BUSINESS AND ENTERPRISE DEVELOPMENT STRATEGIES FROM THE STANDPOINT OF ECONOMIC SECURITY IN CRISIS SITUATIONS

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Abstract: This article employs a systematic analysis to evaluate the progression of Small and Medium Enterprises (SMEs) within the framework of the Covid-19 pandemic, utilizing the European Union (EU) countries and Ukraine as illustrative cases. The analysis draws upon data sourced from Eurostat and the State Statistics Service of Ukraine, encompassing significant SME indicators such as the number of entities, employment figures, and turnover. The findings underscore substantial disparities in the magnitude and function of Small and Medium Enterprises (SMEs) within the economies of the European Union (EU) and Ukraine, as well as the measures employed to bolster businesses during crisis periods.

Keywords: SMEs, SME financing, crisis, SMEs, SMEs' resilience.

1 Introduction

To ensure the resilience and advancement of businesses during crises, it is imperative to effectively attract external financing, mobilize and allocate internal resources within enterprises, leverage political support mechanisms, and enhance organizational preparedness, among other factors. The global landscape has undergone significant transformation due to the COVID-19 pandemic, triggering a profound economic crisis that directly impacted both Ukraine and the European Union (EU). Consequently, European governments swiftly implemented a series of urgent socio-economic support measures in 2020 to counteract the adverse repercussions on the real economy, benefiting the general population as well as businesses. Among these businesses, SMEs emerge as one of the most vulnerable groups, grappling with financing difficulties during crises and necessitating preferential lending terms. Such circumstances underscore the pressing need to explore the dynamics of business development within crisis contexts. The objective of this article is to conduct a statistical analysis assessing the efficacy of business support initiatives in the European Union (EU) and Ukraine, specifically concerning the advancement of key indicators of SMEs.

2 Literature review

The study conducted by Juergensen, Guimón, and Narula (2020) examining the repercussions of the Covid-19 crisis on SMEs, as well as business response and support policies during the crisis, yields valuable insights. Within the study, several aspects of business support and development policies during the crisis are identified and presented in Table 1. These aspects encompass the following key elements: 1) identification of sectors within the economy and groups of enterprises that are most vulnerable and require support (such as SMEs, banks, large enterprises, and the manufacturing sector); 2) adoption of a problem-oriented approach to delivering support tailored to the specific challenges faced by enterprises/industries, accompanied by the formulation of prioritized areas for support, various types of assistance, and short and long-term financing frameworks; 3) transition from the "survival" phase towards the phase of recovery and growth, necessitating the utilization of structural policy tools and methodologies. This transition aligns with the findings of Jones, Kelemen, and Meunier (2016) that emphasize the significance of prompt response to financial crisis consequences by EU institutions, further affirming the importance of policy measures during the "survival" phase.

It is noteworthy that during the stage of business survival, external financing assumes significance as it amplifies the positive influence of SMEs' innovative practices, which are implemented to ensure business sustainability (Adam & Alarifi, 2021). However, the productivity of SMEs during a crisis hinges more on the efficacy of their adopted innovations rather than the financial resources they procure (Adam & Alarifi, 2021). Additionally, at the survival stage, organizational preparedness, staff training, and knowledge transfer emerge as vital factors in effectively managing potential crisis consequences and formulating strategies to overcome them (Toubes, Araújo-Vila & Fraiz-Brea, 2021).

Table 1: Policy approaches to support manufacturing SMEs during the COVID-19 Crisis

	Survival phase	Renewal and growth phase
Main focus	Financial support to prevent liquidity crises and maintain employment	Structural measures to foster innovation, internationalization, and networking
Time horizon	Short-term	Medium-/Long- term
Target groups	One-size-fits-all approach	Differentiated strategy by sector and by type of SME
Policy mix	Reduction of working hours and temporary unemployment Deferral of tax, social security payments, debt payments, and rent and utility payments Loan guarantees Direct lending to SMEs Grants and subsidies	Support for internationalization Innovation support schemes Training and skills development Teleworking and digitalization Cluster development and networking initiatives Entrepreneurship and start-up support

Source: Juergensen, Guimón & Narula (2020)

In a comprehensive theoretical review of 69 academic publications by Eggers (2020) in the realm of SMEs navigating crises, the author delineates strategies to surmount economic downturns across three crucial business domains: finance, strategy, and the institutional environment. It is deduced that, in the majority of instances, finance represents the most susceptible area for SMEs during crises, characterized by challenges such as inadequate financial resources, constrained investment policies, and diminished revenues. Ukrainian authors also studied regional aspects of economic modernization, using qualitative data from the countries of the European Union for this purpose (Ladonko, L., Mozhaikina, N., Buryk, Z., Ostrovskyi, I., & Saienko, V. (2022).

Table 2: Business Area, Crisis, and Continents Covered

Business Area	Crisis	Continent*
Finance (50.7%)	2007 – 2008 Global Financial Crisis (81.2%)	Europe (75.4%)
Strategy and Strategic Orientations (40.6%)	1997 Asian Financial Crisis (5.8%)	Asia (18.8%)
Institutional Environment (8.7%)	2010 and 2011 Christchurch Earthquakes (1.4%)	North America (4.4%)
	2011 Thailand Floods (1.4%)	Oceania (4.4%)
	2015–16 Russian Financial Crisis (1.4%)	Global (2.9%)
	Variety of crises and disasters (8.7%)	

** total exceeds 100% since some studies cover several countries and continents*
Source: Eggers (2020)

Undoubtedly, amidst a crisis, the pursuit of favorable financing terms for enterprises emerges as a paramount undertaking. Casey & O'Toole (2014) highlight that credit-rated SMEs predominantly rely on trade credits, while constrained firms often resort to loans from other companies or informal lending, and small firms frequently avail themselves of grant financing.

Furthermore, in times of crisis, SMEs may adopt a strategy of cooperative collaboration or competitive alliances to leverage their respective strengths and foster synergistic outcomes (Kossyva, Sarri & Georgolpoulos, 2014). Consequently, both fundraising and marketing strategies assume crucial roles in navigating the crisis and ensuring survival (Omar, Ishak & Jusoh, 2020). Consequently, within the scientific literature, extensive discourse takes place regarding the various types, frameworks, and mechanisms of business financing during different stages of support within crisis contexts. Additionally, scholarly discussions emphasize the pivotal significance of innovation, marketing strategies, and organizational preparedness for businesses operating in crisis environments.

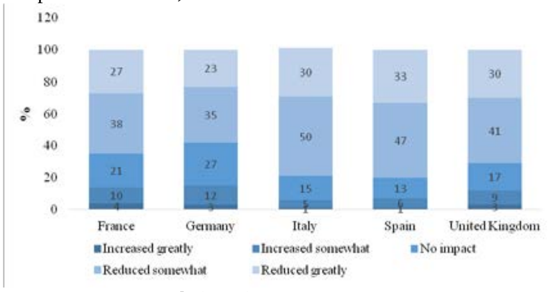
3 Methodology

This article employs a systematic analysis to evaluate the progression of SMEs amidst the Covid-19 pandemic, utilizing the European Union (EU) countries and Ukraine as illustrative cases. The analysis draws upon data sourced from Eurostat and the State Statistics Service of Ukraine, encompassing significant SME indicators such as the number of entities, employment figures, and turnover. To characterize the diverse financial support schemes, the study incorporates information from the Covid-19 Fund in Ukraine and the European Commission (2023), shedding light on the magnitude of funding provided in EU countries during the crisis, as well as the variation in support across different SME sectors. Furthermore, insights into the challenges related to SME financing in Ukraine are derived from the report of the State Audit Service of Ukraine.

4 Results and discussion

In the context of the EU, SMEs emerged as the most significant type of enterprise during the pandemic, constituting 99% of businesses across the Member States. Within the EU, a staggering 24 million companies fall under the SME category, contributing over 50% of the Gross Domestic Product (GDP) and fostering employment opportunities for more than 100 million individuals (European Parliament, 2023). Specifically, in 2020, the EU-27 consisted of 42,000 large enterprises with a turnover of €12,274 billion, 201,000 medium-sized enterprises with a turnover of €4,394 billion, and 442.68 thousand small enterprises with a turnover of €2,378 billion (Eurostat, 2023a; 2023b). The role of SMEs extends far beyond economic contributions, as they play a pivotal role in ensuring the sustainability of the European economy and the overall well-being of the population (Siakas et al., 2014). Survey findings on small and medium-sized enterprises reveal a notable increase in the proportion of businesses encountering a decline in revenue. Disparities across countries arise due to variations in the severity of policies implemented to contain the virus and its subsequent implications on business operations. Notably, Italian and Spanish SMEs have been affected the most, with 30% and 33% of surveyed companies reporting a decrease in revenues, in contrast to 23% in Germany (Dimson et al., 2020).

Figure 1: Respondents' views of Covid-19 impact on their companies' revenues, %



Source: Dimson et. al. (2020)

The Covid-19 pandemic has exerted a substantial influence on small and medium-sized businesses (SMBs) within the EU27. Numerous SMBs have encountered a decrease in sales, disruptions in the supply chain, and a surge in delayed payments. To address the ramifications of the pandemic, SMBs have availed themselves of government assistance through initiatives aimed at wage subsidies, alleviating cash flow challenges, implementing reduced working hours, and similar measures. Encouragingly, many SMBs have embraced the adoption of digital tools to sustain their operations and have shifted toward or enhanced their online sales channels.

The impact of the pandemic on small and medium-sized businesses (SMBs) exhibited significant variations across both EU member states and industries. Notably, certain sectors experienced pronounced challenges as a result of the pandemic, including "accommodation and services to the public" (-37.8%), "transportation and storage" (-16.1%), "administrative and support services" (-13.3%), and "manufacturing" (-9.8%). Conversely, the value added by SMBs witnessed an increase in the "real estate activities" and "information and communication" sectors, with only a moderate decline observed in the "digital" domain, as well as in the "supply of electricity, gas, steam, and air conditioning", construction industry, and professional, scientific, and technical activities. During the year 2020, the EU-27 experienced a reduction in the number of new business registrations and startup formations, alongside a decline in startup financing. Nevertheless, the number of business bankruptcies exhibited a decrease, reflecting the impact of diverse economic support programs implemented by Member States, as well as enhanced cooperation between creditors and regulatory bodies.

In 2020, the Covid-19 pandemic had a profound impact on business operations within the non-financial sector of Europe, leading to a substantial decrease in employment opportunities. Available data reveals a notable decline in the value added generated by SMBs in the EU27 non-financial sector, with a decrease of 7.6%. Furthermore, employment within EU27 SMBs experienced a decline of 1.7%. Specifically, the value added on a factor cost basis decreased by 6%, amounting to USD 6.7 trillion in 2020 compared to USD 7.1 trillion in 2019 (gross operating income less operating subsidies and indirect taxes). Nonetheless, the implementation of various response policies and measures has contributed to the resilience of SMEs. Amid the peak of the pandemic in 2020, these enterprises managed to generate a value-added of USD 3.5 trillion, albeit experiencing a 5% decrease from the USD 4 trillion recorded in 2019. Additionally, the number of individuals employed in SMEs witnessed a decrease of 3%, declining from 121.5 million in 2019 to 127.7 million in 2020 (Wood, 2023).

In light of the challenges and risks faced by SMEs amidst the pandemic, the European Commission recognized the need to revise and align its SME strategy with other key initiatives such as the Industrial Strategy, the European Data Strategy, and the European Green Deal. In response, new measures were identified to support SMEs during these turbulent times. These measures encompassed several areas, including facilitating market access for SMEs beyond the EU, expanding the scope of the Erasmus scheme to provide more opportunities for young entrepreneurs, and promoting the development of pilot initiatives and projects aimed at fostering the adoption of digital solutions by SMEs. This emphasis on digital transformation was driven by the recognition of the imperative for SMEs to transition to digital business models to navigate crises effectively (European Parliament, 2021).

In terms of financial assistance, the European Commission (EC) and the European Investment Bank Group collaborated to allocate €1 billion from the European Fund for Strategic Investments. This funding aimed to stimulate local banks and other lending institutions, ultimately facilitating liquidity for a minimum of 100,000 companies across the EU. In 2020, the EC further announced a substantial €8 billion in support specifically designated for SMEs. To ensure compliance with EU state aid regulations, the EC also unveiled the establishment of a Pan-European Guarantee Fund, overseen by the European Investment Bank. This fund was designed to provide SMEs with access to

€25 billion in financing, bolstering their financial resilience (European Commission, 2023).

Table 3 presents an overview of various financial support schemes implemented during the crisis, highlighting the diverse funding amounts allocated in EU countries. Additionally, the table captures the differentiation in support based on specific sectors within the SME landscape. Notably, one of the most prevalent support mechanisms was the establishment of guarantee agreements between the European Investment Fund and national financial institutions. These agreements played a crucial role in facilitating SME financing by enhancing access to capital under more favorable conditions. The allocated funds were utilized for various purposes, including market expansion, product development, and workforce upskilling initiatives, among others. It is worth noting that Germany, Italy, and France have allocated significantly larger amounts of financial resources to SMEs in various sectors of the economy. France and Italy signed securitization agreements to provide loans to SMEs, with priority given to SMEs engaged in environmental innovation. Significant amounts of financial resources have also been allocated to support SMEs in Romania, with a focus on the agricultural sector, and in Spain, with a focus on digitalization and innovation.

During the pandemic crisis, SMEs in Romania encountered a substantial decline in turnover, necessitating prompt responses to external environmental changes with limited capital resources (Bordeianu, Grigoras-Ichim & Morosan-Danila, 2021).
The increased focus on financing innovative SMEs in Italy and Spain can be attributed to the elevated lending risk associated with these firms during times of crisis. Lee, Sameen, and Cowling (2015) observed diminished access to finance for innovative SMEs during such periods, resulting in a decline in their financial performance. Furthermore, technological innovation plays a pivotal role in promoting the sustainability of SMEs and fostering a greener culture in crises (Alraja et al., 2022).

Table 3: Cases of financial support for SMEs in the EU in crises

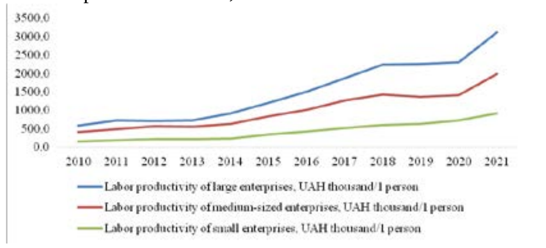
Country	Financing mechanism	Financing coverage	Sectors of SMEs
Bulgaria	Guarantee agreement between the European Investment Fund and Raiffeisenbank, that «provides loans with better terms and conditions»	€10 mio.	Private and public enterprises in the cultural and creative sectors
Denmark, Sweden, Norway, Finland, and Iceland	Guarantee agreement between European Investment Fund and the Danish alternative finance provider REinvent Finance through bridge financing loans, minimum guarantees, and content development loans through the finance provider.	Up to €60 mio.	Nordic film and TV series industry operators in Sweden, Norway, Denmark, Finland, and Iceland
Estonia, Latvia, Lithuania, and Finland	Guarantee of the European Investment Fund, which «was granted to Estonian lender Finora Capital, a fully digital, alternative finance providing company». It has provided «access to more affordable loans» to develop new products, enter new markets, and develop competencies.	€6 mio.	Cultural and creative sectors in Estonia, Latvia, Lithuania, and Finland.
France	The securitization agreement signed between the European Investment Bank Group and BNP Paribas for SME lending	€515 million during 2 years	SMEs from various sectors of the economy
Germany	A preferential lending scheme agreed upon between the European Investment Fund and the European Investment Bank and Commerzbank	Up to €500 mio.	SMEs from various sectors of the economy
Hungary	Guarantee agreement between the European Investment Fund and Magyar Vállalkozásfejlesztési Alapítvány to improve conditions and access to credit	€8,2 mio.	SMEs in the cultural and creative sector, to sustain jobs and speed up the economic recovery.
Italy	The securitization agreement signed between the European Investment Bank Group та Italian leasing specialist Alba Leasing	€490 mio.	SMEs from different sectors of the economy with a focus on environmental investments
Malta	Agreement between the European Commission, the European Investment Bank group, and the Government of Malta to increase the volume of financing for enterprises under SME development initiatives on favorable terms: lower interest rates, improved collateral requirements	€28 mio.	SMEs from various sectors of the economy
Romania	Cooperation agreement between the European Investment Bank Group and Deutsche Leasing Romania, secured by a guarantee from the European Fund for Strategic Investments	€370 mio.	Private sector SMEs, agriculture and equipment, support for borrowers in rural and economically backward regions
Spain	Concessional financing based on the agreement between the European Investment Bank Group and Banco Santander, the signing of three agreements with Banca March, and an agreement with Banco de Sabadell	€900 mio. for Banco Santander and €270 mio. for Banca March. This enabled the mobilization of €300 million for Banco de Sabadell, which ensured the mobilization of €600 million.	SMEs, with a special focus on investments in digitalization and innovation

Source: summarized by the author according to the European Commission (2023)

In Ukraine, the level of funding and support provided to SMEs has been considerably higher in comparison to EU countries. On April 13, 2020, the Ukrainian Parliament decided to establish a Covid-19 Fund with a total value of UAH 80.9 billion (USD 2.4 billion). The support package encompassed various programmatic response measures designed to provide specific assistance to SMEs. These measures included a partial unemployment benefits program for SMEs that were compelled to halt their operations during the lockdown. The program provided financial support equivalent to two-thirds of the wage rate for each hour of lost working time, capped at a maximum amount of UAH 4,723. Additionally, amendments were made to the Affordable Loans 5-7-9% program, which was initially launched in January 2020. Furthermore, targeted support initiatives were implemented to aid individual entrepreneurs, including provisions such as child benefits and temporary tax exemptions. Tax measures were also introduced, such as the temporary suspension of commercial real estate and land tax, tax audits, and the deferral of interest payments for taxpayers and social security payers. Moreover, credit institutions were prohibited from increasing interest rates on previously issued loans. Based on the findings of the State Audit Service of Ukraine (2023), the existing legislation exhibits certain gaps that have resulted in the ineffective utilization of state budget funds disbursed from the COVID-19 Fund. These loopholes have enabled employers to obtain partial unemployment benefits without appropriate justification and cover expenses unrelated to quarantine measures or without suspending their operations. For instance, in the case of the Chernihiv region, there is an estimated potential misuse of budgetary funds amounting to UAH 6.5 million. These findings highlight the need for addressing the identified gaps to ensure the proper allocation and utilization of budget resources (State Audit Service of Ukraine, 2023).

In comparison to the EU27, Ukraine witnessed the presence of 1,955,119 small businesses (99.1%) and approximately 17,946 medium-sized businesses (0.9%) in 2020. These enterprises accounted for 60% of the country's GDP, 7 million jobs, and contributed 40% of tax revenues. Subsequently, in 2021, the number of small businesses decreased slightly to 1,937,827, while the count of medium-sized businesses reached 17,811 (State Statistics Committee of Ukraine, 2023a). The share of employed workers in small enterprises (SEs) constituted 47.4% in 2020 and increased marginally to 48.0% in 2021, whereas, in medium-sized enterprises (MEs), it stood at 35% in 2020 and slightly decreased to 33.6% in 2021 (State Statistics Committee of Ukraine, 2023b). SEs contributed to 27.6% of total sales in 2020 and 26.1% in 2021, while MEs accounted for 39.6% during the same period (State Statistics Committee of Ukraine, 2023c). Remarkably, the pandemic had a minimal impact on SME employment in Ukraine, as the number of employees in SEs only experienced a 1% decrease in 2020-2021, while MEs witnessed a 4% increase within the same timeframe. However, it is worth noting that labor productivity in Ukraine's SEs remains comparatively low, with medium and large enterprises demonstrating higher efficiency (Figure 2).

Figure 2: Labor productivity dynamics of large, medium, and small enterprises in Ukraine, 2010-2021



Source: calculated by the author based on data from the State Statistics Committee of Ukraine (2023a; 2023c)

It is noteworthy that the agricultural sector in Romania experienced a negative growth rate of -5.88% in gross value added during the pandemic. However, in 2021, the sector demonstrated a significant recovery with a growth rate of 22.57%, followed by a further growth rate of 8.55% in 2022. These figures indicate the effectiveness of SME financing in Romania's agricultural sector and the success of supporting borrowers in rural and economically disadvantaged regions, as evidenced in Table 4. In comparison, Bulgaria did not provide specific support for its agricultural sector. Consequently, Bulgaria's agricultural sector experienced a negative growth rate of -1.10% during the pandemic, but saw a remarkable recovery in 2021 with a growth rate of 51.00%, followed by a growth rate of 15.74% in 2022. This discrepancy can be attributed to variations in the countries' economic structures and the composition of their agricultural sectors. In Romania, the agricultural sector accounted for 19% of employment in 2021, whereas in Bulgaria, it constituted 6% of total employment. Additionally, in terms of value-added, the agricultural sector in Romania contributed 4.4% of the country's GDP in 2021, equivalent to $12,356.96 million. In contrast, the agricultural sector in Bulgaria represented 4.4% of GDP in 2021, amounting to $3,670.75 million (World Bank, 2023a; 2023b; 2023c).

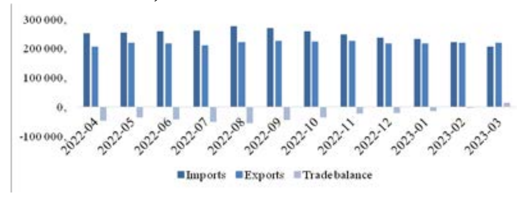
Table 4: The growth rate of Gross value added of the agricultural industry in Eu-27, basic prices, %

TIME	2012	2018	2019	2020	2021	2022	Growth (+/-). 2022-2019
European Union - 27	0,56%	-2,31%	3,91%	-0,98%	7,33%	15,75%	11,84%
Belgium	27,18%	-9,96%	18,04%	-5,90%	3,99%	7,91%	-10,14%
Bulgaria	1,82%	-3,34%	2,04%	-1,10%	51,00%	15,74%	13,71%
Czechia	-6,21%	1,50%	3,05%	10,44%	19,62%	17,49%	14,44%
Denmark	34,33%	-28,77%	35,60%	22,11%	-12,48%	27,40%	-8,21%
Germany	-9,19%	-22,80%	31,11%	-5,38%	0,27%	44,31%	13,19%
Estonia	15,89%	-25,80%	36,86%	-8,90%	5,82%	65,20%	28,34%
Ireland	-4,60%	-17,79%	10,21%	12,95%	21,48%	22,23%	12,02%
Greece	4,45%	-5,33%	7,41%	0,58%	1,43%	16,44%	9,03%
Spain	0,38%	-0,36%	-2,78%	-0,37%	7,64%	-5,57%	-2,79%
France	3,06%	12,58%	-5,71%	-2,37%	13,94%	23,54%	29,24%
Croatia	-9,63%	11,09%	4,82%	1,58%	26,46%	6,20%	1,38%
Italy	4,18%	4,86%	-1,85%	-2,74%	3,41%	10,68%	12,53%
Cyprus	2,26%	-3,98%	12,86%	4,08%	-8,38%	-1,64%	-14,50%
Latvia	24,39%	-18,82%	65,49%	2,91%	5,55%	27,56%	-37,93%
Lithuania	29,75%	-20,23%	24,45%	21,72%	2,95%	9,77%	-14,68%
Luxembourg	24,53%	4,02%	0,03%	0,38%	6,63%	36,99%	36,95%
Hungary	-11,05%	-3,04%	2,41%	-3,18%	12,82%	-18,78%	-21,19%
Malta	-5,81%	-5,04%	8,04%	-12,35%	-8,34%	-0,02%	-8,06%
Netherlands	7,16%	-8,67%	4,94%	-6,07%	3,90%	9,94%	5,00%
Austria	-1,19%	-3,27%	-2,02%	2,53%	16,22%	18,87%	20,88%
Poland	1,82%	-11,07%	9,33%	6,87%	-3,78%	41,30%	31,97%
Portugal	-3,13%	0,82%	10,13%	-0,24%	7,65%	-8,69%	-18,82%
Romania	-23,43%	7,96%	5,54%	-5,88%	22,57%	8,55%	3,00%
Slovenia	-19,16%	44,01%	-9,64%	5,22%	-28,09%	27,29%	36,93%
Slovakia	8,20%	-16,97%	-3,70%	23,18%	9,46%	25,83%	29,54%
Finland	6,31%	5,38%	11,01%	7,85%	2,75%	10,22%	-0,79%
Sweden	5,63%	-22,41%	5,87%	8,77%	24,04%	6,22%	0,35%
Iceland	5,53%	-18,13%	1,94%	6,37%	2,84%	14,56%	12,61%
Norway	6,54%	-13,39%	3,82%	0,01%	5,67%	5,01%	1,20%
Switzerland	-1,33%	1,68%	7,17%	9,51%	-7,13%	9,36%	2,19%

Source: Eurostat (2023d)

Furthermore, it is essential to acknowledge the varying levels of financial support provided to SMEs by EU institutions across different Member States. It is pertinent to concur with the perspective put forth by Polishchuk & Chugaev (2022) that the COVID-19 pandemic and the subsequent severe recession, the most profound since 1945, have impacted the collaborative sectors of the EU. This crisis has exacerbated existing disparities in economic development among countries and regions, necessitating a comprehensive review and enhancement of financial instruments within the scope of common policies and, specifically, financing policies. The effectiveness of stimulating entry into new markets through SME financing in the EU during the crisis appears to be insufficient, as indicated by the negative trade balance observed in 2022. The proportion of EU-27 national imports in world imports stood at 13.4% in 2015, 14.0% in 2019 before the pandemic, 13.8% in 2020-2021 during the pandemic, and 15.3% in 2022. In terms of national exports of the EU-27 countries, their share in world exports was 15.6% in 2015, 15.9% in 2019 before the pandemic, 16.1% and 14.7% in 2020 and 2021 respectively, and 13.7% in 2022. Throughout the period from 2015 to 2021, the EU-27 countries maintained a positive trade balance, with figures such as €191.1 billion in 2019, €215.3 billion in 2020, and €55.039 billion in 2021. However, in 2022, the trade balance turned negative, reaching -€429.4 billion euros (Figure 2) (Eurostat, 2023e). The trade deficit in the EU can be attributed to several factors. Firstly, the negative energy balance caused by the escalation of energy prices and the ongoing conflict in Ukraine has had a significant impact. Secondly, there has been a decline in manufacturing exports to the EU, which has contributed to the trade deficit. Lastly, the war in Ukraine has also resulted in a reduction in export and import activities with Russia and China, further exacerbating the trade deficit (Eurostat, 2023c).

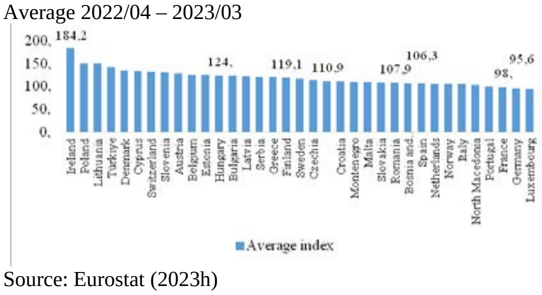
Figure 3: Export, import, and trade balance of goods in EU-27 in 2022/04 – 2023/03, million euro



Source: Eurostat (2023f; 2023g)

Furthermore, it is noteworthy to highlight the observed decline in industrial production in Germany and France. During the period from April 2022 to March 2023, the Average Volume index of production stood at 95.6 for Germany and 98.0 for France (Figure 4).

Figure 4: Volume index of production in EU-27, 2015=100 (SCA) (mining and quarrying; manufacturing; electricity, gas, steam, and air conditioning supply, excluding construction), Average 2022/04 – 2023/03



Source: Eurostat (2023h)

5 Conclusions

The EU and Ukraine exhibit notable differences in the scale and role of SMEs in their respective economies, as well as the measures implemented to support businesses during times of crisis. In the EU, SMEs play a crucial role in ensuring economic stability, contributing to 50% of GDP. Conversely, in Ukraine, despite SMEs making a significant contribution to GDP (60%), their labor productivity is considerably lower compared to larger companies. Both the EU and Ukraine have recognized the importance of SME financing and policy support measures, particularly in response to challenges such as declining revenues, decreased sales, and supply disruptions. It is noteworthy that the approaches taken by the EU and Ukraine differ. EU countries have emphasized the provision of preferential terms for SME financing through the establishment of guarantee agreements with key financial institutions within member states. Funding has been allocated in the EU27 to support the most vulnerable SMEs, aiming to facilitate their development of new products and enhancement of staff skills. Additionally, initiatives have been introduced to enable SMEs to explore new markets outside the EU, expand the Erasmus scheme for young entrepreneurs, and foster the adoption of digital solutions through pilot projects and initiatives. In Ukraine, the response measures have included the implementation of a partial unemployment benefits program for SMEs, modifications to the Affordable Loans 5-7-9% program, targeted support for individual entrepreneurs, and the implementation of tax measures. Despite variations in response policies, SMEs in EU member states have experienced a more pronounced impact. The number of employed SMEs witnessed a decline of 3%. Conversely, in Ukraine, the number of employed small enterprises decreased by 1%, while medium-sized enterprises experienced a 4% increase during the period of 2020-2021. These contrasting trends suggest potential disparities in the enforcement of quarantine restrictions and the diverse effects of the pandemic on different countries.

The study uncovers variations in financial support schemes among EU member states, including disparities in the amount of SME financing provided during the crisis and variations in support across different sectors of SMEs. A prevailing support scheme observed in the EU involves the establishment of guarantee agreements between the European Investment Fund and national financial institutions to facilitate SME financing. This mechanism has proven effective in enabling enterprises to secure funding and gain access to capital under more favorable conditions.

Literature:

1. Juergensen, J., Guimón, J., & Narula, R. (2020). European SMEs amidst the COVID-19 crisis: assessing impact and policy responses. *Journal of Industrial and Business Economics*, *47*, 499-510.
2. Eggers, F. (2020). Masters of disasters? Challenges and opportunities for SMEs in times of crisis. *Journal of Business Research*, *116*, 199-208.
3. Jones, E., Kelemen, R. D., & Meunier, S. (2016). Failing forward? The Euro crisis and the incomplete nature of European integration. *Comparative political studies*, *49*(7), 1010-1034.
4. Casey, E., & O'Toole, C. M. (2014). Bank lending constraints, trade credit and alternative financing during the financial crisis: Evidence from European SMEs. *Journal of Corporate Finance*, *27*, 173-193.
5. Alraja, M. N., Imran, R., Khashab, B. M., & Shah, M. (2022). Technological innovation, sustainable green practices, and SMEs' sustainable performance in times of crisis (COVID-19 pandemic). *Information Systems Frontiers*, 1-25.
6. Kossyva, D., Sarri, K., & Georgolpoulos, N. (2014). Co-opetition: A business strategy for SMEs in times of economic crisis. *South-Eastern Europe Journal of Economics*, *12*(1).
7. Adam, N. A., & Alarifi, G. (2021). Innovation practices for the survival of small and medium enterprises (SMEs) in the COVID-19 times: the role of external support. *Journal of Innovation and Entrepreneurship*, *10*(1), 15.
8. Toubes, D. R., Araújo-Vila, N., & Fraiz-Brea, J. A. (2021). Organizational learning capacity and sustainability challenges in times of crisis: A study on tourism SMEs in Galicia (Spain). *Sustainability*, *13*(21), 11764.
9. Bordeianu, O. M., Grigoras-Ichim, C. E., & Morosan-Danila, L. (2021). SMEs Sustainability in Times of Crisis. *LUMEN Proceedings*, *17*, 58-65.
10. Siakas, K., Naaranoja, M., Vlachakis, S., & Siakas, E. (2014). Family businesses in the new economy: How to survive and develop in times of financial crisis. *Procedia Economics and Finance*, *9*, 331-341.
11. Omar, A. R. C., Ishak, S., & Jusoh, M. A. (2020). The impact of the Covid-19 movement control order on SMEs' businesses and survival strategies. Geografia-Malaysian Journal of Society and Space, 16(2), 90–103.
12. Filippetti, A., & Archibugi, D. (2011). Innovation in times of crisis: National Systems of Innovation, structure, and demand. *Research Policy*, *40*(2), 179-192.
13. Eurostat (2023a). *A number of enterprises in the non-financial business economy by size class of employment.* https://ec.europa.eu/eurostat/databrowser/view/TIN00145/default/table?lang=en
14. Eurostat (2023b). *Turnover of the non-financial business economy by size class of employment.* https://ec.europa.eu/eurostat/databrowser/view/TIN00146/default/table?lang=en
15. Eurostat (2023c). Highest ever EU trade deficit recorded in 2022. https://ec.europa.eu/eurostat/web/products-eurostat-news/w/DDN-20230331-1
16. Dimson J., Mladenov Z., Sharma R., Tadjeddine K. (2020). COVID-19 and European small and medium-sized enterprises: How they are weathering the storm. https://www.mckin sey.com/industries/public-and-social-sector/our-insights/covid-19-and-european-small-and-medium-size-enterprises-how-they-are-weathering-the-storm
17. Wood, J. (2023). Smaller companies proved more resilient to COVID-19 pandemic disruption than larger firms. World Economic Forum. https://www.weforum.org/agenda/2023/01/europe-smes-business-resilience-covid-19/
18. European Parliament (2021). Covid-19: how the EU can help small businesses. https://www.europarl.europa.eu/news/en/headlines/economy/20210107STO95112/covid-19-how-the-eu-can-help-small-businesses
19. European Commission (2023a). Supporting European businesses during the pandemic. https://commission.europa.eu/strategy-and-policy/coronavirus-response/jobs-and-economy-during-coronavirus-pandemic/supporting-european-businesses-during-pandemic_en
20. European Commission (2023b). Supporting European businesses during the pandemic. https://commission.europa.eu/strategy-and-policy/coronavirus-response/jobs-and-economy-during-coronavirus-pandemic/supporting-european-businesses-during-pandemic_en
21. *Eurostat (2023d). Gross value added of the agricultural industry - basic and producer prices* https://ec.europa.eu/eurostat/databrowser/view/TAG00056/default/table?lang=en
22. Eurostat (2023e). Trade in goods, by main world traders - EU27 (from 2020). https://ec.europa.eu/eurostat/databrowser/view/TET00071/default/table?lang=en
23. Eurostat (2023f). Imports of goods – total. https://ec.europa.eu/eurostat/databrowser/view/TEIET110/default/table?lang=en
24. Eurostat (2023g). Exports of goods – total. https://ec.europa.eu/eurostat/databrowser/view/TEIET010/default/table?lang=en
25. Eurostat (2023h). Production in the industry – total (excluding construction). https://ec.europa.eu/eurostat/databrowser/view/TEIIS080/default/table?lang=en
26. OECD. (2020). *Tackling coronavirus (COVID-19): Contributing to a global effort. SME policy responses*. Paris: OECD. https://www.oecd.org/dac/development-assistance-committee/DAC-Joint-Statement-COVID-19.pdf
27. World Bank (2023a). Employment in agriculture (% of total employment) (modeled ILO estimate). https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS
28. World Bank (2023b). Agriculture, forestry, and fishing, value added (% of GDP). https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?view=chart
29. World Bank (2023c). Agriculture, forestry, and fishing, value added (current US$). https://data.worldbank.org/indicator/NV.AGR.TOTL.CD?view=chart
30. Lee, N., Sameen, H., & Cowling, M. (2015). Access to finance for innovative SMEs since the financial crisis. *Research Policy*, *44*(2), 370-380.
31. Polishchuk, L., & Chugaev, O. (2022). ASSESSMENT OF THE EU COHESION POLICY IN THE PANDEMIC CONDITIONS: STRUCTURAL AND INDUSTRY ASPECT. Journal of International Relations of KNU, 56(2).

32. State Audit Service of Ukraine (2023). Report of the State Audit Service of Ukraine on the results of the audit of the use of funds allocated from the fund for combating the acute respiratory disease COVID-19 caused by the coronavirus SARS-CoV-2 and its consequences. https://dasu.gov.ua/attachments/58dbe33f-3148-45ed-8518-cd7bb78e95d1_3BIT%20(2).pdf
33. State Statistics Committee of Ukraine (2023a). Number of operating business entities by type of economic activity (2010-2021). https://www.ukrstat.gov.ua/operativ/operativ2022/fin/pssg/ksg _ek_2010_2021_ue.xlsx
34. State Statistics Committee of Ukraine (2023b). Number of Employed Workers by Economic Entities by Type of Economic Activity (2010-2021). https://www.ukrstat.gov.ua/operativ/operativ2022/fin/pssg/kzpsg_ek_2010_2021.xlsx
35. State Statistics Committee of Ukraine (2023c). The volume of products (goods, services) sold by economic entities by type of economic activity (2010-2021). https://www.ukrstat.gov.ua/operativ/operativ2022/fin/pssg/orpsg_ek_2010_2021_ue.xlsx
36. Ladonko, L., Mozhaikina, N., Buryk, Z., Ostrovskyi, I., & Saienko, V. (2022). Regional aspects of the economy modernization: the qualitative evidence from EU countries. International Journal for Quality Research, 16(3), 851-862.

Primary Paper Section: A

Secondary Paper Section: AH