplier companies, approximately 50% of purchases were attributed to just 10% of customers. To further underscore this point, we examined customer concentration or dispersion based on the impact of crises on the financial results of the companies. Among negatively impacted companies, less than 5% of customers account for 50% of purchases in 9.4% of cases. These are customers who expect top-priority service, special offerings, and are acutely aware of their contribution to supplier sales. However, these insights would not pique interest if not compared with the relative share of large customers in the other two groups (neutral and positively impacted by the crisis).

In the case of neutrally impacted companies, only 2.3% of subjects could boast such large customers, while for positively impacted companies, the share was 3.4%. These data suggest that high concentration of large customers may negatively impact the value of purchases, due to the presence of secondary and tertiary adverse effects on suppliers. The potential bankruptcy or difficulties of a major customer would expectedly affect the sales value of the suppliers. This conclusion can be further corroborated by examining the relative share of smaller customers in companies positively impacted by crises. In 62.0% of such companies, less than 20% of customers contribute less than 50% of purchases in value terms. This serves as additional support for the previously drawn conclusion.

The second hypothesis (H2) concerns the presence or absence of a connection between improved collaboration with other companies and financial performance (Table 1).

Table 1. Hypothesis testing for the presence/absence of a relationship between better collaboration with other companies and financial performance

	Statistical significance (Sig.)	Cramer's V (Cramer's coefficient)	Presence / absence of relationship
Total for all companies	0,000	0,306	Average in strength
Negatively influenced	0,060	0,206	No relationship
Neutrally influenced	Not applicable	Not applicable	Not applicable
Positively influenced	0,001	0,412	Average in strength

The hypothesis H2 was confirmed. A moderate link was established through chi-square analysis, with a Cramer's V coefficient of 0.306. The method was not applicable for negatively impacted companies since the coding variable for financial performance is a constant. The presence of a link is more strongly expressed in positively impacted companies. In 59.7% of the companies, a more efficient management of relationships with other entities was observed, partially neutralizing the effects of crises on their finances. In these companies, financial reflections ranged from up to a 50% decrease to up to a 20% increase in annual terms.

Conclusion

The findings of this study shed light on critical aspects of rural businesses and their financial resilience during turbulent times, such as the Co-19 pandemic and the ongoing conflict in Ukraine. These conclusions have significant implications for the strategic decision-making processes of these enterprises, contributing to their enhanced resilience and financial sustainability.

First and foremost, the data indicate that in less than 50% of the companies examined, customer distribution exhibits an asymmetric pattern but tends to normalize. This suggests that a substantial portion of these businesses recognizes the importance of diversifying their customer base, mitigating the risks associated with overreliance on a limited number of clients. By actively seeking a more balanced distribution, these companies demonstrate a proactive approach to financial stability.

Furthermore, the study highlights a crucial point regarding the servicing of large customers during crises, particularly in moments of "queue effects." It reveals that high concentration of large customers may introduce higher risks to sales and financial outcomes. This is particularly evident among companies that have experienced positive impacts from the crisis. Their high degree of customer concentration is a potential vulnerability, as it can result in significant adverse effects on suppliers should a major customer face financial difficulties or insolvency.

Lastly, the research confirms the second hypothesis, indicating that the management of collaboration with other companies has a tangible impact on financial results. This discovery is particularly pronounced among companies positively impacted by crises. The study finds that in nearly 60% of these companies, more effective relationship management with other entities partially neutralizes the adverse effects of crises on their financial performance. These findings emphasize the importance of investing resources and efforts in improving collaboration with business partners, especially in times of economic uncertainty. The companies included in the study have a long way to go in making sense of their actions in terms of their business model, its design and redesign, and in terms of managing relationships with their customers.

In conclusion, the insights provided by this study not only contribute to our understanding of the dynamics of rural microenterprises during turbulent times but also offer valuable guidance for strategic decision-making. By acknowledging the significance of customer diversification and effective collaboration, rural businesses can enhance their resilience and financial sustainability, ultimately thriving in the face of challenges and uncertainties.

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