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WSTĘP

INDRODUCTION

Słów parę o publikacji

Z przyjemnością przekazuję Państwu kolejny numer czasopisma „Przestrzeń, Ekonomia, Społeczeństwo”. Jest to wydanie specjalne, które składa się z 8 anglojęzycznych artykułów.

Stanowi ono pokłosie Międzynarodowej Konferencji Naukowej pt. „Sprawozdawczość sektora mikro i małych przedsiębiorstw w krajach Europy Środkowo-Wschodniej – stan i wyzwania”, która odbyła się w Sopockiej Akademii Nauk Stosowanych w dniach 20-21 października 2022 roku. Wydarzenie to było doskonałą okazją do podjęcia rozważań nad kierunkami doskonalenia raportowania sektora MMP w krajach Europy Środkowo-Wschodniej na tle transformacji systemowych i ekonomicznych, tym bardziej, że jak wiemy, przemiany polityczne, społeczne i gospodarcze, jakie zainicjowane zostały w latach 80. i 90. XX wieku w tym regionie, są spektakularne.

Zakres tematyczny konferencji obejmował takie zagadnienia, jak:

- Rola i znaczenie sektora mikro i małych przedsiębiorstw w gospodarce;
- Regulacje prawne funkcjonowania sektora MMP w krajach ESW;
- Sprawozdawczość finansowa sektora MMP w krajach ESW;
- Raportowanie niefinansowe w sektorze MMP w krajach ESW;
- Odpowiedzialność społeczna przedsiębiorstw sektora MMP;
- Digitalizacja i cyfryzacja procesów przedsiębiorstw sektora MMP;
- Kierunki doskonalenia sprawozdawczości sektora MMP w krajach ESW dla ich zrównoważonego rozwoju.

Tematyka artykułów opublikowanych w bieżącym numerze jest zbieżna z zagadnieniami prezentowanymi podczas konferencji. Ich autorami są uznani naukowcy m.in. z: Litwy, Macedonii Północnej, Mołdawii, Rumunii, Ukrainy oraz Węgier. W kolejnym – 22/II/2022 numerze prezentowane będą artykuły przedstawicieli z Polski.

Aktualny, 21 już numer czasopisma „Przestrzeń, Ekonomia, Społeczeństwo” jest pierwszym, wydanym po zmianach, jakie w ostatnim czasie dokonały się na naszej Uczelni. Najbardziej znaczącą była zmiana rangi i nazwy naszej Uczelni – Sopocka Szkoła Wyższa stała się Sopocką Akademią Nauk Stosowanych. Z rebrandingiem związana jest także modyfikacja logo naszej Uczelni, a co za tym idzie – również szaty graficznej wydawanego przez Sopocką Akademię periodyku.

W ostatnim czasie szeregi naszej Rady Naukowej zasiłło kilkoro nowych członków, reprezentujących krajowe oraz zagraniczne uczelnie wyższe. Mam nadzieję, że to swoiste „nowe otwarcie” pociągnie za sobą kolejne, korzystne zmiany.

Joanna Grott

ECONOMY
EKONOMIA

Avni Arifi

THE IMPACT OF SMES IN JOB CREATION IN WESTERN BALKANS

Abstract

The purpose of this paper is to analyze the impact of SMEs on job creation in the WB6 countries (North Macedonia, Albania, Kosovo, Montenegro, Bosnia & Herzegovina, and Serbia). During the last two decades, the countries in the Western Balkans region have faced different economic challenges, including employment-related issues and the question of who is in fact the creator of new jobs in this region. The paper employs explanatory methodology, through analysis of the statistical data collected in the Enterprise Survey conducted by the World Bank Group. The data analyzed covers three periods, i.e., year 1 (2009), year 2 (2013), year 3 (2019). The surveys were administered to a representative sample of 5358 firms in the non-agricultural, formal, private sectors, including small, medium and large enterprises. The paper concludes that the most widespread type of business activity in the Western Balkan countries are SMEs, which tend to employ more than large enterprises, with an average share of 45%–77%, by which they contribute more to new job creation, compared to large enterprises, and are indeed the ones reducing job scarcity and exhibiting a smaller share in job shrinkage. The implications arising from the paper are twofold, i.e., they can inspire both the academic and researcher circles to analyze even further the impact of SMEs, by including additional measuring indicators as well the policy makers to revise the policy of assisting SMEs in any means possible. The paper fills the gap in the existing literature dealing with the impact of SMEs on job creation in the WB region. The relevance of this research stands in fact that the study addresses the impact and relevance of SMEs' job creation in countries known for their long transition period.

Keywords: job creation, small and medium enterprises, employment.

WPLYW MŚP NA TWORZENIE MIEJSC PRACY W BAŁKANACH ZACHODNICH

Streszczenie

Celem niniejszego opracowania jest analiza wpływu MŚP na tworzenie miejsc pracy w krajach BŚ6 (Macedonia Północna, Albania, Kosowo, Czarnogóra, Bośnia i Hercegowina oraz Serbia). W ciągu ostatnich dwóch dekad kraje regionu Bałkanów Zachodnich stanęły przed różnymi wyzwaniami gospodarczymi, w tym kwestiami związanymi z zatrudnieniem i pytaniem, kto w rzeczywistości jest twórcą nowych miejsc pracy w tym regionie. W opracowaniu zastosowano metodologię eksplanacyjną, poprzez analizę danych statystycznych zebranych w ramach Badania Przedsiębiorstw, prowadzonego przez Grupę Banku Światowego. Analizowane dane obejmują trzy okresy,



tj. rok 1 (2009), rok 2 (2013), rok 3 (2019). Ankiety zostały skierowane do reprezentatywnej próby 5358 firm z pozarolniczych, formalnych, prywatnych sektorów, w tym małych, średnich i dużych przedsiębiorstw. W badaniu stwierdzono, że najbardziej rozpowszechnionym rodzajem działalności gospodarczej w krajach Bałkanów Zachodnich są MŚP, które zwykle zatrudniają więcej niż duże przedsiębiorstwa, ze średnim udziałem 45%–77%, przez co w większym stopniu przyczyniają się do tworzenia nowych miejsc pracy, w porównaniu z dużymi przedsiębiorstwami, i są w istocie tymi, które zmniejszają niedobór miejsc pracy. Implikacje wynikające z artykułu są dwojakie, tj. mogą zainspirować zarówno środowiska akademickie, jak i badawcze, do dalszej analizy wpływu MŚP, poprzez włączenie dodatkowych wskaźników pomiarowych, a także decydentów, do zrewidowania polityki wspierania MŚP w każdy możliwy sposób. Artykuł wypełnia lukę w istniejącej literaturze dotyczącej wpływu MŚP na tworzenie miejsc pracy w regionie BŚ. Istotność tego badania polega na tym, że dotyczy ono wpływu i znaczenia tworzenia miejsc pracy przez MŚP w krajach znanych z długiego okresu przejściowego.

Słowa kluczowe: tworzenie miejsc pracy, małe i średnie przedsiębiorstwa, zatrudnienie.

Introduction

Small and medium-sized enterprises have played and continue to play an important role in both developed and developing countries. Their impact is great in many aspects of the economy. They are among the largest employers, among the largest contributors to every economic parameter of the country¹. Globally but also in the local context, they represent over 90% of enterprises operating in local economies. This in fact testifies to the role they have in every economy². Furthermore, a substantial number of individuals rely on small and medium-sized enterprises, either directly or indirectly. Moreover, SMEs tend to be among the most innovative firms operating in high-tech sectors, and they can contribute to the technological upgrading of an economy³.

SMEs have played an important role during the transition to market economy of the Western Balkans countries (Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro, and Serbia). From the beginning after the independence of the countries from the former Yugoslavia, the formation and expansion of SMEs has been an important factor of the transformation process. During the transformation, whole economies that had been under state control for dec-

¹ Neumark D., Wall B., Zhang J., *Just the Fact. Small businesses and job creation: Do small businesses create jobs?*, Public Policy Institute of California (PPCI), San Francisco 2008.

² De Wit G., De Kok J., *Do small businesses create more jobs? New evidence for Europe*, "Small Business Economics", No 42, 2014, pp. 283–295.

³ Bartlett W., *Small Firms as a Development Factor in South East Europe*, [In:] D. Sternad, T. Döring, *Handbook of Doing Business in South East Europe*, Palgrave Macmillan, Basingstoke 2012, pp. 232–250.

ades, often consisting of extremely big businesses, had to be turned into privately held market economies based mostly on SMEs⁴.

As in other parts of the world, small businesses form the backbone of the economy in the Western Balkans where up to 99% of all enterprises are small or medium sized. In fact, in the 6 countries of the Western Balkans, SMEs constitutes somewhere between 60% and 80% of the total employment, which is on average higher than in the EU⁵.

The rest of paper is organized as follows: Section II reviews the existing contemporary literature on the Western Balkans economy, the labor market, the SME's and its impact. Section III describes the data collection that are used for preparing this paper, Section IV gives the conclusions of the paper.

1. Literature review

There is an ongoing debate on the importance of small enterprise versus large ones, especially when it comes to their contribution in the economy. As it turns out small and medium enterprises are the ones that contribute when measuring different indicators. This is highlighted in the study conducted by Gemechu, Francis and Meza⁶. In this ongoing debate, a significant contribution is given by authors Haltiwagner, Jarmin and Miranda⁷. They found that the relationship between the size of the enterprise and the employment growth is sensitive and point out that small businesses, start-ups, and young businesses contribute more to job creation.

In the study conducted by de Kok, Deijl and Van Essen, point out that even though there are variation between countries, regarding the level of employment and the contribution towards job creation SMEs are dominant across the world. This is especially present in developing economies, where in majority of them, SMEs employ more the 50% of total formal employment in the private sector but they contribute by more than half on the total employment creation in the formal economy⁸. In the same line, is the study conducted by Ayyagari,

⁴ GRETA Associati, *Prospective analysis of the SME sector in the Western Balkans. Final Report*, Greta, Venice 2021.

⁵ WB-EDIF, *Building the Future of SMEs in the Western Balkans*, Retrieved from: <http://www.wbedif.eu/>. [accessed: 22.08.2022].

⁶ Gemechu A., Francis C. D., Meza J. R., *SMEs, Age, and Jobs: A Review of the Literature, Metrics, and Evidence*, "Policy Research Working Paper", 7493, The World Bank Group, 2015.

⁷ Haltiwanger J., Jarmin R. S., Miranda J., *Who Creates Jobs? Small versus Large versus Young*, "The Review of Economics and Statistics" 2013, Vol. XCV, No 2, pp. 347–361.

⁸ de Kok, J., Deijl, C., Van Essen, C. V., *Is Small Still Beautiful? Literature Review of Recent Empirical Evidence on the Contribution of SMEs to Employment Creation*, World Bank & GIZ, Eschborn 2013.

Demirguc-Kunt and Maksimovic⁹. They analyze the contribution of SMEs in developing countries in indicators such as employment, job creation, and growth. They conclude that SMEs have significant contribution to job creation and employment growth, while controlling the firm's age.

The same conclusion can be drawn from the study of Neumark, Wall and Zhang. In their study, which analysis the role of SMEs in job creation, the results show that SMEs create more jobs, on net value¹⁰.

In another paper, the authors Ayyagari, Demirguc-Kunt and Maksimovic¹¹ analyze the contribution of SME in the total employment, job creation and growth in 99 countries worldwide where they compare the relevance of SMEs and young enterprises across the economies. The authors conclude that SME (especially those with less than 100 employees), contribute more and have the highest share in employment and job creation but they fall behind when it comes to productivity growth.

According to different studies including Beck et al¹², shows a positive correlation between the share of SMEs employment in total employment the GDP per capita, that is the higher the fare of SMEs contribution to total employment the higher GDP per capita.

The importance of SME for WB6 economies

South-East Europe countries and especially countries that belong to WB6 have had a different and difficult transition from the planned economy to free market economy, where they entry and growth of new enterprises has been hindered by the states itself and their policies and haven't offered sufficient support to the new enterprises up until last ten years. The main reasons for this have been the close connection between political elite and the large firm that had dominated the internal market and delayed the market liberalization process¹³.

The situation as turned for better in recent 15 years and private business have been emerging on high scale and their contribution visible. In fact, small and medium enterprises started to contribute in a fundamental way to the devel-

⁹ Ayyagari M., Demirguc-Kunt A., Maksimovic V., *Who creates jobs in developing countries?*, "Small Business Economics" 2014, Vol. 43, No 1, pp. 43, 75–99.

¹⁰ Neumark D., Wall B., Zhang J., *Do Small Businesses Create More Jobs? New Evidence for the United States from the National Establishment Time Series*, "The Review of Economics and Statistics", 93(1), 2011, pp. 16–29.

¹¹ Ayyagari M., Demirguc-Kunt A., Maksimovic V., *Small vs. Young Firms across the World - Contribution to Employment, Job Creation, and Growth*, The World Bank Policy Research Work, Washington 2011.

¹² Beck T., Demirguc-Kunt A., Levine R., *SMEs, Growth, and Poverty*, "Journal of Economic Growth", Vol. 10., No 3, 2005.

¹³ Bartlett W., *Barriers to SME Development in Bosnia and Herzegovina, Macedonia and Slovenia*, [In:] *Globalization, Democratization*, Massmedia, Zagreb 2003, pp. 363–376.

opment of the emerging private sector and to more dynamic and competitive economies of Western Balkans¹⁴. They are viewed as major engine in the economic reconstruction and growth of the WB6 region¹⁵. The creation of new firms has played an important role in the initial emerge increase of the private sector's contribution to GDP and employment in the whole region¹⁶. As pointed out, the private sector where SMEs belong, are the main contributor to economic output in WB6; however, the state retains a dominant role in some key industries in several countries of the region¹⁷.

SMEs are a crucial part of emerging business environments and key drivers of a sustainable and inclusive economy. In the Western Balkans, the SMEs make up significant number of all firms, generate around 60% of value added and account for almost three quarters of employment¹⁸. Small and medium-sized enterprises (SMEs) dominate the private sector and account for about two-thirds of value added on average.

When we talk about the importance of SMEs and their emergence in the economies of Western Balkans, the Table 1 offers interesting data which strengthen these conclusions. Based on the data, it can be seen that the number of SMEs that are functioning has risen in each of WB countries, mostly in Montenegro (22.8%) and the least in North Macedonia (4.9%). But the trend is positive and shows an increased interest of the population engaging in their own business and establishing SME.

Table 1. Number of SMEs per 1 000 inhabitants in the Western Balkans.

SMEs per 1 000 inhabitants	ALB	BiH	KOS	NMK	MNE	SRB	WB Average
2017	15.4	8.5	20.3	26.5	48.8	50.9	28.4
2020	17.3	9.7	23.9	27.8	59.9	58.4	32.8
% Change	12.3%	14.1%	17.7%	4.9%	22.8%	14.7%	14.4%

Source: OECD, 2022.

¹⁴ Bartlett W., *Small Firms as a Development Factor in South East Europe...*, pp. 232–250.

¹⁵ *SME Policy Index: Western Balkans and Turkey 2019: Assessing the Implementation of the Small Business Act for Europe*, OECD Publishing, Paris 2019.

¹⁶ Uvalic M., *Privatisation Approaches: Effects on SME Creation and Performance*, [In:] R. J. McIntyre, B. Dallago (eds), *Small and Medium Enterprises in Transition Economies*, Palgrave Macmillan & WIDER, 2003, pp.171-184.

¹⁷ Sanfey P., Milatović J., *The Western Balkans in Transition: diagnosing the constraints on the path to a sustainable market economy. Background paper for the Western Balkans Investment Summit hosted by the EBRD, 26 February 2018*, European Bank for Reconstruction and Development, 2018.

¹⁸ *SME Policy Index: Western Balkans and Turkey 2022: Assessing the Implementation of the Small Business Act for Europe*, OECD Publishing, Paris 2022.

The SMEs contribution to the Western Balkans countries' economies can be seen as well through the data shown in the Table 2. If Table 1 pointed out the emergence of new SMEs in the region, the real impact and importance of SMEs in WB6, can be seen through the fact that SMEs constitute majority of enterprises that are active in each country. In Albania SMEs constitute 81.90% of total active enterprises, in BiH the share of SMEs in total enterprises is 63.14%, in Kosovo the share is 75.49%, in North Macedonia very similar and is 73.94%, whereas in Serbia SMEs constitute 65.10% of active enterprises in the country.

The value that SMEs in WB6 add in their respective economy is significant in each country. In Albania they contribute to the added value with 74.10%, in BiH the contribution of SMEs in added value is 60.98% of the total value, in North Macedonia the value created by SMEs in 67.89%, in Montenegro the percentage is even bigger and is 77%, whereas in Serbia the total added value by SMEs is around 60%.

In terms of the contribution towards the export, the data are available only for three countries. In Albania, the SMEs contribute on the export with 64%, in North Macedonia the percentage is around 26% whereas in Serbia is around 40%.

Table 2. SMEs contribution in WB6 economies.

	ALB	BiH	KOS	NMK	MNE	SRB
Number of enterprises						
Micro	37%	13.3%	31.3%	31.79%	/	29.7%
Small	22.1%	23.25%	25.6%	22.56%	/	16.6%
Medium	22.8%	26.59%	18.59%	19.58%	/	18.8%
Large	18.1%	36.86%	24.51%	26.06%	/	34.9%
SMEs	81.90%	63.14%	75.49%	73.94%	/	65.10%
Value added (in thousands EUR)						
Micro	22.2%	11.39%	/	21.63%	53%	23%
Small	25.9%	22.41%	/	24.20%		16%
Medium	26%	27.18%	/	22.07%	24%	20.20%
Large	25.9%	39.02%	/	32.11%	23%	40.80%
SMEs	74.10%	60.98%	/	67.89%	77.00%	59.20%
Total added value	3,383,173	3,521,797	/	3,106,080	1,819,361	15,056,892
Share of exports						
Large	36%	/	/	73.99%	/	60.50%
SMEs	64%	/	/	25.88%	/	39.50

Source: OECD, 2022.

2. Methodology and results

The papers represent an exploratory study where the information and data are gathered through the document method and statistical data from international institutions. The paper analysis the contribution of SMEs in the Western Balkans economies while focusing on their impact on job creation. The data are obtained from World Bank Enterprise Survey that offers a diverse economic data on firms from over 154 countries. The type of data used in for analysis are Employment Indicators that provides a snapshot of employment in the private sector. These main indicators are focusing on the stock of (and changes in) aggregate permanent, full-time employment. The indicators are as follow: Employment Share, Employment Expansion, Employment Contraction, and Net Employment Change. The data set are analyzed in three time periods: year 2007. Year 2013 and year 2019 (before the COVID-19). During this timeframe, a total of 4957 enterprises were surveyed and the results are presented below.

The first set of data that we analyze from the employment indicators is employment share by type of enterprise. Looking at the Table 3, we can compare the data for all six WB countries:

- i) In Albania, small and medium enterprises employ 68.7% of total employment in 2007 and 59.4% in 2019, whereas large enterprises employ only 31.4% in 2007 and 40.5% in 2019.
- ii) In BiH, SMEs share in employment in 2009 was only 47.2% and it declined by 2019 to 44.9% whereas share of employment of large enterprises which was 52.8% in 2007 has risen to 55.1% in 2019.
- iii) In Kosovo, SMEs employed 73.8% of all employments in the country in 2009, and it was increased in 78.3% by 2019, whereas large enterprises employed only 26.2% in 2009, which by 2019 had declined to 21.7% of total employment.
- iv) In Montenegro, in 2009, SMEs were employing 77.3% of total employment, which by 2019 had declined to 59%, whereas the share of large enterprises had increased from 22.7% in 2009, to 41% in 2019.
- v) In North Macedonia, the employment share of SMEs in 2009 were only 53.5% and had a small increase by 2019, which reached to 60.1%, whereas on the other hand, large enterprises share in total employment in 2009 was 46.5% and it decreased to 39.8% by 2019.
- vi) In Serbia, SMEs contributed to total employment with 41.8% in 2009, which was increased by 2019 to 53.8%, whereas the share of large enterprises had fallen from 58.2% in 2009 to 46.2% in 2019.

Table 3. Employment share by type of enterprise.

Country	Year	Employment share by type of enterprise		
		Small	Medium	Large
Albania	2007	29.8%	38.9%	31.4%
	2013	26.9%	46.4%	26.7%
	2019	22.8%	36.6%	40.5%
BiH	2009	13.2%	34.0%	52.8%
	2013	16.0%	47.0%	37.1%
	2019	11.6%	33.3%	55.1%
Kosovo	2009	42.3%	31.5%	26.2%
	2013	24.4%	49.8%	25.7%
	2019	37.1%	41.2%	21.7%
Montenegro	2009	44.6%	32.7%	22.7%
	2013	33.1%	38.5%	28.3%
	2019	15.4%	43.6%	41.0%
North Macedonia	2009	20.5%	33.0%	46.5%
	2013	35.4%	49.4%	15.2%
	2019	26.7%	33.4%	39.8%
Serbia	2009	12.0%	29.8%	58.2%
	2013	18.8%	25.8%	55.3%
	2019	18.1%	35.7%	46.2%

Source: Enterprise Surveys www.enterprisesurveys.org The World Bank Group.

What is probably more important to this study in to find out the who creates more jobs by the size of the enterprise. Table 4 gives insight to this aspect. The table analyzes three aspects: i) firms that expanded, ii) percentage of expansion, iii) share in the total expansion.

The six WB countries perform as follow in those indicators:

- i. In Albania, SMEs have a higher rate of expansion in comparison to large firms, in 2019 small enterprises expanded by 55.5% and medium enterprises by 78.4% whereas large enterprises expanded only by 46.9%. When it comes to employment expansion the average of SMEs was between 13.9% and 25.3% in the analyzed years, whereas for large enterprises the range was between 3.8–7.9%. The share in expansion is significantly higher at SMEs with 84.5% and on the other hand large enterprises share is only 15.5%
- ii. In BiH, we tend to see increase in % of large firms that expand (73.6% in 2019), in comparison to SMEs whose % of firms that expand tend to decline (36.7–62.7% in 2019). The same trend can be noticed in the indicator employment expansion where SME during the analyzed period tend to have a decline, and in average contribute between 5.8–7.4% whereas large enterprises have a increase trend which reached 9.6% in employment expansion in 2019.

- iii. In Kosovo, there is a stable trend of small and medium enterprises that expand (between 58–65% for small and 72.2–78%), whereas there is negative trend in large enterprises expansion (decline from 97.8% to 64.4%). The employment expansion in SMEs has relatively positive trend (shifting from 6.6% to 13.5% for small and from 4.3% to 6% for medium enterprise) in the analyzed period, whereas at the large enterprises we have a positive difference of 2.5 percentage points. The share of SME in employment expansion by 2019 is 84.7% and of large enterprises only 15.3%.
- iv. In Montenegro, there is a negative trend that affects SMEs when it comes to % of SMEs that expanded (decline from 73.8% to 48.6% for small enterprises and decline from 83.6% to 43.2% for medium ones) in comparison to large ones, where a positive trend is evident. This reflects as well as in the employment expansion, where there is a decline of 4.4 pp for small and 8.6 pp for medium enterprises, but as well as in the large enterprises. Overall, in Montenegro, SMEs contribution in employment expansion is 55.4% which is still above large enterprises which contribute with 44.6%.
- v. In North Macedonia, there is a similar trend as in Montenegro. The percentage of SMEs that expanded has declined (from 66.4% to 40.7% for small and from 64.7% to 55.5% for medium enterprises), whereas there is a slightly positive trend to large enterprises. This affects the employment expansion as well which has declined by half at the SMEs during the period, whereas at the large enterprises again there is a slight positive trend (increase to 4.6% from 1.9%). But in general, in North Macedonia, SMEs still have the highest share in employment expansion (71.6%) in comparison to large enterprises (28.4%).
- vi. The similar trend follows the SMEs when analyzing the indicators that measures the percentage of firms that expand. There is decline of SMEs that expanded during the period 2009–2019 in Serbia, which is contrary to large enterprises which have seen an increase of % of enterprises that have expanded (increase from 34.6% to 47.4%). The negative trend follows the percentage of employment expansion in SME, where small enterprises have fallen behind by 2.8 pp and medium enterprises by more than half (6.7 pp), whereas large enterprises have positive trend (increase by 1.2 pp). Lastly, even though there is a decline in the total share of employment expansion from SMEs (decline from 65.5% to 61.3%), they still hold the majority of shares in the employment expansion in comparison to large enterprises which hold only 38.4% of employment expansion.

Table 4. Percengate of added jobs by type of enterprise.

Country	Year	% of Firms that Added Jobs by type of enterprise								
		Small			Medium			Large		
		Firms that Ex-panded	Ex-pan-sion	Share in Ex-pan-sion	Firms that Ex-pande d	Ex-pan-sion	Share in Ex-pan-sion	Firms that Ex-pande d	Ex-pan-sion	Share in Ex-pan-sion
Albania	2007	73.6%	25.3%	40.1%	77.4%	20.5%	44.4%	85.2%	7.9%	15.5%
	2013	41.4%	10.8%	36.0%	45.6%	10.8%	64.0%	0.0%	0.0%	0.0%
	2019	55.5%	17.1%	35.2%	78.4%	13.9%	48.6%	46.9%	3.8%	16.1%
BiH	2009	63.8%	9.4%	19.9%	70.3%	8.6%	48.1%	49.4%	3.3%	32.0%
	2013	43.2%	5.8%	17.5%	47.3%	5.6%	51.2%	54.8%	4.4%	31.3%
	2019	36.7%	5.8%	8.4%	62.7%	7.4%	30.0%	73.6%	9.6%	61.6%
Kosovo	2009	65.2%	6.6%	54.0%	78.0%	4.3%	27.8%	97.8%	3.4%	18.2%
	2013	51.7%	13.1%	26.3%	56.1%	12.7%	52.3%	86.3%	10.1%	21.4%
	2019	58.0%	13.5%	54.9%	72.2%	6.0%	29.8%	64.4%	5.9%	15.3%
Montenegro	2009	73.8%	11.8%	40.1%	83.6%	13.3%	33.1%	67.3%	15.5%	26.8%
	2013	39.1%	5.4%	48.8%	25.5%	3.3%	34.8%	62.7%	2.0%	16.4%
	2019	48.6%	7.4%	19.2%	43.2%	4.7%	36.2%	75.9%	6.6%	44.6%
North Macedonia	2009	66.4%	16.6%	35.7%	64.7%	14.2%	51.2%	36.1%	1.9%	13.1%
	2013	48.1%	9.6%	34.9%	57.1%	8.1%	42.6%	63.5%	15.0%	22.5%
	2019	40.7%	8.2%	32.7%	55.5%	7.7%	39.0%	43.7%	4.6%	28.4%
Serbia	2009	56.0%	10.1%	16.2%	66.9%	12.6%	49.4%	34.6%	3.4%	34.4%
	2013	36.8%	6.7%	24.5%	42.5%	4.2%	21.3%	54.8%	5.0%	54.2%
	2019	42.9%	7.3%	23.8%	57.1%	5.9%	37.6%	47.4%	4.6%	38.7%

Note: Employment Expansion measures the annual rate of expansion of the aggregate stock of permanent, full-time employment. It only takes firms that, on net, expanded their employment and computes the yearly growth rate in the aggregate stock of permanent, full-time employment.

Source: Enterprise Surveys www.enterprisesurveys.org The World Bank Group.

To get a better picture of the impact of each type of enterprises in employment in WB6, we must analyze the indicators that highlight the reduction of jobs by enterprises. Table 5 offers more insight in this regard.

The share of SMEs that contracted in Albania have been increased during the 11 years span, from 16.7% to 26% in 2019, whereas the employment contraction has been steadier at small enterprises and has risen from 3.2% to 5.8% in 2019. In terms of share in contraction SMEs have seen a decline (64.6% to 49.4), whereas large companies an increase by more than 15 pp.

In BiH, the percentage of SMEs that have contracted have been increased 36.5% in 2009 to 44 in 2019, the employment contraction as well, from 2.8% in 2009, to 6.3% in 2019, and the share in contraction from 25.3% in 2009, to 78.2% which represents a big increase.

The SMEs in Kosovo have experienced rise in percentage of contracted firms, from 13% in 2009, to 39.7% in 2019, as well as in employment contraction which in 2009 was only 2.6% and in 2019 was 9.7%. The share in contraction is the only indicator that has declined during the analyzed period, from 92.1% to 77.8%.

In Montenegro, SMEs as well have experienced increased in percentage of contracted firms. If in 2009, the percentage of contracted SMEs was only 23.6%, in 2019 the percentage rose to 54.5%. An increase has been seen as well as in the employment contraction, which was only 4.1% in 2009, to be increase up to 9.5%. An increase has been identified in the total share of contraction of SMEs which has risen to 85.8%.

North Macedonian SMEs have had more less the same trend. The percentage of contracted SMEs which was 31.2% in 2009, increased to 41.6% in 2019, the employment contraction which was 3.3% had risen to 5.2%, whereas the share in contraction has risen from 12.6% to 57.3%. Lastly, in Serbia, the SMEs have even higher values in jobs reduction, starting from percentage of firm contracted, which were 40.9% in 2009, and had risen to 49.2%. Employment contraction in the Serbian SMEs on the other hand have experienced decline, from 7.4% to 5.3%, whereas the share in contraction has been increased from 13.6% to 64.8%.

Table 5. Percentage of firms that reduced jobs by type of enterprise.

Country	Year	% of Firms that Reduced Jobs by type of enterprise								
		Small			Medium			Large		
		Firms that Contracted	Con- traction	Share in Con- traction	Firms that Contracted	Con- traction	Share in Con- traction	Firms that Contracted	Con- traction	Share in Con- traction
Albania	2007	7.2%	1.2%	19.1%	9.5%	2.0%	45.5%	14.8%	1.8%	35.4%
	2013	12.4%	2.1%	15.0%	31.4%	5.7%	73.0%	33.5%	1.5%	12.0%
	2019	10.8%	1.6%	9.1%	15.2%	4.2%	40.3%	51.9%	4.3%	50.6%
BiH	2009	12.6%	1.0%	4.6%	23.9%	1.8%	20.7%	45.7%	3.7%	74.6%
	2013	28.0%	4.9%	13.9%	38.9%	7.4%	62.6%	37.5%	3.6%	23.5%
	2019	23.0%	3.6%	24.9%	21.0%	2.7%	53.3%	14.8%	0.7%	21.7%
Kosovo	2009	3.9%	0.2%	10.6%	9.1%	2.4%	81.5%	2.2%	0.3%	7.9%
	2013	14.1%	2.5%	29.2%	15.8%	3.0%	70.8%	0.0%	0.0%	0.0%
	2019	17.7%	4.0%	28.6%	22.0%	5.7%	49.2%	17.1%	4.9%	22.2%
Montenegro	2009	7.2%	1.1%	19.8%	16.4%	3.0%	38.2%	32.7%	4.8%	42.0%
	2013	15.1%	3.5%	42.7%	17.3%	1.4%	20.0%	22.2%	3.5%	37.3%
	2019	12.9%	3.6%	14.8%	41.6%	5.9%	71.0%	20.8%	1.3%	14.2%
North Macedonia	2009	8.7%	0.9%	2.3%	22.5%	2.4%	10.3%	62.2%	10.7%	87.4%
	2013	15.2%	2.1%	24.2%	32.4%	3.9%	62.8%	24.7%	2.8%	13.0%
	2019	15.0%	1.8%	17.1%	26.6%	3.4%	40.2%	41.2%	2.9%	42.8%
Serbia	2009	15.5%	3.1%	3.1%	25.4%	4.3%	10.5%	57.9%	13.6%	86.4%
	2013	29.9%	6.4%	21.3%	46.9%	6.0%	28.0%	38.8%	5.2%	50.6%
	2019	26.7%	3.9%	38.5%	22.5%	1.4%	26.3%	30.4%	1.4%	35.2%

Note: Employment Contraction measures the annual rate of contraction of the aggregate stock of permanent, full-time employment. It only takes firms that, on net, reduced their employment and computes the yearly rate of contraction in the aggregate stock of permanent, full-time employment.

Source: Enterprise Surveys www.enterprisesurveys.org The World Bank Group.

Lastly, after analyzing the main indicators of employment (expansion and contraction of jobs) for all types of enterprises, and focusing on SMEs, as a last step it will be analyzed the net jobs which is a result of subtracting the two above mentioned indicators. Table 6 offers in depth data.

SMEs in Albania even though have experienced decline in net change value during the analyzed period, they have had positive net change of 25.3% in job creation in 2019 whereas larger enterprises have experienced negative net change of -0.5%. The share in job creation of SME was 103.1% whereas large enterprises have negative contribution of -3.2%. Bosnian SMEs have also experienced decline in net change values in job creation, which was 15.2% in 2009, and declined to 7% in 2019 whereas large enterprises have experienced increased from -0.3% to 8.9%. The share of net job creation by 2019 that belonged to SMEs was 28%.

A positive change can be seen at Kosovo SMEs in terms of increase of net jobs created. In 2009, SMEs had positive net change of 8.2% whereas in 2019 this increased to 9.7%. The same thing can be said about the share in the net job creation which in 2019 SMEs contributed by 94%.

On the other hand, Montenegrin SMEs, followed the same trend as SMEs in Albania and BiH. Their net change in job creation declined from 21% to 2.6% in the time span of 11 years, and their share in job creation have had sharp decline to only 2%. The North Macedonian SMEs had better result with net change 10.7% in 2019 and 82.3% share in the job creation within the country. In Serbia, by 2019 SMEs had net change value in job creation of 7.9% and share in all jobs created of 59.6%.

Table 6. Net jobs created by type of enterprises.

Country	Year	Net job creation by type of enterprises					
		Small		Medium		Large	
		Net change	Share	Net change	Share	Net change	Share
Albania	2007	24.1%	42.4%	18.4%	44.3%	6.2%	13.3%
	2013	8.7%	53.9%	5.1%	56.4%	-1.5%	-10.3%
	2019	15.5%	49.9%	9.8%	53.2%	-0.5%	-3.2%
BiH	2009	8.3%	33.6%	6.9%	72.6%	-0.3%	-6.1%
	2013	0.8%	34.2%	-1.7%	-214.7%	0.9%	80.6%
	2019	2.3%	4.1%	4.7%	23.9%	8.9%	72.0%
Kosovo	2009	6.3%	64.4%	1.9%	14.9%	3.1%	20.7%
	2013	10.6%	25.7%	9.7%	48.4%	10.1%	25.9%
	2019	9.4%	90.6%	0.3%	3.4%	1.0%	6.0%
Montenegro	2009	10.7%	45.0%	10.3%	31.9%	10.8%	23.1%
	2013	1.9%	67.0%	1.9%	78.8%	-1.4%	-45.8%
	2019	3.8%	26.9%	-1.2%	-24.9%	5.3%	98.0%
North Macedonia	2009	15.7%	213.7%	11.8%	269.7%	-8.8%	-383.4%
	2013	7.5%	40.0%	4.3%	33.0%	12.2%	27.0%
	2019	6.4%	44.2%	4.3%	38.0%	1.6%	17.7%
Serbia	2009	7.0%	18.4%	8.3%	53.5%	-10.3%	-172.0%
	2013	0.3%	11.6%	-1.8%	-99.3%	-0.1%	-12.3%
	2019	3.4%	16.5%	4.5%	43.1%	3.2%	40.4%

Source: Enterprise Surveys www.enterprisesurveys.org The World Bank Group.

3. Conclusion

There is consensus between academics and researchers that SMEs have enormous impact on country's economy. The analysis conducted in this study suggest that SMEs represent the majority of active enterprises that are operating in WB6 economies, where the least representation is in BiH (63.14%) and the highest in Albania (83.10%). Moreover, they are the highest contributor to the added value in the countries of the region, with the least in Serbia (59.20%) and the highest in Montenegro (77.00%). SMEs are the fastest growing type of enterprises in the region, and on average there are 32.8 SMEs per 1,000 habitants.

When it comes to employment, they represent the highest employer in the whole region, and the least that they employ is in BiH where they contribute up to 44.9% of total employment, and the highest is in Kosovo, where SMEs employ 78.3% of total employed people. And when it comes to job creation, SMEs

in WB6 experience positive net change in values of job creation in comparison to large enterprises and are bigger contributors in creation new jobs as they own higher percentage of the share of net jobs created.

The limitations of the paper are in the fact that the data used are generated solely from survey conducted with enterprises (a sample) and doesn't take into consideration the official data offered by different national and international institution. Moreover, the data takes into consideration only the aggregate stock of permanent, full-time employment, and doesn't include the part-time and seasonal employment.

The focus of future research shall focus in taking into consideration the limitation of the paper, and including econometric analysis of the indicators by measuring the real effect by using econometric models.

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TRANSFER PRICING RISKS ASSESSMENT WITHIN APPLICATION OF FACTOR ANALYSIS

Abstract

Implementation and adaptation of the risk assessment system defined by the OECD into national legislation will provide guidance for both the tax authorities and taxpayers. It will reduce the resource costs in the process transfer pricing risk identification and analysis as well as increase the effectiveness of transfer pricing inspections. The article presents the fundamentals of transfer pricing risk analysis and assessment, based on international practice. A technique for evaluation of the indicators significantly impacting the assessment of transfer pricing risks (profitability, operation structure) has been defined. To improve the process of arranging transfer pricing risk analysis, a proposed matrix of transfer pricing risk indicators can be used. For application consistency purposes, the main typical indicators of transfer pricing risks have been systematized into a matrix, in which the accounting and financial reporting indicators are given accordantly with each factor.

Keywords: Transfer Pricing; transfer pricing risks, factor analysis, risk indicator, profitability indicators.

OCENA RYZYKA CEN TRANSFEROWYCH Z ZASTOSOWANIEM ANALIZY CZYNNIKOWEJ

Streszczenie

Wdrożenie i adaptacja systemu oceny ryzyka określonego przez OECD do przepisów krajowych będzie stanowić źródło wytycznych zarówno dla organów podatkowych, jak i podatników. Pozwoli to na zmniejszenie kosztów zasobowych w procesie identyfikacji i analizy ryzyka cen transferowych, jak również zwiększy efektywność kontroli cen transferowych. W artykule przedstawiono podstawy analizy i oceny ryzyka cen transferowych, oparte na praktyce międzynarodowej. Zdefiniowano technikę oceny wskaźników istotnie wpływających na ocenę ryzyka cen transferowych (rentowność, struktura działalności). W celu usprawnienia procesu porządkowania analizy ryzyka cen transferowych można wykorzystać zaproponowaną macierz wskaźników ryzyka cen transferowych. Dla zachowania spójności aplikacji główne typowe wskaźniki ryzyka cen transferowych zostały usystematyzowane w macierzy, w której wskaźniki rachunkowości i sprawozdawczości finansowej są podane zgodnie z każdym czynnikiem.

Słowa kluczowe: Ceny transferowe; ryzyko cen transferowych, analiza czynnikowa, wskaźnik ryzyka, wskaźniki rentowności.



Introduction

The main purpose in the transfer pricing risk analysis process is the identification and risk factors testing in compliance with determined risk criteria. Ukrainian legislation set up the monitoring risk order in controlled transactions¹. This procedure specifies the general principles of the analysis procedure applied by tax authorities in the process of transfer pricing audit. However, such procedures do not provide detailed recommendations which risk factors should be analyzed and do not specify quantitative criteria that would indicate the risks existence. In addition, the order intended for tax authorities applying, but cannot be used by taxpayers in the process of internal transfer pricing risk audit.

The methodological basis for the research, presented in this article, was analysis of regulatory documents, experimental information as well as practical studies. The comparison and sampling methods were used during the research. Systematization and information modeling methods is the source for conclusion and generalizations formation together with the tabular methods for results visual presentation of the conducted research.

The Report of the General Forum by European Commission on Transfer Risk Management² mainly discloses the general approach to the assessment of transfer pricing risks. Also, the above-mentioned document contains general methods for handling with transfer pricing risks. We consider the global experience of the leading countries which apply transfer pricing risk assessment on the state level.

Table 1 shows the current practice of the world countries on transfer pricing risk assessment, namely the approaches used by the countries and, also the local regulatory documents.

¹ Ministry of finance of Ukraine, *Conducting monitoring of controlled operations order*, 2021, retrieved from: http://zakon2.rada.gov.ua/laws/show/z1055-15_ [accessed: 28.08.2022].

² *EU Joint Transfer Pricing Forum. Report on Transfer Pricing Risk Management*, Brussels 2013, retrieved from: https://www.drtp.ca/wp-content/uploads/2015/02/Report_Transfer_Pricing_Risk_Management.pdf [accessed: 22.08.2022].

Table 1. The world's leading countries approaches to transfer pricing risk assessment.

Country	Risk assessment approaches	Regulations
Australia	A rating system is used, which provides for the assignment of a certain risk indicator (rating) depending on the taxpayer's financial and non-financial criteria (profitability of controlled transactions, the share of transactions with offshore companies, tax burden, etc.). There are four ratings being used for risk assessment: white (no risk), green (low risk), yellow (medium) and red (high risk). When assigning a medium or high-risk grade, the tax authorities may decide to start tax audit ³ .	Practical Compliance Guideline 2019/1 - Transfer pricing issues related to inbound distribution arrangements (2019)
United States	As part of the preliminary transfer pricing risk assessment, tax authorities conduct a factor analysis, scrutinizing financial and non-financial indicators. Financial ones include the actual effective tax rate (tax burden) and financial ratios compared to market averages for a similar industry. Among the non-financial there are participation in corporate disputes, business restructuring, transaction with law-tax jurisdiction counterparties, history of cooperation with tax authorities and regulators (availability of disputes, tax rulings, APA, MAP, etc.), tax adjustments made and other information. In the presence of significant factors that indicate potential tax risks, as well as in the case of significant materiality of such risks, tax authorities may proceed to a tax audit based on the results of a preliminary risk assessment ⁴ .	Compliance Assurance Program; Transfer pricing examination process (2020)

³ Australian Taxation Office, *Practical Compliance Guideline*, 2019, retrieved from: <https://www.ato.gov.au/law/view/document?DocID=COG/PCG20191/NAT/ATO/00001> [accessed: 01.09.2022].

⁴ *Compliance Assurance Program; Transfer pricing examination process*, The Internal Revenue Service, 2020, retrieved from: https://www.irs.gov/irm/part4/irm_04-051-008 [accessed: 22.08.2022].

Country	Risk assessment approaches	Regulations
United Kingdom	<p>Transfer pricing risk assessment takes place in the format of a preliminary internal audit, which is conducted by specialists of the tax service. The assessment is based on the analysis of risk factors, some of which have quantitative, and the other - qualitative characteristics. Internal Recommendations for risk assessment have the following structure:</p> <ul style="list-style-type: none"> – Assessment of the necessary resources for conducting a risk audit (hereinafter - an audit); – Analysis of the amount of potential risk (tax at risk); – List of recommended risk factors for analysis (quantitative and qualitative); – Analysis procedure. <p>Further, the Recommendations provide a more detailed description of the procedures within each of the main risk factors:</p> <ul style="list-style-type: none"> – Effective tax rate; – Transfer pricing rules in the country of the taxpayer's counterparties; – Financial result of the taxpayer in the context of the overall result of the group; – Systemic losses; – Significant intra-group payments (services); – Substantial royalties; – Structuring an ownership of intangible assets; – Participation in business reorganization processes; – Others. <p>In addition, the Recommendations provide guidance on possible sources of information and action algorithms in case of uncertainty⁵.</p>	<p>HMRC's guidance.</p> <p>Transfer pricing, Internal manual INTM482000 (2022)</p>

⁵ HMRC's guidance, *Transfer pricing, Internal manual INTM482000*, 2022, retrieved from: <https://www.gov.uk/hmrc-internal-manuals/international-manual/intm482000> [accessed: 28.08.2022].

Country	Risk assessment approaches	Regulations
Netherlands	<p>The Horizontal Monitoring approach is applied (for all types of taxes, including for transfer pricing), which consists in the fact that tax authorities do not analyze risks in advance, but rely on the taxpayer, who in good faith prepares all forms of tax reporting and initiates the discussion of all specific business situations with the tax authorities immediately at the time of their occurrence or at the stage of planning of transactions. A tax inspector is assigned to each large or medium-sized taxpayer, who spends a significant part of the time at the entity and has access to all its accounting and financial data. Horizontal monitoring includes seven main steps:</p> <ul style="list-style-type: none"> – Cyclical analysis of the "risk profile" of the taxpayer; – Meeting with the taxpayer in case of profile change; – Scanning of general compliance (have the taxpayer fulfilled all required obligations prescribed by law); – Discussion and resolution of situations with potential tax risk; – Voluntary reconciliation of the amount of tax liability for a risky transactions; – Discussion and developing of changes in the taxpayer planning and reporting process to prevent similar situations in the future; – Change in the "risk profile" analysis procedure based on monitoring results⁶. 	<p>Horizontal monitoring guide (2016)</p> <p>Tax control framework (2011)</p>

⁶ *Guide. Horizontal monitoring. Tax service providers*, Tax and Customs Administration, 2016, retrieved from: <https://www.moore-drv.nl/wp-content/uploads/2020/11/guide-horizon-monitoring.pdf> [accessed: 22.08.2022]; *Establishing a tax control framework: the utility and necessity of it*, The Dutch Tax Administration, 2011, retrieved from: <https://www.compact.nl/en/articles/establishing-a-tax-control-framework-the-utility-and-necessity-of-it/> [accessed: 22.08.2022].

Country	Risk assessment approaches	Regulations
Canada	<p>The framework for the risk assessment is the Tax Control Framework (TCF) through the Tax risk Management (TRM) procedure.</p> <p>Factor analysis is used to assess risks. All taxpayers are divided into risk groups: high, medium and low. The main risk factors are:</p> <ul style="list-style-type: none"> – History of tax audit of previous years; – Effective tax rate; – Type of activity; – Aggressiveness of tax planning approaches; – Complexity of transactions; – Level of voluntary cooperation with tax authorities; – The level of the corporate management system; – The level of installation of internal controls process. <p>Analysis of information is divided into phases: automatic analysis (using Robotics (RPA) and data analytics); analysis of reports and information from open sources available to the tax inspector; analysis of information provided by the taxpayer upon request⁷.</p>	<p>Information Circular IC 00-1R6; (2017)</p>

Source: own generalization.

In addition, the OECD document is the basis for the majority world countries legislation regarding the assessment of transfer pricing risks, which defines the main factors that indicate the potential risks existence⁸.

Most of the risk factors have a numerical value and are based on the economic analysis of the taxpayers' financial statements.

⁷ Canada Revenue Agency, *Information Circular IC 00-1R6*, 2017, retrieved from: <https://www.canada.ca/en/revenue-agency/services/forms-publications/publications/ic00-1/ic00-1r6-voluntary-disclosures-program.html> [accessed: 01.09.2022].

⁸ *Public Consultation: Draft handbook on transfer pricing risks assessment*, OCED, 2013, retrieved from: <https://www.oecd.org/ctp/transfer-pricing/Draft-Handbook-TP-Risk-Assessment-ENG.pdf> [accessed: 28.08.2022].

Among the main signs of risks defined by the OECD are the following:

- Risk arising from recurring transactions,
- Risk arising from large or complex one-time transactions,
- Risk arising from taxpayer behavior in governance, tax strategies or ability to deliver compliance.

Next, we will focus on financial assessments and consider the features of the analysis for risk factors and indicators. The international practice is widely used risks factor analysis for transfer pricing risk assessment. Let's consider in more detail the indicators that are used to analyze the presence of possible risk factors:

Profitability

Comparison with indicators of previous periods (historical) involves comparison of profitability indicators in the analyzed period with corresponding indicators of the taxpayer in past periods. A significant decrease in indicators may indicate changes in pricing model.

First, profitability is compared with similar indicators of profitability in the industry or with potentially comparable companies. One of the key indicators of the high transfer pricing risk for a company will be financial results that are significantly different from those that are average in the market for this industry, or from those that are specific to certain comparable companies to this company. Such deviations in profits from industry average may indicate that prices or commercial terms in analyzed transactions potentially do not correspond with “arm’s length” principle, which means that the following cases should be the subject of a more detailed analysis of transfer pricing risks during the preparatory work for the tax audit. Obviously, there may be other reasons not related to transfer pricing if the financial results of the company differ from the industry average. Therefore, low profitability compared to market average can only be an indicator of high risk but cannot be a confirmation of the presence of tax risk.

Comparison of profitability with industry indicators is carried out by calculating the relevant financial ratios.

Risk assessment based on the profitability analysis of the taxpayer's activity is carried out by comparing the actual financial indicators of the taxpayer with historical, industry or market indicators, which is also called the benchmarking process.

As a rule, the following are used as indicators of profitability:

- Gross margin and cost mark up,
- Operating margin and full cost mark up,
- Return on assets or capital.

Profitability indicators of potentially comparable companies can be found in various commercial databases (Amadeus, Orbis etc.). Also, tax authorities have

access to historical data from previous audits, which can also be useful for assessing the presence of tax risk and used for internal purposes. In addition, when the taxpayer submits the transfer pricing report to the tax authority, it may include an analysis of potentially comparable companies, as well as the financial data of such companies, and therefore may be a starting point for analyzing the risks of the taxpayer and comparing the taxpayer with industry indicators or indicators of comparable companies.

Comparison with market or industry indicators

In this case, to determine the potential presence of transfer pricing risk, the actual profitability indicators of the taxpayer in the controlled transactions are compared with the corresponding average indicators of the companies in the industry in which the taxpayer operates. In the course of the analysis, statistical approaches are often used, within the framework of which the median or quartile indicators of a sample of comparable companies in the relevant industry are analyzed.

If the actual profitability indicator deviates significantly from the average market indicators, this indicates potential transfer pricing risk and a more detailed analysis of the situation is required.

Comparison with other group's members indicators

The profitability of the taxpayer can also be compared with the indicators of other companies of the group for the corresponding period. So, for example, if the operating margin of the Ukrainian distributor of the international group of the company is significantly lower than the similar indicator of the distributor of the same group, for example, in Hungary (where the rate of corporate profit is lower) or lower than the average profitability of all distributors of the group in other countries, this fact may indicate the presence of transfer pricing and requires a more detailed analysis.

Comparison with previous period indicators

Such an analysis involves comparing the profitability indicators of the taxpayer in the audited period with the corresponding indicators of the taxpayer in the previous reporting periods. A significant decrease in indicators may indicate, among other things, changes in pricing approached or other factors of transfer pricing risks

Systematic loss making or low profit activity

The fact that the taxpayer's profitability deviates from the market average is not an absolute indicator of the presence of transfer pricing risk. The reason for this may be economic factors or certain business decisions of the taxpayer (launching of a new product etc). However, regular losses (negative profitability) or minimal profits may indicate systematic tax avoidance. In many coun-

tries, systemic multiple year losses are the main reason to initiate transfer pricing audit.

Opposite dynamic to market trends

The main evidence that taxpayer's financial are within the market range is their significant and positive correlation with economic (inflation, GDP etc.) and market indicators (growth rates, profitability etc.). However, a negative or absent correlation may indicate the "artificiality" of financial indicators and the presence of transfer pricing risks.

An indicator that the company's transactions have a risk to be non-compliant with "arm's length" principle is information on the distribution of profits between the countries in which the group of companies operates, namely, when a significant part of the profits is distributed to low-tax jurisdictions that have limited business functions.

It should be noted that taxpayer's indicators comparison with industry indicators or with the corresponding profitability indicators of another company does not mean that such a company is comparable to market companies. Usually, commercial databases don't have precisely segmented information in the context of each specific company, but rather operate with the general financial indicators of the company, that is, general indicators for the entire company's business. Because the necessary information cannot be obtained from open sources, advance transfer pricing risk assessment cannot be performed. Thus, for analysis taxpayer and tax authorities can use the following interpretation of the market benchmarking results (table 2).

Table 2. Interpretation of market benchmarking results (example).

Indicator	Value
Profitability of the taxpayer	2%
Mid-market profitability	2.5%
Group average profitability	3%
Average taxpayer profitability for the previous 5 years	2.5%
Quantity of unprofitable years from the last 5 years	2
Correlation with market dynamics over the previous 5 years	-65%
Risk factor	existing

Source: own calculation for demo example.

The risk indicator is assigned the value "existing" when the taxpayer's actual rate deviates by more than 10% in three from five factors.

The structure of the transactions

Another risk factor is significant deviations in the structure of business transactions from the market structure. In this case, it means situations when most of the income or expenses, assets or liabilities are formed in the results of controlled transactions. Such a fact may indicate the deliberate structuring of intra-group transactions in such a way as to obtain certain benefits in taxation. Relevant risk indicators are presented in the form of financial ratios, the economic analysis of which can be an instrument of identifying risky transactions.

Transactions with low-tax jurisdictions counterparties (factor F1)

If a significant part of the income and/or expenses are formed in transactions with counterparties that are registered in low-tax jurisdictions or have favorable tax regimes, this probably indicates the presence of transfer pricing risks. When analyzing such indicators, critical values of the share of such incomes and/or expenses from the total volume of incomes and expenses are established. If the actual value of the coefficient exceeds the critical one, this is a direct indication of the risk of deviation of the terms of transactions from market conditions.

Intra-group services (Factor F2)

Intra-group services such as marketing, IT, management, HR, and others are typical for most international groups of companies. As part of such services, the parent or management company usually outsources its global management costs to the group's subsidiaries in different countries. The main issue from the transfer pricing perspective centers is the economic feasibility of purchasing such services by the subsidiaries. Often, international companies use such services as profits allocations mechanism from local markets. An indicator of the transfer pricing risk can be a significant amount (percentage) of the purchase of such services compared to the total amount of the taxpayer's operating expenses.

Royalties and license fees (Factor F3)

In the form of royalties, Ukrainian taxpayers are often paid to related parties for using of trademarks, patents, and know-how. The significant rates for such payments and their significant share in the taxpayer's expenses are a direct indication of the existence of aggressive tax structuring process. In addition, the presence of significant local marketing costs for the promotion and development of such intangible assets is indicator that the royalty recipient probably does not meet the DEMPE concept and cannot claim for substantial reward for its functions⁹.

⁹ *The DEMPE functional analysis, Royalty range, 2018*, retrieved from: <https://www.royaltyrange.com/home/blog/the-dempe-functional-analysis> [accessed: 22.08.2022].

Significant transactions with intangibles (Factor F4)

Often transfers of intangible assets (IA) are carried out in the process of tax restructuring, which aims to optimize the tax burden of the group. The analysis of financial ratios provides a basic understanding of whether there have been significant transactions involving the acquisition/sale of IA and what tax effect they had or will have on tax return of the local taxpayer.

Significant intra-group debt (Factor F5)

Intragroup loans are one of the most common tax structuring tools. International groups of companies often use debt instruments instead of equity injections to distribute profits within the group through interest payments. The analysis of balance sheet ratios of debt, assets and interest expenses is the simplest instrument for factor analysis of transfer pricing risks.

Business restructuring transactions (Factor F6)

Often, the main goal of business restructuring is obtaining long-term benefits in taxation. As a result of such transactions, the structure of the payer's assets and liabilities changes significantly. For example, the decision to transfer all tangible assets to the management (holding) company with subsequent payments of lease payments for using of such assets on behalf management company will lead to significant changes in assets structure of the balance sheet of local taxpayer. Such analysis makes it possible to identify possible restructuring transactions and analyze the possible transfer pricing risks.

Centralization of operational functions (Factor F7)

Often, groups of companies centralize certain functions, such as procurement, management, logistics, etc., to improve operational efficiency. The downside of such processes is a negative tax effect for local companies when such functions are allocated just "contractually", while local companies are forced to pay a significant fee for their use. The economic analysis of the activity allows to compare the effect of such centralization with payments for using centralized functions.

Economic analysis indicators (financial ratios) act as indicators of the existing risk within the framework of the above-mentioned risk factors. The operation principle is the following: if the indicator value exceeds the set critical value, the risk is evident, and this operation requires a detailed analysis. The indicators matrix can be presented as follows (table 3):

Table 3. Indicators matrix.

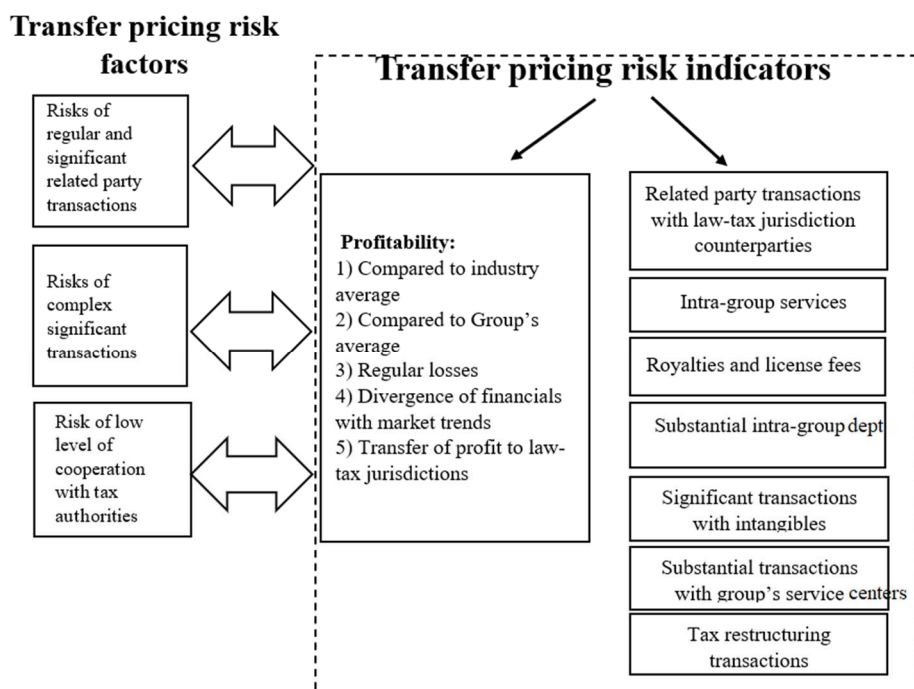
Indicator/Factor	F1	F2	F3	F4	F5	F6	F7
Controlled transactions / Income (Costs)	>30%	-	>10%	-	-	-	-
Controlled transactions / Operating costs	-	>15%	>15%	-	-	-	-
Controlled transactions / Marketing expenses	-	-	>100 %	-	-	-	-
$\frac{\text{Intangible assets (n)} - \text{Intangible assets (n-1)}}{\text{Assets (n)} + \text{Assets (n-1)}} / 2$	-	-	-	>10%	-	-	-
$\frac{\text{Debt (n)} + \text{Debt (n-1)}}{\text{Capital (n)} + \text{Capital (n-1)}}$	-	-	-	-	>1,5	-	-
$\frac{\text{Assets (K) (n)}}{\text{Assets (K) (n-1)} - 1}$	-	-	-	-	-	>50%	-
$\frac{\text{Income (n)}}{\text{Income (n-1)}} / \frac{\text{OC (n)}}{\text{OC (n-1)} - 1}$	-	-	-	-	-	-	>10%

Source: own calculation based on advisory opinions and tax experts experience.

Where: K – asset article number;
n – year number.
OC – operating costs.

Summarizing the above, it can be stated that it is appropriate to classify risk indicators into two groups: by the result of operations and by the structure of operations. Fig. 1 illustrates the classification of transfer pricing risk indicators.

Fig. 1. Classification of transfer pricing risk indicators.



Source: Own study.

Conclusions

The taxpayer analysis of financial reporting is practical mechanism for identifying transfer pricing risks both for tax authorities and for taxpayers during internal audit procedures. As an organizational model for the indicators "profitability" analysis it is proposed to use a tabular interpretation, that is, market benchmarking process.

The analysis conceptual basis is testing process of possible risk factors about working risk hypotheses, which have a mathematical expression in the form of indicators risk (financial ratios).

Such hypotheses are formulated in form of assumptions that if a certain ratio is greater than a critical value. For example, capital debt exceeds by 1.5 times, then such a debt was probably formed in non-market conditions and would not have been issued by an independent financial institution and, accordingly, interest on such debt can significantly understate profits.

It is presented a matrix with corresponding numerical values for the quantitative assessment of risks and indicators comparison with limit values. The proposed matrix formation mechanism allows to operate with a large array of diverse information and to extract the required data.

The analysis results are not a direct indication of the risk existence, but it could provide information about what operations of which taxpayer have primary importance in terms of necessity to analyze them for the transfer pricing risk.

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SUSTAINABILITY ACCOUNTING – THE BASIS FOR IMPLEMENTATION OF INTEGRATED REPORTING WITHIN MICRO AND SMALL ENTERPRISES

Abstract

The purpose of this research is to analyze the perception of small and micro enterprise managers in the Republic of Moldova regarding the need for sustainability accounting and reporting. Based on the synthesis of the literature, it has been hypothesized that to recognize and acknowledge the social and environmental efforts of micro and small enterprises, it is necessary to review the accounting models and policies thereof, with the introduction of social and environmental cost and benefit assessment methods as well as sustainable managerial accounting implementation tools.

In order to achieve the objective, a sample of 88 micro and small enterprises, operating in the accommodation and food service sector in the Republic of Moldova, was subject to a survey questionnaire. The data accumulated were processed using statistical methods of data grouping into distribution series, as well as data analysis, synthesis, abstraction, comparison. The research carried out has revealed reluctance on the part of the managers, regarding the need for accounting and disaggregated reporting of economic, social and environmental costs, but also shown the relevance of sustainable performance reporting in integrated reporting systems. In this study, the Author finds that managers, including chief accountants, are not familiar with the EMA Methodology, Sustainability Accounting, yet are willing to gain knowledge in this field, if provided with thematic trainings, webinars, publication of case studies, assimilation of good practices. By applying the questionnaire method, it has been found that about 3/4 of micro and small 'accommodation and food service sector' enterprise managers would opt to implement a sustainability accounting system, if the state guaranteed certain tax incentives or other measures to mitigate the high costs of sustainable practices, in order to become more competitive in relation to large companies.

Keywords: sustainability accounting, integrated reporting, micro and small enterprises, accommodation and food service activities.



RACHUNKOWOŚĆ ZRÓWNOWAŻONEGO ROZWOJU – PODSTAWY WDRAŻANIA ZINTEGROWANEJ SPRAWOZDAWCZOŚCI W MIKRO I MAŁYCH PRZEDSIĘBIORSTWACH

Streszczenie

Celem niniejszego badania jest analiza percepcji menedżerów małych i mikro przedsiębiorstw w Republice Mołdawii na temat potrzeby prowadzenia rachunkowości i sprawozdawczości w zakresie zrównoważonego rozwoju. Na podstawie syntezy literatury postawiono hipotezę, że w celu rozpoznania i potwierdzenia społecznych i środowiskowych wysiłków mikro i małych przedsiębiorstw, konieczny jest przegląd ich modeli rachunkowości i polityki, wraz z wprowadzeniem metod oceny społecznych i środowiskowych kosztów, a także korzyści czy narzędzi wdrażania zrównoważonej rachunkowości zarządczej.

Aby zrealizować cel, poddano badaniu ankietowemu 88 mikro i małych przedsiębiorstw, działających w sektorze zakwaterowania i usług gastronomicznych w Republice Mołdawii. Zgromadzone dane zostały przetworzone z wykorzystaniem metod statystycznych grupowania danych w szeregi rozdzielcze, a także analizy danych, syntezy, abstrakcji, porównania. Przeprowadzone badanie ujawniło niechęć menedżerów, względem potrzeby rozliczania i zdezagregowanego raportowania kosztów ekonomicznych, społecznych i środowiskowych, ale także wykazało zasadność raportowania zrównoważonych wyników w systemach zintegrowanej sprawozdawczości. W niniejszym badaniu Autorka stwierdza, że menedżerowie, w tym główni księgowi, nie posiadają wiedzy na temat metodologii EMA, Sustainability Accounting, jednak są skłonni zdobyć wiedzę w tym zakresie, jeśli zapewni się im szkolenia tematyczne czy webinaria.

Słowa kluczowe: rachunkowość zrównoważonego rozwoju, sprawozdawczość zintegrowana, mikro i małe przedsiębiorstwa, działalność usługowa w zakresie zakwaterowania i gastronomii.

Introduction

The last three decades are marked by the reconceptualization of economic activity by adopting environmental, social and corporate governance (ESG) considerations as a basic feature of the sustainability-based business model. The financial-accounting field is no exception. In the science and practice of accounting, the integration of the principles of sustainability is explained by the desideratum that "Accounting, as a tool for representing the life of the enterprise, must give a true and fair view of reality"¹, so it must assess and provide information on the extent to which an entity supports certain social objectives

¹ Voinea M.M., *Contabilitatea – o reprezentare normative a realului economic?*, "Management Intercultural" 2013, Vol. XV, Nt.2(28), available online: https://seaopen-research.eu/Journals/articles/MI_28_14.pdf [accessed: 22.06.2022].

or assumes responsibility for the management of environmental impact, as well as ethics and transparency issues. All these activities are expressed in indicators systematized under the umbrella of the ESG – an approach to assess the extent to which an entity conducts business by pursuing non-financial objectives that go beyond an entity's role in maximizing the value created for its owners.

Sustainability aspects in accounting are also associated by researchers with the concept of "capital", better said with its forms. The capital created is considered one of the central assets and the most important indicator of the well-being of a country. However, in order to achieve sustainable growth, it is taken into account that investing in a certain form of capital does not erode the quality of other forms of capital: natural, human, financial, social or intellectual².

When developing value-added growth strategies, it must assess the positive (capital creation) or negative (capital erosion) impact. The matrix developed by Radej aptitude for developing the strategy of growth with added value of an economic entity³.

The need to transform accounting and the way of reporting is explained by the Positive Accounting Theory, which aims to explain and predict accounting phenomena, the emergence and explanation of new accounting models adopted by entities, being considered as "... one of a base of management's choices regarding accounting policies to maximizes their own best interests"⁴ and which "... seeks to explain a process, which uses the ability, understanding and knowledge of accounting and the use of accounting policies that are most suitable for dealing with certain conditions in the future"⁵.

The traditional accounting paradigm does not capture to the necessary extent the consequences of the activity of enterprises on the environment or in social terms. Financial accounting, by virtue of its regulation, cannot fully ensure the measurement, assessment and reflection of aspects of social responsibility,

² ACCA. *Intellectual property*, available online: <https://www.cfainstitute.org/en/research/esg-investing> available online: https://www.accaglobal.com/caribbean/en/technical-activities/technical-resources-search/2014/march/intellectual-property_msm_moved.html, [accessed: 22.04.2022].

³ Radej B., *The Four Capital Model, Matrix and Accounts*, "Occasional Paper", No. 7, 2007, available online: <http://www.ier.si/files/Occasional%20paper%202007.pdf>; [accessed: 16.06.2022].

⁴ Nasution S., Putri R., Muda I., Ginting S., *Positive Accounting Theory: Theoretical Perspectives on Accounting Policy Choice*, [in:] *Proceedings of the 1st Unimed International Conference on Economics Education and Social Science* (UNICEES 2018), p 1132, available online: <https://www.scitepress.org/Papers/2018/95060/95060.pdf> [accessed: 12.04.2022].

⁵ Ibidem, p. 1129.

environmental impact, ethical aspects, etc. "There is thus a need for a new holistic accounting which captures corporate environmental impacts"⁶.

Among the multiple meanings and concepts given by theorists and practitioners of sustainable accounting, in the literature we encounter several associated concepts: Sustainable Accounting; Environmental Managerial Accounting (EMA); Social and Environmental Accounting (SEA); Sustainable Reporting; GRI (Global Reporting Initiative) Standards, ESG Analysis, etc.

Large companies, corporations that have adopted sustainable business models and practices, operate with sustainable asset categories, turn to sources of capital (sustainable finance), which has as financial instruments: green bonds, social bonds, sustainable bonds, Sustainability-linked Bonds or SDG-linked Bonds. According to the Institute of International Finance estimates, the issuance of sustainable financing instruments reached in 2021 the figure of USD 1.644 billion, of which the largest share belongs to green bonds (37.74%) and Sustainability-linked loan (32%). The issuance of sustainable financing instruments in 2021 compared to 2020 doubled (2.15 times), estimating by 2025 an average annual issue of about 1.25 trillion USD. These estimates are based on the following⁷:

1. Application for funding of projects with environmental benefits (sustainable infrastructure projects (green); renewable energy).
2. Ensuring that ESG financing products benefit both financiers and investors.
3. Develop the regulatory basis on the functioning of the market for sustainable financing instruments.
4. The market build-up of sustainable instruments as a result of the proactive reaction of banks (financiers) to the previous conditions (1–3).

The development of the market for sustainable instruments, in turn, will influence the structure of the investment portfolios, in which they will undoubtedly find themselves. Respectively, it will be necessary to account and evaluate their performance. Accounting for the harnessing of natural resources, the costs of sustainable products, of processes and activities is also an area of concern to both practitioners and researchers. The cost of natural resources is not included in national accounts until they are included in the economic system. Be-

⁶ Jones M., *Accounting for the environment: Towards a theoretical perspective for environmental accounting and reporting*, "Accounting Forum" 2010, Volume 34, Issue 2, pp. 123-138, available online: <https://doi.org/10.1016/j.accfor.2010.03.001> [accessed: 02.06.2022].

⁷ Delteil B., Chandhok S., Deffarges J., Nguyen A., *Can Vietnamese banks seize the green-bond opportunity?*, 2022, available online: <https://www.mckinsey.com/industries/financial-services/our-insights/can-vietnamese-banks-seize-the-green-bond>, [accessed: 20.05.2022].

tween the accounts of Environmental-Economic Accounting and the national accounts is a relationship of interdependence⁸. Within this system of record keeping, land, water, mineral and energy resources, soil, underwater space are considered assets. Their services – ecosystem services – are accounted for as natural inputs.

1. The way of providing environmental information and environmental performance is important

An important interest for our research, but also for the decision-making is the way of presenting the information regarding ESG's actions. The way in which information is provided influences the way information is perceived, respectively, influences decision making.

Sustainability accounting is based on theoretical foundations, which explain its role as an information system for adopting managerial decisions or informing other categories of interested parties. „Sustainability accounting is the contribution of accounting to sustainable development”⁹.

Accounting information plays an important role in the managerial process¹⁰. The relationship "accounting information – decision-making process" is explained through the prism of the "cause-effect" link, by the quality and degree of detail of which depends the managerial efficiency. In the stated context, the agent theory explains the accounting reasoning for the record keeping and reporting of social and environmental costs as well as the benefits of the sustainability accounting model¹¹. It also explains the need for companies to combine decisions to create value for interested parties with decisions of responsible (ethical) behavior.

Agent theory, in terms of the concept of information asymmetry, explains the perception of information and the impact on decision-making by different categories of interested parties. Thus, consumers, society, as interested parties, through the sustainable reporting system, have access to information on the ethical, social responsibility and environmental attitude of the company.

The motivation for accepting a sustainable accounting and reporting model is the serious environmental problems faced by society at the moment, social

⁸ United Nations. *System of Environmental-Economic Accounting 2012 Central Framework*, New York 2014, available online: https://unstats.un.org/unsd/envaccounting/seearev/seea_cf_final_en.pdf [accessed: 22.06.2022].

⁹ Ozili Peterson K., *Sustainability accounting*, 2021. Available at SSRN: <https://ssrn.com/abstract=3803384> or <http://dx.doi.org/10.2139/ssrn.3803384> [accessed: 12.04.2022].

¹⁰ Bhimani A., Horngren C. T., Datar S. M., Foster G., *Management and cost accounting*, 6th Edition, Prentice Hall, Hoboken 2015.

¹¹ Baboukardos D., Beddewela E., Soobaroyen T., *Editorial*, "Sustainability Accounting, Management and Policy Journal" 2021, Vol. 12, No. 4, pp. 719–73.

inequity, scandals related to fraudulent reporting, etc., and managers and accountants, having primary access to information, can act promptly to prevent or mitigate these threats.

In-depth studies on the given problem have been carried out on the example of environmental accounting.

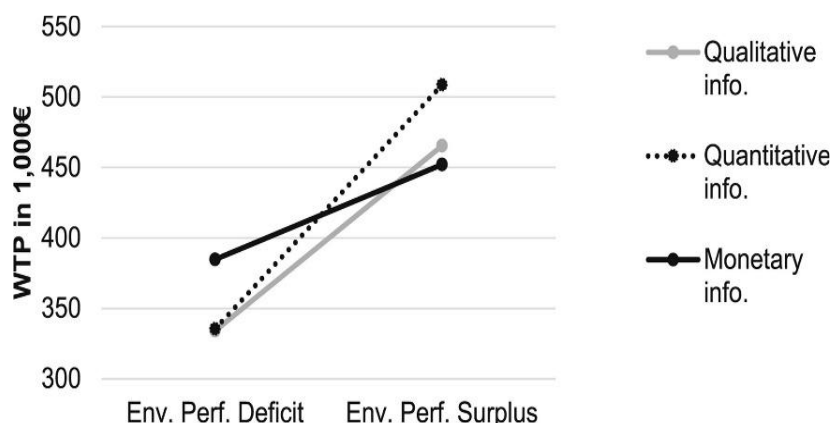
Most opinions converge in support of the expression of information provided by environmental management accounting¹² in physical and monetary units. Thanh Nguyet Phan, Kevin Baird & Sophia Su (2017), conducting a study on a sample of 208 companies in Australia, found that preference is given to managerial accounting with the expression of indicators in physical units, an insignificant weight preferring to keep environmental managerial accounting in monetary units. the same study the authors deduced that there is a close link between the level of EMA use and environmental performance. These findings confirm once again its usefulness to be applied in practice, including by small business enterprises. A similar conclusion was reached by Philipp Hummel and Jacob Hörisch, who, researching the way of presenting information on environmental problems, consider it relevant to systematize them into 3 forms of expression¹³:

- a) qualitative;
- b) quantitative physical;
- c) monetary quantitative.

¹² Phan T. N., Baird K., Su S., *The use and effectiveness of environmental management accounting*, "Australasian Journal of Environmental Management" 2017, 24:4; T. N., Baird K., Su S., *The use and effectiveness of environmental management accounting*, "Australasian Journal of Environmental Management" 2017, 24:4, pp. 355-374.; Hummel P., Hörischb J., *It's not what you say, but how you say it*, "Journal of Cleaner Production" 2020, volume 268, available online: <https://doi.org/10.1016/j.jclepro.2020.122247>, <https://www.sciencedirect.com/science/article/abs/pii/S0959652620322940> [accessed: 02.06.2022].

¹³ Hummel, op.cit.

Figure 1. Mean willingness to pay (WTP) differentiated by type of providing environmental information and environmental performance.



Source: Hummel P., Hörischb J., *It's not what you say, but how you say it*, "Journal of Cleaner Production" 2020, volume 268, available online: <https://doi.org/10.1016/j.jclepro.2020.122247>
<https://www.sciencedirect.com/science/article/abs/pii/S0959652620322940>
 [accessed: 02.06.2022].

The results of this study show that the information communicated must be understandable to all categories of stakeholders, so it must be expressed not only in monetary units (in value), but also in non-monetary expression. One argument in support of this is that ESG factors are measurable, but difficult to assess in units of value, for example, staff turnover. facilitates the perception of information, hence the quality of the decision-making process. From the graphic representation (see figure 1) of the correlation between the form of expression of information with reference to sustainable activities and sustainable performance, it follows that the surplus of information expressed in monetary units erodes the performance (effect) of information on the company's actions for the benefit of the environment on the consumer's decision to pay for it. information provided to the consumer in indicators expressed in physical units has a greater favorable impact on the decision to buy non-polluting products, services. So, the way of presenting information on the ESG aspects of a company "as you say it" influences the way of communication with interested parties (decision-makers), as well as the performance of a company.

The concept of "Corporate Social Responsibility" management also explains the need for sustainability accounting and reporting. In the report "Edelman Trust Barometer 2022"¹⁴, conducted by questioning over 36 thousand respondents

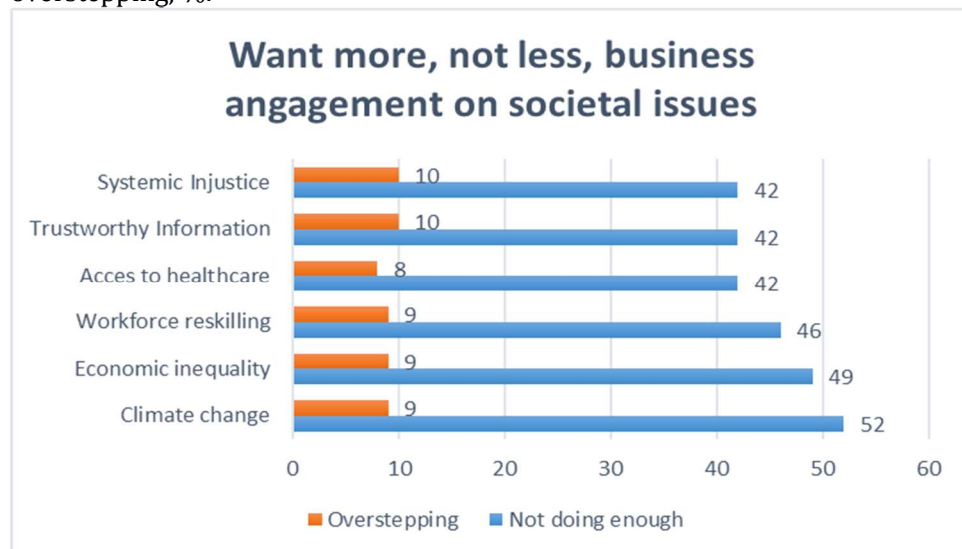
¹⁴ *Edelman Trust Barometer, 2022*, available online: https://www.edelman.com/sites/g/files/aatuss191/files/2022-01/2022%20Edelman%20Trust%20Barometer%20FINAL_Jan25.pdf, p. 33, [accessed: 20.05.2022].

from 27 countries to the statement "All stakeholders hold business accountable" (p. 26), about 60 percent of respondents said that they act based on their beliefs and values when:

- a) buy or support certain brands (58%);
- b) choose a job (60%);
- c) invest (64%).

Institutional investors in the G7 countries are more concerned about ESG issues, with 80 per cent of those surveyed in the Edelman Trust Barometer 2022 report stating that they are subjecting the ESG to the same scrutiny as operational and financial performance. In connection with this, the ESG analysis has become an important part of the investment process¹⁵. This research brought to the fore another important aspect, namely: better information can reduce social division, so low-income respondents said they have greater confidence if they are better informed than high-income respondents who are not informed¹⁶. So, informing stakeholders is important, including on ESG issues.

Figure 2. On addressing each societal issue, business is... not doing enough vs. overstepping, %.



Source: *Edelman Trust Barometer, 2022*, available online: https://www.edelman.com/sites/g/files/aatuss191/files/2022-01/2022%20Edelman%20Trust%20Barometer%20FINAL_Jan25.pdf, p. 33, [accessed: 20.05.2022].

¹⁵ *CFA Institute, ESG Investing and Analysis*, available online: <https://www.cfainstitute.org/en/research/esg-investing>, [accessed: 12.04.2022].

¹⁶ *Edelman...* op. cit.

Summarizing the findings set out above, we can consider that the research was carried out largely at the corporate level. Environmental policies, along with social responsibility and ethical constraints, are adopted by large companies, creating an image of corporate responsibility. Aware of their responsibility in achieving Sustainable Development Goals 2030 (SDG 2030), large companies, groups of companies develop and publish sustainability or integrated reports¹⁷.

The introduction of sustainability accounting and integrated reporting is actively developing internationally, but there are several *problems*:

- The low level of awareness by managers and chief accountants of small business entities about the benefits of sustainability accounting and the role of reporting ESG indicators for business competitiveness and performance.
- Lack of a clear theoretical and methodological framework for sustainability accounting and reporting.
- Difficulties in measuring the sustainable use of the environment and attributing environmental costs to the unit cost of a product or service.
- Creating reserves for environmental or social risks (COVID-19 pandemic). According to some analysts, the formation of such reserves creates prerequisites for the manipulation of profit indicators.
- Damage to human health due to noise pollution is difficult to assess and report. such as construction, air transport, rail, etc. are responsible for noise pollution. According to estimates by the European Environment Agency, environmental noise affects human health and the well-being of around 20% of Europe's population to a different extent. exposure to noise can produce various negative health effects, from discomfort and sleep disorders to cases of ischemic heart disease and premature deaths¹⁸.
- The opportunity costs arising from the missed possibility of rehabilitating the biosphere are also impossible to estimate and account for. For example, trees could be planted on asphalt-covered land allocated to car parks, which would help purify the air from gases and harmful substances emitted into the atmosphere by an industrial enterprise located in the vicinity. Missed opportunities, in this case, are extremely difficult to estimate.

The problems mentioned make it difficult to account for patrimonial elements, costs and generate sustainable reporting.

¹⁷ *Sustainability Reporting*, available online: <https://www.sustainability-reports.com/annual-reports/> [accessed: 22.06.2022].

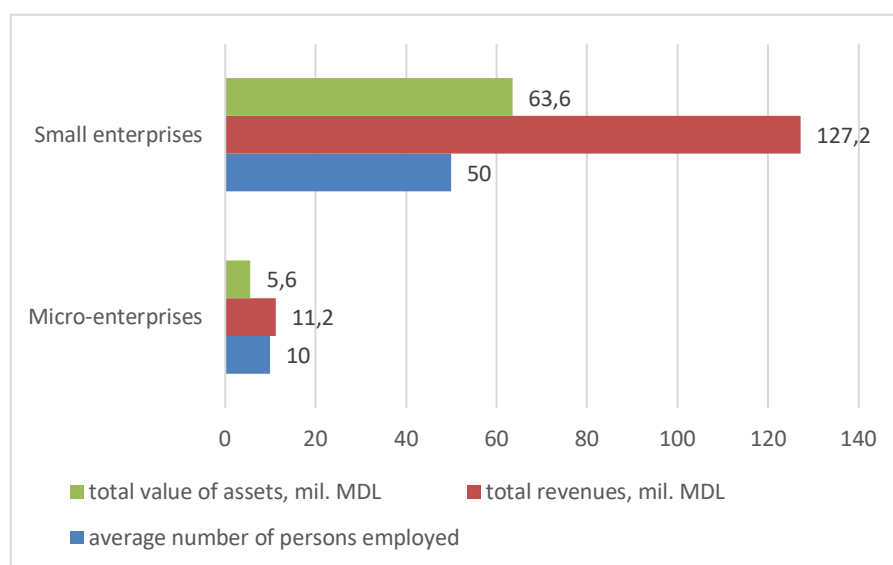
¹⁸ Peris E., *What are the main conclusions of the second report on environmental noise published by the EEA?*, 2021, available online: <https://www.eea.europa.eu/articles/noise-pollution-is-a-major>, [accessed: 28.05.2022].

2. Premises for the implementation of sustainable accounting and reporting in SMEs: empirical research on entities from the Republic of Moldova

However, more and more small business enterprises are adopting sustainable business models, focusing on the responsible consumer. This justifies the need to research the management's perception of the benefits and necessity of sustainability accounting and reporting within small business entities.

Considering the contribution of small businesses to economic development, as well as the growing tendency to adopt sustainable practices in this sector, we have set ourselves the objective of researching the given problem on a sample of small business entities in the Republic of Moldova with public food services or touristic reception activity. to the data of the National Bureau of Statistics of the Republic of Moldova, the share of SMEs is about 98.6% in the total number of enterprises. They secure jobs for about 317 thousand people, which is 60% of the total number of employees. According to the Law on accounting and financial reporting no. 287 of 15.12.2017, the entity must meet at least 2 of the 3 criteria to be assigned to a particular category (Figure 3). At the same time, the defining criterion is the number of employees.

Figure 3. Criteria for delimitation of entities into micro and small enterprises, according to the Law on accounting and financial reporting of the Republic of Moldova.



Source: elaborated by the author based on art. 4 of Law No. 287/2017.

In order to carry out the research, questionnaires were applied to the managers (general managers and managers of the departments with financial-accounting function) of 88 small and micro-enterprises, which carry out activity in the field

of "Accommodation activities and public food services", such as touristic and agro-touristic pensions, restaurants, other categories of entities with food services (Table 1).

Table 1. Number and structure of enterprises by size and type of activity – participants in the questionnaires.

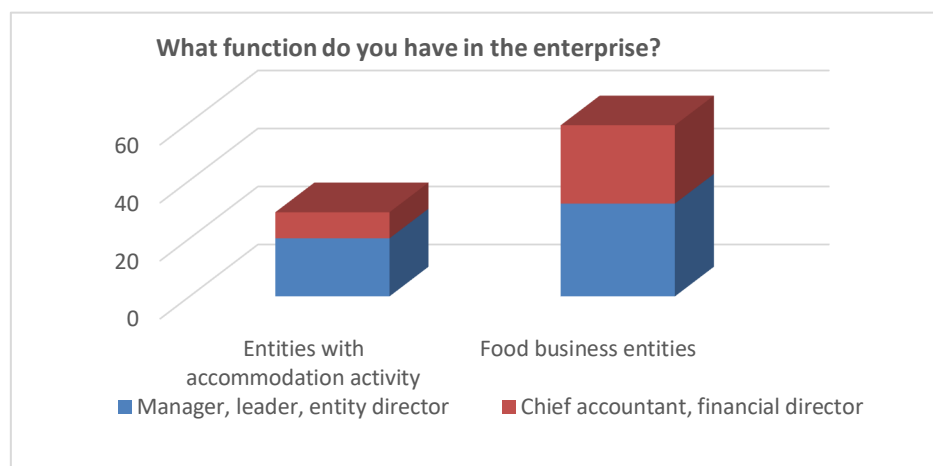
Indicators	Entities with accommodation activity		Food business entities		Total
	units	shares in total, %	units	shares in total, %	
Total enterprises	29	32,95	59	37,05	88
including: micro-enterprises	22	31,90	47	68,10	69
small enterprises	7	36,80	12	63,20	19

Source: developed by the author based on the collected data.

The research was attended by 29 entities with accommodation activity, mostly represented by touristic pensions (micro-enterprises) and 59 entities with food services.

Therefore, 59% of the respondents hold the position of manager, leader, entity director, respectively 41% - head of the financial-accounting department (chief accountant, financial director) etc. The small number of chief accountants is explained by the fact that 78.4 percent are micro-enterprises, which outsource accounting services, respectively the responsibility and initiative for the adoption of sustainability accounting policies and practices lies with the manager.

Figure 4. The structure of the investigated entities according to the position of the interviewed persons.



Source: elaborated by the author.

The answers to the questions raised in the questionnaire were systematized in Table 2.

Table 2. Respondents' responses to sustainability accounting and integrated/sustainable reporting.

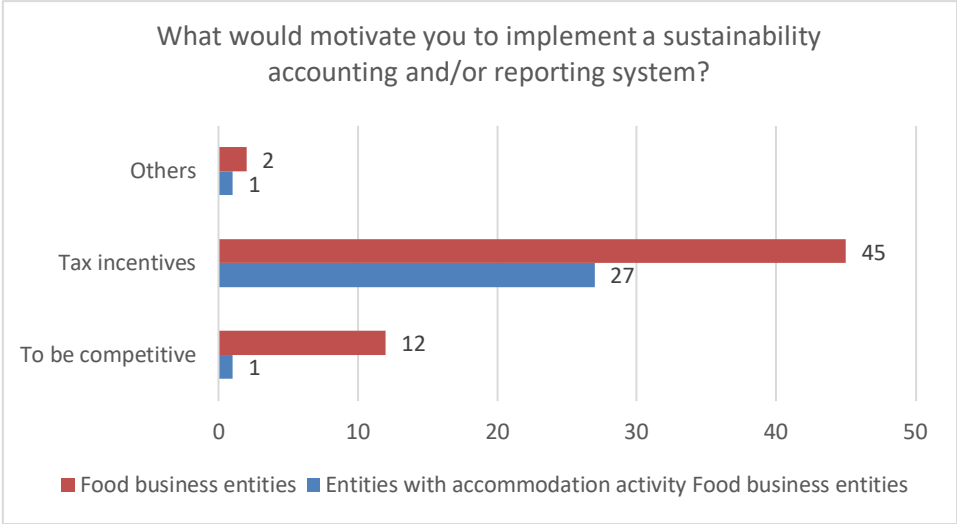
Questions raised	Variants of answer		
	Yes	No	I don't know
<i>Does the entity, which you represent, implement environmentally responsible, social and ethical practices?</i>			
Entities with accommodation activity	19	4	6
Food business entities	31	10	18
<i>Do you consider sustainability accounting relevant as an integral part of your company's accounting practices?</i>			
Entities with accommodation activity	7	20	2
Food business entities	10	40	9
<i>Would you like social and environmental costs to be clearly delineated and appropriately attributed by products, activities, centers of responsibility, etc.?</i>			
Entities with accommodation activity	7	18	4
Food business entities	12	32	15
<i>Do you consider it necessary to report indicators that reflect non-financial performance: environmental, social indicators, etc.?</i>			
Entities with accommodation activity	10	10	9
Food business entities	5	38	16
<i>If your response to the previous query was YES, then should the reporting of sustainable performance be mandatory as a component of an integrated reporting system?</i>			
Entities with accommodation activity	5	5	0
Food business entities	2	3	0

Source: elaborated by the author.

The analysis of the data collected with the help of the questionnaire and systematized allowed us to find a weak spread of responsible practices in the entities with public food services. Also, there is a reluctance on the part of the management of the interviewed enterprises regarding the implementation of sustainability accounting and/or reporting, although environmentally friendly activities are widely spread in the field of tourism, responsibly capitalizing on natural resources and promoting multiple projects of a social character (development of rural businesses, support of female entrepreneurship, etc.). This fact

is explained by the poor information on these issues in the Republic of Moldova, a greater attention being paid to the development of sustainable businesses, without realizing the necessity and benefits of accounting and reporting the performance of sustainable activities. Interviewing some respondents, it was found that they were not aware of the United Nations EMA Methodology initiative or sustainable accounting, stating that they would comply with some decisions of the Ministry of Finance or regulations.

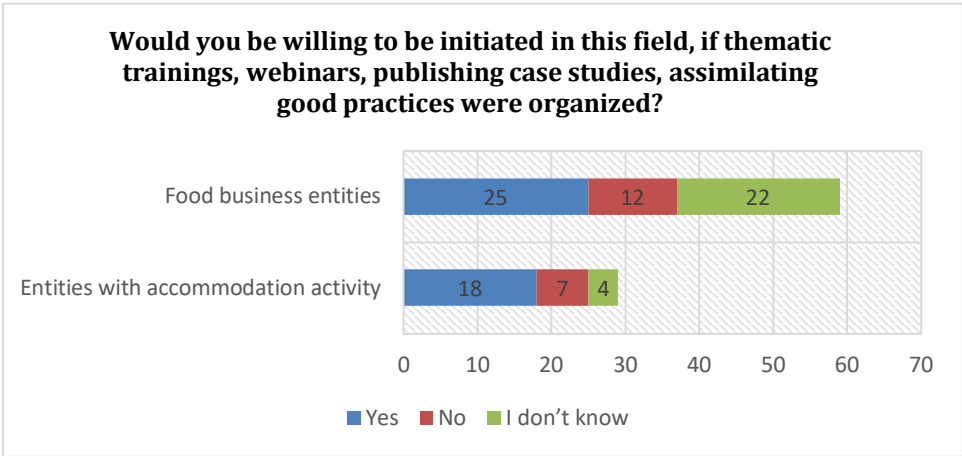
Figure 5. Respondents' responses regarding the motivation for the implementation of the sustainability accounting and reporting system.



Source: elaborated by the author.

Tax incentives would be the main factor, which would contribute to the wider implementation of sustainability accounting and reporting (see Figure 5), as well as competitiveness, which is an important factor for food businesses.

Figure 6. Respondents' responses on availability and interest in sustainability accounting and reporting training.



Source: elaborated by the author.

The data systematized in Figure 6 shows that only half of those surveyed declared themselves open to know the field of sustainability accounting and reporting. Perspectives for solving this problem opens EMA – a concept introduced by the Environmental Protection Agency in the United States of America three decades ago, being subsequently adopted by the United Nations – Nations Division for Sustainable Development (UNSD). The implementation of EMA in enterprises with food services and touristic reception activities will allow a better management of environmental problems. Since the year 2006, Christine Jasch considered EMA as the next step in the evolution of management accounting¹⁹.

This requires efforts and advocacy at the level of business associations, professional associations, as well as institutional initiatives for EMA practices to be widely implemented. “These kinds of collaborations can lead to better support for environmental management and EMA, thus instituting the required educational programs and training to enhance employees’ awareness of EMA practices that include the role of technology”²⁰. Thus, the Government could intervene on the one hand with regulations, on the other hand – professional associations

¹⁹ Jasch C., *Environmental management accounting (EMA) as the next step in the evolution of management accounting*, “Journal of Cleaner Production”, 2006 Issue 14, available online: <https://doi.org/10.1016/j.jclepro.2005.08.006>, [accessed: 07.06.2022].

²⁰ Nasser A., Tehmina K., Kend M., *Environmental management accounting in the Middle East and North Africa region: Significance of resource slack and coercive isomorphism*, “Journal of Cleaner Production” 2020, Volume 267, available online: <https://doi.org/10.1016/j.jclepro.2020.121870>, [accessed: 12.04.2022].

in the field of accounting, researchers, experts, consultants, educational institutions – with studies, trainings, research.

Conclusions

The company's growing concerns about ESG issues make sustainability accounting an important component of the business strategy and decisional process. Sustainability accounting and reporting increase the quality of the decision-making process.

Sustainability accounting is a relatively new concept for the Republic of Moldova. This conclusion was inferred both from the analysis of the perception of the management of small entities in the field of accommodation activities and food services by applying the questionnaire, as well as from the analysis of institutional documents (standards, regulatory framework), noting the lack of initiatives or documents of sectoral or national policies that address this field of accounting.

Recommendations

Institutional efforts and initiatives are needed to implement and promote extensively the principles of sustainability accounting and the need to communicate information on the efforts of companies in supporting the achievement of SDG 2030. This information is necessary to make consumers, but also tenderers, responsible for ESG issues.

Establishing measures of motivation and stimulation on the part of the state to increase the interest in the implementation of sustainability accounting and sustainable performance reporting.

The implementation of EMA in enterprises with tourist, reception activities and food services will allow a better management of environmental problems.

The elaboration of the theoretical and methodological framework of integrated reporting and the formation of professional competences for its practical application both by large entities and groups, as well as by the entities of the small business.

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**NON-FINANCIAL REPORTING IN THE SMALL BUSINESS
SECTOR AND THE BENEFITS THEREOF
IN THE STAKEHOLDER DECISION-MAKING PROCESS:
THE PRACTICE OF THE REPUBLIC OF MOLDOVA**

Abstract

Identification of the current problems related to non-financial reporting, which lower the quality of the information used by the decision-makers as well as limit the development of practical recommendations for decision implementation by small enterprises in the Republic of Moldova.

The study was carried out using a complex of general and special scientific methods: a systemic approach, analysis, synthesis, modeling, study of normative acts and specialized literature, comparison, abstraction, survey and content analysis. The systemic approach consists in the rational combination of selected scientific directions, aimed at research methodology formulation, i.e., at identifying the problem, formulating the hypothesis and substantiating it.

The improvement measures and new evidence on the relevance of non-financial reporting and the need for the implementation thereof by small businesses in the country, as well as the stakeholder decision-making benefits, contribution to the visibility of the reporting entity, the development of client portfolio, community relationship strengthening, and capital increase have been taken into consideration.

The article and the conclusions presented by the Author are based on the research into the practical effectiveness of the information presented in non-financial reports. The relevance of the research lies in the modeling of non-financial reporting at a local level, arguing for its implementation by small businesses, demonstrating the need for qualitative information in stakeholder decision-making and the contribution of that information to the high evaluation of reporting entity performance.

Keywords: sustainability report, corporate reporting, interested parties, information quality, economic performance of an entity.



RAPORTOWANIE NIEFINANSOWE W SEKTORZE MAŁYCH PRZEDSIĘBIORSTW I KORZYŚCI Z NIEGO PŁYNĄCE W PROCESIE PODEJMOWANIA DECYZJI PRZEZ INTERESARIUSZY: PRAKTYKA REPUBLIKI MOŁDAWSKIEJ

Streszczenie

Celem niniejszej pracy jest identyfikacja aktualnych problemów związanych z raportowaniem niefinansowym, obniżających jakość informacji wykorzystywanych przez decydentów, jak również ograniczających opracowanie praktycznych rekomendacji dla realizacji decyzji przez małe przedsiębiorstwa w Republice Mołdawii. Badanie zostało przeprowadzone z wykorzystaniem pakietu ogólnych i specjalistycznych metod naukowych: podejścia systemowego, analizy, syntezy, modelowania, badania aktów normatywnych i literatury fachowej, porównania, abstrakcji, ankiety i analizy treści. Podejście systemowe polega na racjonalnym połączeniu wybranych kierunków naukowych, zmierzających do sformułowania metodologii badań, tj. do zidentyfikowania problemu, sformułowania hipotezy i jej uzasadnienia.

W artykule uwzględniono działania usprawniające oraz nowe dowody na istotność raportowania niefinansowego i potrzebę jego wdrożenia przez małe przedsiębiorstwa w kraju, a także korzyści decyzyjne dla interesariuszy, wkład w widoczność jednostki raportującej, rozwój portfela klientów, wzmocnienie relacji ze społecznością oraz wzrost kapitału. Artykuł i przedstawione przez Autorkę wnioski oparte są na badaniach praktycznej skuteczności informacji prezentowanych w raportach niefinansowych. Istotność badań polega na modelowaniu raportowania niefinansowego na poziomie lokalnym, argumentując za jego wdrażaniem przez małe przedsiębiorstwa, wykazując zapotrzebowanie na informacje jakościowe w podejmowaniu decyzji przez interesariuszy oraz wkład tych informacji w wysoką ocenę wyników jednostki raportującej.

Słowa kluczowe: sprawozdanie zrównoważonego rozwoju, sprawozdawczość korporacyjna, strony zainteresowane, jakość informacji, wyniki ekonomiczne jednostki.

Introduction

Nowadays, small and medium-sized enterprises (SMEs) are the predominant form of enterprise, significantly influence global economic stability, constituting about 99% of all firms, constituting about 70% of employments¹, actively par-

¹ Organisation for Economic Cooperation and Development, „*ENHANCING THE CONTRIBUTIONS OF SMEs IN A GLOBAL AND DIGITALISED ECONOMY*”, Meeting of the OECD Council at Ministerial Level, Paris, 7-8 June 2017, p. 8, available online: <https://www.oecd.org/industry/C-MIN-2017-8-EN.pdf> [accessed: 06 June 2022].

ticipate in the gross domestic product (GDP) of the private sector at the national level. The European Union (EU) employs 93 million people and is at the heart of economic development. They represent 99% of all businesses in the EU. The European Commission supports SMEs by facilitating their trade and encouraging them to participate in the development of standards for products and services in the field of activity of each².

A trustworthy partner of SMEs sector entities in the Republic of Moldova is the Organization for the Development of the Small and Medium Enterprise Sector (ODIMM), which offers them the opportunity to develop, become sustainable and strong, both domestically and abroad, by accessing support programs for the business community³.

In line with the National Bureau of Statistics (NBS) in 2020, the number of SMEs in the Republic of Moldova constituted 57.2 thousand enterprises and represents about 98.6% of the total number of reporting enterprises. The average number of wage earners in SMEs in the reference period constituted 316.8 thousand, accounting for 60.1% of the total average number of employees of enterprises in the country. Turnover of SMEs in this period totaled 7.5 thousand euros or 39.3% of total sales revenue in the national economy. In 2020, 4.8 thousand SMEs or 8.5% of all SMEs were active in the manufacturing industry, the majority of which were active in trade, accounting for 20.5 thousand enterprises or 35.7% of all SMEs in the country⁴.

Taking a look at the share of SMEs in the total number of enterprises at global, European, and local levels, and their turnover, we determine that their importance is significant in all areas of economic development, but in the author's opinion, one of the basic elements of business success is access to information for stakeholders. Therefore, a prosperous development of an entity cannot occur without an effective process of financial and even non-financial reporting of its performance.

SME businesses differ widely in terms of size, sector, business model, and other criteria that do not allow them to be treated universally. In this sense, the in-

² European Commission, *Entrepreneurship and Small and Medium-Sized Enterprises (SMEs)*, available online: https://ec.europa.eu/growth/smes_en [accessed: 29 June 2022].

³ Organization for the Development of the Small and Medium Enterprises Sector/ Organizația pentru Dezvoltarea Sectorului Întreprinderilor Mici și Mijlocii, „*The Strategic Development Directorates of the Organization for Development of Small and Medium Enterprises from Moldova (ODIMM)*”, p.10, available online: <https://www.odimm.md/ro/>
https://www.odimm.md/files/odimm/Directii_strategice_DIMM.pdf [accessed 17 May 2022].

⁴ National Bureau of Statistics (BNS), *The activity of small and medium enterprises in the Republic of Moldova in 2020*, available online: <https://statistica.gov.md/news/view.php?l=ro&idc=168&id=7066> [accessed: 16 June 2022].

formation and its quality presented in non-financial reports on the performance of the entity, in addition to the information presented in the financial statements, in the author's opinion brings significant benefits for internal users in management decision making, for economic decision making by a wide range of users, who may not require reports to meet their particular information needs, for business partners, and other stakeholders. In addition, the non-financial reports also present the results of the work of persons in positions of responsibility and their accountability for the resources entrusted to them.

In achieving the purpose proposed in the given article, the author analyzes the normative framework, theoretical opinions and other researches regarding non-financial reporting. The author tests the existing practices and proposes the implementation of the non-financial reporting framework by the entities of the small business sector at the local level in order to present the qualitative information necessary to the interested parties regarding the economic, social and environmental performance in order to improve visibility, attract new sources of capital and maintaining business continuity and competitiveness.

Within the application of general and special scientific methods, the author planned an explanatory study to verify previous research; applied a survey among local small businesses on the need to implement non-financial reporting; studied the types and content of non-financial information reported locally by public interest entities in the banking and non-banking financial sector (banks and insurance companies) presented on their official website, as small businesses are currently not reporting. The applied comparative method served a good support in identifying the differences between the regulations and non-financial reporting practices at the national level compared to the European ones and at the global level. In order to have a good understanding of the role of non-financial reporting and its influence on the evaluation of the entity's performance, we collected and analyzed information from theoretical, methodological sources, information from the National Bureau of Statistics, scientific databases. In the process of scientific abstraction, we assessed the impact of International Financial Reporting Standards, including the set for small businesses, on improving the quality of information provided to interested parties, since at the local level there are no separate standards for non-financial reporting.

The issue of non-financial reporting is constantly being investigated and discussed at the country level and currently remains current. At the same time, an important problem in non-financial reporting at the local level is the lack of a clear legal regulation regarding its types, content and format; indicators regarding the performance of the reporting entity, etc., which would satisfy the information needs for managerial decision-making by both internal users and other external stakeholders. Entities from the small business sector in the Republic of Moldova are currently not reporting non-financial information and do not benefit from these opportunities, which lead to a decrease in their performance

evaluation and a lack of information for interested parties. At the same time, they also do not use the International Financial Reporting Standards (IFRS), which have already gained popularity among users of financial statements, being currently the most used financial reporting standards⁵. However, investors and many other interested users are increasingly demanding new methods of presenting both financial and non-financial information to assess the possibility of obtaining income from investments in companies and to show how the activity of large companies influences the public interest, the environment and society⁶. According to the regulatory framework at the national level, reporting according to IFRS is applied only by entities of public interest, which within the framework of non-financial reporting publish only the management report and the non-financial statement.

1. Literature Review Non-Financial Reporting

The relevance of information presented in non-financial reports by modern enterprises is widely studied in the works of domestic and foreign researchers. The topicality of the study in the given field is caused by the fact that the non-financial reporting of entities with different business models and the intensification of the globalization process are nowadays becoming an important source of information for making managerial decisions by different groups and stakeholders⁷.

In order to satisfy the information requirements regarding the performance of the entity, other authors propose the implementation of integrated reporting, which is clearly regulated worldwide. The need for its implementation came with the emergence of integrated thinking and reporting of organizations, as they include financial and non-financial capital in their annual disclosures⁸. However, investors and other financial actors to this day remain the key stake-

⁵ *International Financial Reporting Standards (IFRS)*, Ministry of Finance of the Republic of Moldova. Legislative acts, available online: <https://mf.gov.md/ro/lex> [accessed: 6 July 2022].

⁶ Lazari L., Grigori L., *Compatibility of the accounting curriculum with the requirements of the accounting profession in the labor market and its environment: realities, needs and expectations*, „International scientific conference on accounting, ISCA 2021”, 10 Edition, April 1-2, 2021, Collection of articles, ASEM, Chişinău 2021, p. 58, available online: https://caae.ase.md/files/caae/conf/conf_aprilie_2021.pdf [accessed: 6 July 2022].

⁷ Petryk O., Kurylo O., Karmaza O., Makhinchuk V., Martyniuk O., *Non-financial reporting of companies and the necessity of its confirmation by auditors in Ukraine*, „Problems and Perspectives in Management”, Volume 16, 2018, Issue #2, p. 385, available online: <https://www.businessperspectives.org/index.php/journals/problems-and-perspectives-in-management/issue-282/non-financial-reporting-of-companies-and-the-necessity-of-its-confirmation-by-auditors-in-ukraine> [accessed: 17 May 2022].

⁸ Camilleri M. A., *Theoretical insights on integrated reporting: The inclusion of non-financial capitals in corporate disclosures*, „Corporate Communications” 2018, Vol. 23, No. 4, p. 568, available online: <https://www.emerald.com/insight/content/doi/10.1108/CCIJ-01-2018-0016/full/html> [accessed: 12 May 2022].

holders of many entities and are still the main stakeholders using corporate reports that reveal integrated information, which are becoming more efficient with the help of practitioners who are constantly refining them to improve their organizational management and strengthen its legitimacy vis-à-vis institutions and other stakeholders in society as it incorporates ESG information into IR. But, according to me, integrated reports cannot be limited only to given users, they can become an effective communication model in raising people's awareness of environmental protection and according to other authors in this sense they must be widely studied for media coverage and discussions on social networks⁹.

The benefits and transparency of reported non-financial information are demonstrated by researchers from the West University of Timisoara, Romania, who noted the high degree of transparency of information regarding the development of the entity and concluded that reporting to the environment, employees and the community are welcome because responsible companies invest in the trust of their stakeholders while improving their economic performance. Their findings that credibility and transparency are those impressions that stakeholders are left with after studying non-financial reports are also relevant to date¹⁰.

Other authors from Romania evaluate different factors that affect social responsibility through the lens of sustainability and social responsibility reports published by entities on their official pages. The authors highlighted the fact that there are guidelines issued to provide reporting entities with a framework for the preparation of these reports, but in Romania there is still no specific template for the preparation of social responsibility and sustainability reports and in this sense, I support the proposals that socially responsible practices come to the center of attention of responsible people, being one of the basic values of society¹¹.

In the given context, to address the issues discussed, another GRI certified author, in her publication on non-financial Global Reporting Initiative (GRI), comes up with practical proposals for the preparation of the given report, studies the importance of non-financial reporting and presents concrete results

⁹ Yasir Yasir, Nurjanah Nurjanah, Nova Yohana, Samsir Samsir, *Corporate Communications in Contribution to Addressing Environmental Problems: Case Study of an Indonesian State Oil Company*, „Information & Media” 2022, vol. 93, pp. 154, available online: <https://www.journals.vu.lt/IM/article/view/24302/24599> [accessed: 16 June 2022].

¹⁰ Milu N. D., Hategan C. D., *Transparency Degree of Non-financial Information Disclosure*, „Annals of the University Ovidius Constanta”, XIX(2), 2019, p. 808, available online: https://www.researchgate.net/publication/340828977_Transparency_Degree_of_Non-financial_Information_Disclosure [accessed: 16 June 2022].

¹¹ Dumitrascu M., Feleagă L., *Mission, vision and organizational values, catalysts of social responsibility*, „Financial Audit”, XVII, Nr. 1(153)/2019, București, Romania, p. 71, available online: http://revista.cafr.ro/temp/Articol_9607.pdf [accessed: 29 June 2022].

from the company in which she works. According to her opinion, non-financial reporting creates a link between financial and non-financial performance and there is the possibility of a long-term prioritization of business plans with benefits for the company as well as in the external sphere. I agree that sustainability reporting has brought benefits in the case of the TMK Artrom Group entity, which are significant for the reason that sustainability performance has been monitored and evaluated, areas that require certain improvements have been identified and it has been possible to optimize certain processes, costs were reduced and productivity increased in certain areas, it was possible to compare the company's performance with other entities in the same activity sector, the company's visibility in the community increased as a result of the social responsibility initiatives presented in the published information and others improvements¹².

Other authors conducted an empirical study, in which they investigated the relationship between corporate social responsibility (CSR) and profit in Romanian entities. Therefore, they concluded that companies that implement CSR activities to a greater extent are more profitable from an economic point of view, because reporting the given results, investors are increasingly interested in the social and environmental impact of these entities and as a result, so they want to invest in those that have a good CSR performance¹³.

I have also included in the investigation the studies presented in the Commission Report of D. Bolton, because it demonstrates that, not looking at the fact that SMEs differ greatly in terms of size, the sector in which they operate, the business model, they also have a specific, which defines their essence and highlighted some features, which demonstrates that information on the performance of entities in the SME sector is needed by stakeholders. These are: the small sales market, which does not allow the company to have a significant impact on prices; legal independence, i.e. the owner himself controls his business; personalized management, in other words, the owner personally participates in the management of his business¹⁴. D. Bolton is one of the first researchers to draw attention to the role of SMEs in the modern competitive

¹² Popescu L. C., Legal Advisor & Sustainability Manager TMK ARTROM Grup, „GRI Non-Financial Reporting – Challenge and Solutions”, November 28, 2019, available online: https://govnet.ro/uploads/files/28_GOVNET%20Sustainability%20and%20Non%20Financial%20Reporting%202019%20%20TMK%20Group%20Laura%20Popescu.pdf [accessed: 11 June 2022].

¹³ Hategan C. D., Sirghi N., Curea-Pitorac R. I., Hategan V. P., *Doing Well or Doing Good: The Relationship between Corporate Social Responsibility and Profit in Romanian Companies*, „Sustainability” 2018, 10(4), 1041, p. 4, available online: <https://www.mdpi.com/2071-1050/10/4/1041> [accessed: 14 May 2022].

¹⁴ Bolton J. E., *Small firms: Report of the Committee of Inquiry on Small Firms*, Her Majesty's Stationery Office, London 1971, p. 51, available online: [https://www.scirp.org/\(S\(i43dyn45teexjx455qlt3d2q\)\)/reference/ReferencesPapers.aspx?ReferenceID=1798789](https://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferencesPapers.aspx?ReferenceID=1798789) [accessed: 29 June 2022].

economy and these findings are still relevant today as only non-financial reporting will highlight entities in the SME sector and make a significant contribution to their development and capitalization.

SMEs' support policies and their impact assessment on business from different perspectives have been addressed by Moldovan scholars since the 1990s. Several local research papers are devoted to the problems of small and medium-sized business development at the local level: Doga-Marzac M. studied how to finance the small and medium sector and proposed effective measures on access to financing at the national and external level¹⁵; V. Turcanu, a notorious name among the research in the field in the country and I. Golocialova - development of accounting methodology and preparation of financial statements, improvement of the reporting framework¹⁶; Birca A., Lazari L. - treated the degree of transparency of an entity through the prism of reported information¹⁷.

Also, a great contribution to the development of accounting, financial and non-financial reporting in the country is made by the well-known researcher L. Grigoroï, who has several valuable local kinds of research in the given field. In his joint paper with one of the Romanian professors¹⁸ he demonstrated that financial statements are insufficient to provide an overview of an entity's activity. I support the need to implement non-financial reporting by entities in the country, because in order to present an all-encompassing picture of an entity, reporting will have to include both traditional financial statements and some non-financial information, which include data on sustainable development, the impact of the entity's activity on the environment, social responsibility, because the need for integrated reporting, worldwide, is directly influenced by both the future relevance of financial reporting, which has recently been raising new requirements, and the requirements regulatory bodies and information users.

¹⁵ Doga-Mîrzac M., *The functioning mechanism of microfinance organizations oriented towards the business environment*, „Studia Universitatis Moldaviae”, Exact and Economic Sciences Series, nr. 2 (122), 2019, p. 49, available online: https://ibn.idsi.md/vizualizare_articol/83313 [accessed: 12 May 2022].

¹⁶ Țurcanu V., Golocialova I., *The development of the concept of accounting in the Republic of Moldova*, [In:] *Proceedings of the International Scientific Conference: Accounting and auditing in the globalized conditions: realities and prospects for development*, ed. 7., 19-20 apr. 2018, Chișinău, S. n., 2018, p. 27, available online: <http://irek.ase.md:80/xmlui/handle/1234567890/63> [accessed: 16 June 2022].

¹⁷ Bîrcă A., Lazări L., *Transparency of information – important management instrument in ensuring performance and development of corporate governance*, „Akademos”, 1(60), 2021, p. 72, available online: https://ibn.idsi.md/ro/vizualizare_articol/132011 [accessed: 12 May 2022].

¹⁸ Grigoroï L., Dumitru M., *Integrated reporting - perspective for entities from the Republic of Moldova*, „Conferinței The accounting and auditing paradigm, national realities, regional and international trends”, Chișinău, Moldova, 5 edition 2016, p. 12, available online: https://ibn.idsi.md/ro/collection_view/1434 [accessed: 14 May 2022].

Multilaterally, through the analysis of statistical data; legal framework and policy documents; main international ratings, together with interviewing different groups of local entrepreneurs, SMEs support policies were analyzed by scholars E. Aculai, A. Stratan, and A. Novac. The results of the research showed, that the majority of entrepreneurs, over the years, indicated the deterioration of business environment conditions, although the opinions of certain groups of entrepreneurs differ significantly¹⁹. In this regard, the government's economic policy does not sufficiently take into account the opinion of entrepreneurs regarding the general changes in the business climate, as well as the specific problems faced by different groups of local entrepreneurs.

2. The theoretical and regulatory framework

It is known that non-financial reporting presents a way for the entity to publish information on the social, economic and environmental impacts and performances related to its current activities, but also to assume responsibility towards stakeholders. Non-financial information appeared to respond to the need for more complete information, revealing the entity's performance indicators.

The concept of non-financial information is increasingly used and could be understood as everything that is not financial, but there is no definition generally understood or generally accepted of it, and in practice it is used in many different ways. From the perspective of shareholders and investors, non-financial information is relevant and important in making investment decisions²⁰.

For others, they are synonymous with sustainability or social, environmental and governance information, and for some, they are associated and equated with key performance indicators (KPIs). KPIs are generally quantitative measures that allow the quality, sustainability and variability of the company's cash flows and earnings to be assessed. Finally, non-financial information can be defined as all information disclosed by the company that cannot be explained with a currency and that includes information on environmental, social and governance reporting, corporate social responsibility (CSR)²¹. Non-

¹⁹ Aculai E., Stratan A., Novac A., *Sme support policy in the Republic of Moldova and assessment of its impact on business development*, „Economy and Sociology”, no. 2/2018, p. 24, available online: <https://economy-sociology.ince.md/?edmc=1078> [accessed: 12 May 2022].

²⁰ Tarquinio L., Posadas S.C., *Exploring the term “non-financial information: an academics’ view*, „Meditari Accountancy Research. Department of Economic Studies”, Vol. 28, No. 5, 2020, D’Annunzio University of Chieti–Pescara, Pescara, Italy, p. 735, available online: <https://www.emerald.com/insight/content/doi/10.1108/MEDAR-11-2019-0602/full/pdf?title=exploring-the-term-non-financial-information-an-academics-view> <https://www.emerald.com/insight/2049-372X.htm> [accessed: 6 July 2022].

²¹ Socoliuc M., Cosmulese C. G., Ciubotariu M. S., Mihaila S., Arion I. D., Grosu V., *Sustainability Reporting as a Mixture of CSR and Sustainable Development. A Model for Micro-Enterprises within the Romanian Forestry Sector*, „Sustainability”, 2020, Vol.12(2), 603, p. 24, available online: <https://www.mdpi.com/2071-1050/12/2/603>

financial reporting rules are almost unregulated. CSR reports are produced using a variety of principles and guidelines, which limits comparisons between companies, transparency and progress assessment. The problems of reporting non-financial information are constantly discussed in the specialized literature and by companies that prepare CSR reports, both sides are convinced of the benefits of their standardization²².

Firms in a service and trade industry that are perceived to have little negative impact on the environment and society are shaped by stakeholder, signaling, institutional, and agency theories. Strategic theories such as legitimacy, institutional, signaling, agency, and intergenerational equity theories explain the integration of non-financial reports into corporate reporting by firms in capital markets or countries that are heavily regulated²³. Certainly, this study contributes to the evolving corporate reporting literature by identifying and contextualizing the various theories underlying the integration of non-financial information in corporate reporting.

At the same time, non-financial reporting presents both locally and globally the values of the economic entity, as well as the practiced business model while demonstrating the link between its strategy and its commitment to a sustainable economy. Globally, all companies that report information on sustainability apply the GRI standards²⁴. They present the consensus of investors and other interested parties on the information that matters most for understanding a company's impact on society and the environment, prescribe who should report this information, and how it should be reported. In its reports entities can assess their own performance and risks in relation to other entities and identify opportunities for improvement. At the same time, they can also be used by charitable enterprises as a means of disclosing information on social, environmental and economic impact that provides assurance that their donations are used effectively.

Another internationally accepted framework is the AA1000 "Accountability Principles Standards" based on fundamental principles that underpin the de-

[accessed: 16 June 2022].

²² Krištofik P., Lament M., Musa H., *The reporting of non-financial information and the rationale for its standardisation*, „Journal: Business Administration and Management”, 2016, Vol. 19, No. 2, pp. 157-175. available online: <https://www.ekonomie-management.cz/en/archiv/search/detail/1318-the-reporting-of-non-financial-information-and-the-rationale-for-its-standardisation/> [accessed: 6 July 2022].

²³ Haruna Maama, *Integration of Non-Financial Information into Corporate Reporting: A Theoretical Perspective*, „Academy of Accounting and Financial Studies Journal”, Research Article, 2020, Vol: 24, Issue: 2, available online: <https://www.abacademies.org/articles/integration-of-nonfinancial-information-into-corporate-reporting-a-theoretical-perspective-9152.html> [accessed: 6 July 2022].

²⁴Global Reporting Initiative (GRI), available online: <https://www.globalreporting.org/standards/>
<https://www.globalreporting.org/reporting-support/> [accessed: 14 May 2022].

velopment and presentation of non-financial reports, guide companies through the process of identifying, prioritizing, and responding to sustainability challenges, and collaborate with aligned organizations in the ESG ecosystem to integrate analysis of those issues into investment decision making, promote responsible business practices and transform their performance over the long term²⁵. All of these are a vital necessity for local small and medium-sized businesses as well.

Directive 2014/95/EU of the European Parliament and of the Council²⁶, the amendments to Directive 2013/34/EU regarding the presentation of non-financial information, identifies the need to increase transparency to a high and comparable level in all member states social and environmental information provided by businesses in all sectors in relation to average number of employees, balance sheet total and net turnover. So, as we can see, many SMEs are exempted from additional requirements and the obligation to present a non-financial statement only applies to large enterprises that are public interest entities and public interest entities that are parent enterprises of a large group, with an average number of employees over 500 in both cases. At the same time, the European Parliament and the Council provide that this provision should not prevent the member states from asking companies and groups, other than the companies that are the subject of the Directive, to present non-financial information²⁷. We therefore conclude that to facilitate the presentation of non-financial information by small and medium-sized enterprises at the present time, non-binding guidelines, including general and sectoral key indicators of non-financial performance taking into account best practices, need to be developed, international developments and the results of related initiatives at European level, according to the proposals set out in the Directive in question.

The legal framework for the activity of small and medium-sized enterprises in the Republic of Moldova, as well as the state support measures for their creation and development are stable through criteria for defining small and medium-sized enterprises, which cumulatively meet the following conditions:

- have an average annual amount of employees (average written number of personnel during the management period) of up to 250;

²⁵ Account Ability Principles Standards. AA1000, available online: <https://www.accountability.org/standards/aa1000-accountability-principles/>; <http://www.mas-business.com/docs/AA1000APS%202008%20Final.pdf> [accessed: 12 May 2022].

²⁶ Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups Text with EEA relevance, available online: <https://eur-lex.europa.eu/eli/dir/2014/95/oj> [accessed: 12 May 2022].

²⁷ European Commission, *Guidelines on non-financial reporting (methodology for reporting non-financial information)*, „Official Journal of the European Union”, 2017/C 215/01, available online: [https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:52017XC0705\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:52017XC0705(01)&from=EN) [accessed: 29 June 2022].

- have an annual turnover (sales revenue) of up to EUR 2.5 million or have total assets (fixed and current assets) of up to EUR 2.5 million, according to the last approved financial statement²⁸.

The turnover ceiling, which is foreseen as a criterion for defining small and medium-sized enterprises at the country level, is currently under public discussion and may be increased up to EUR 5 million concerning the evolution of macroeconomic indicators.

At the national level, financial and non-financial reporting is regulated by the new Law on accounting and financial reporting, in force from January 1, 2019²⁹, accounting standards, other normative acts. The regulatory bodies in the field of accounting and financial reporting in the Republic of Moldova are The Ministry of Finance, the National Commission for Financial Markets, central specialized bodies, the National Bureau of Statistics, the Accounting and Financial Reporting Council, which is established under the Ministry of Finance and ensures the improvement of accounting and financial reporting at the local level. In its composition, apart from members, representatives of state institutions, members of the business and professional associations, the academic environment in the field of accounting also participate. The Ministry of Finance is responsible for the acceptance of International Financial Reporting Standards (IFRS), the elaboration and approval of National Accounting Standards (NAS); methodological guidelines, regulations, instructions, and other normative acts in the field of accounting and financial reporting.

The procedure of bookkeeping and applying the accounting standards is determined based on: total assets at the reporting date, sales revenue, and the average number of wage earners during the reporting period. Small entities in the Republic of Moldova keep double-entry bookkeeping and prepare simplified financial statements according to the local NAS, and non-financial reporting for them is not provided for by the regulatory framework.

3. Survey on the need for implementation non-financial reporting by local SMEs

Entities in the small business sector, in addition to satisfying the demand for goods and services provided, need the necessary financing to ensure the prosperous development of their business. The chances of financing for local entities in the given sector can also be increased by the quality of the information presented in the non-financial reports, in addition to the financial ones current-

²⁸ Law no. LP179/2016 of 21.07.2016 regarding small and medium enterprises, available online: https://www.legis.md/cautare/getResults?doc_id=105839&lang=ro [accessed: 6 July 2022].

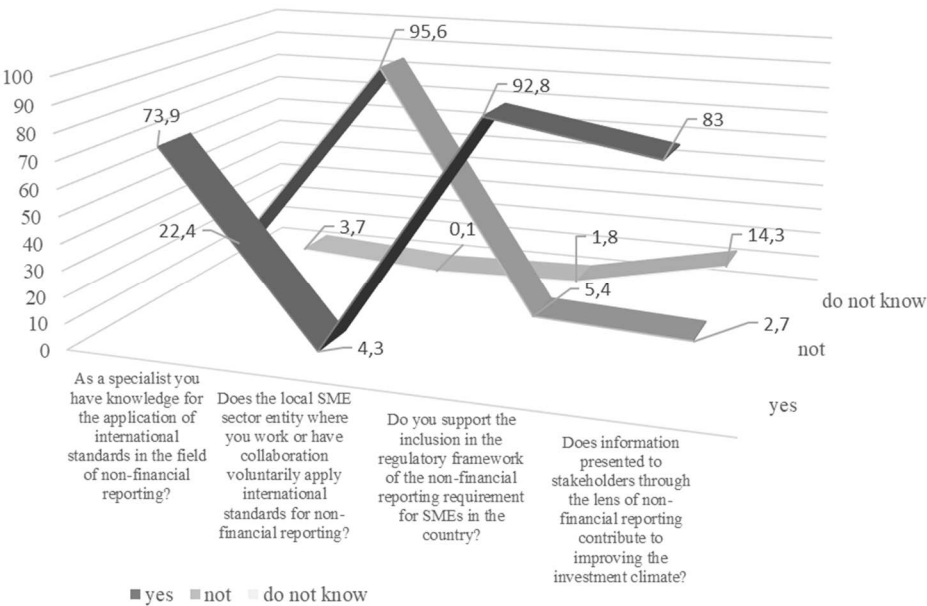
²⁹ Law on accounting and financial reporting, No. LP287/2017 of December 15, 2017, in force on January 1, 2019, available online: https://www.legis.md/cautare/getResults?doc_id=125231&lang=ro [accessed: 6 July 2022].

ly presented in the simplified and abbreviated reports according to the SNC, applied at the national level.

In order to highlight some aspects related to the importance of implementing non-financial reporting in the entities of the small business sector in the country, the author initiated a survey of opinions based on a questionnaire of accounting and auditing employees who work within the enterprises small or have partnership relations with them.

112 respondents took part in the survey, who answered the questions included in the questionnaire as to whether they have knowledge of the application of international standards in the field of non-financial reporting; the entity in which the respondent works or has a tangential partnership with it, submits non-financial reports voluntarily, do they support the inclusion in the regulatory framework of the non-financial reporting requirement for small businesses in the country and if it contributes to improving the investment climate the information presented to interested parties through in terms of non-financial reporting. The results are presented by the author in the following figure:

Figure 1. Survey results on the implementation of non-financial reporting by entities in the small business sector in the country.



Source: Drawn up by the author based on survey results.

3.1. Survey results

As we can see from figure 1 above, 73.9% of 112 respondents who participated in the survey, employees in the field of accounting and auditing in the entities of the small business sector in the country, or their partners, have knowledge for the application of international standards in the field of non-financial reporting. 92,8% of the respondents who participated in the survey agree that the implementation of non-financial reporting by entities in the small business sector is necessary for the development of their business and 83,0 percent of the participants confirm that the information presented to interested parties through the lens of reporting non-financial will contribute to improving the investment climate. Most of them mentioned that its implementation is welcome for the purpose of visibility of the performance of the reporting entity in the given sector of the national economy.

The majority of respondents who support the implementation of non-financial reporting for entities in the small business sector believe that the implementation of non-financial reporting is already an opportunity to attract foreign investment and also believe that it must be an imperative requirement within the reforms the reporting framework in the given sector of the economy at the local level.

The most common disadvantages mentioned in the survey are the additional costs for implementing information systems and training staff. Some respondents reported that they do not promote themselves on social networks, do not publish on their web page information about their activity and cannot provide an answer to the question about the visibility of the entity on the market, but also other advantages as a result of the implementation of non- financial. Few entities in the local small business sector, 4,3%, apply international standards for non-financial reporting in order to present comprehensive, truthful and comparable information for foreign investors.

4. Research results and discussion

The peculiarities of non-financial reporting, in terms of types, content, format and choice of the set of indicators is a decision of the reporting entity itself, which depends on the structure, volume of the business model and other influencing factors, including the satisfaction of information needs of a wide range of users for the purpose of making managerial decisions.

The regulatory framework for financial reporting, which also includes requirements for non-financial reporting by public interest entities at the national level, has been significantly improved in recent years. In this contest, on 01 January 2019, the new Law on Accounting and Financial Reporting has been implemented, which establishes the basic regulatory framework, general principles and requirements, and the regulatory mechanism in the field of accounting and financial reporting in the Republic of Moldova.

As of 01 January 2020, the national standard “Presentation of Financial Statements”, is in force in the new wording³⁰, which was developed based on Directive 2013/34/ EU, the Conceptual Framework for Financial Reporting, IAS 1 “Presentation of Financial Statements” and IAS 7 “Cash Flow Statement”. The standard governs the preparation and presentation of full, simplified, and abbreviated financial statements of entities applying the SNC. Financial statements are intended to present information useful in making economic decisions for a wide range of users like owners (partners, shareholders, founders, members), creditors, customers, employees, public authorities, and the public. To achieve this purpose financial statements, provide information on assets; equity; liabilities; income and expenses; cash flows.

Depending on the categories of entities set out in Law 287/2017 and its own information needs, the entity may prepare: full financial statements; simplified financial statements; or abbreviated financial statements. Under the established requirements, small entities in the Republic of Moldova prepare and present simplified financial statements, which include only the balance sheet; profit and loss statement, and explanatory notes, a fact that once again demonstrates the need for the development of non-financial reporting by entities in the sector of small and medium-sized enterprises in the country, which must complete the reporting framework with financial and non-financial information that is not presented in abbreviated or simplified financial statements.

Simultaneously, the Ministry of Finance has implemented the Methodological Guide for the preparation of financial statements, which was developed based on Law no. 287/2017, SNC, and other accounting regulations and has a recommendation character³¹.

Large entities and local public interest entities currently prepare and present annually, together with the financial statements, the management report, which contains an accurate presentation of the position of the entity, the development and performance of its activities and presents an analysis correlated to the size and complexity of the activities carried out.

The management report shall include information on: financial performance indicators³²; non-financial performance indicators relevant to the entity’s busi-

³⁰ National Accounting Standard „Presentation of Financial Statements”, available online: <https://mf.gov.md/ro/lex/contabilitate-%C8%99i-audit> [accessed: 16 June 2022].

³¹ Methodological guide for drawing up financial statements, Approved by Order no. 154 of 09.12.2020, Published: in „Official Gazette”, No. 360-371 art. 1389 of 25.12.2020. https://www.legis.md/cautare/getResults?doc_id=124687&lang=ro [accessed: 16 June 2022].

³² Law on accounting and financial reporting, No. LP287/2017 of December 15, 2017, in force on January 1, 2019, available online: https://www.legis.md/cautare/getResults?doc_id=125231&lang=ro [accessed: 6 July 2022].

ness; the entity's growth prospects; research and development activities; redemption of social shares and own shares; the entity's subsidiaries; the principal risks and uncertainties facing the entity; environmental protection and employee career opportunities; where the use of financial instruments is significant for the assessment of the financial position and performance, the given entities shall also disclose information on their objectives and policies in risk management and the extent of their exposure to price risk, credit risk, liquidity risk and cash flow risk.

The public interest entity in the management report, following the legal framework at the local level, presents a separate chapter on corporate governance; the extent of the entity's compliance with the provisions of the corporate governance code; the entity's internal control and risk management systems concerning the financial reporting process; the significant participation quotas in the share capital, direct or indirect, beneficial owners and beneficial owners of any securities; the powers of the board and the executive body concerning the issue and redemption of securities; the powers and rights of management bodies, of the shareholders, of other holders of the entity's securities and how they may be exercised; the structure, operation, and composition of the entity's management bodies and committees.

As local SMEs are not reporting non-financial information, the author briefly presents the management report based on the information published on the website of the "Intact General Insurance" Joint Stock Company (18), which operates in the non-banking financial sector of the Republic of Moldova . The Management's annual report includes the results of the activity of the Company "Intact Asigurări Generale" S.A., for the reporting period from 01.01.2021 to 31.12.2021. The report was prepared under the current regulatory legal framework. The financial data are presented in the report following the individual financial statements of the company prepared based on International Financial Reporting Standards (IFRS). The author briefly presents the information carried out in the Management Report for 2021 in the following table:

Table 1. Report of the Management of the Joint Stock Company "Intact Asigura-ri Generale" for the year 2021.

Chapters of the report	Published information
1. Company development and performance	The company discloses information on its business in the general insurance categories as of 31 December 2021 according to the business license; presents information on employees and their business results in the reporting year; the priorities of the executive body in the given period and their orientation towards increasing the stability of the business, strengthening the market position, strict management of underwriting, operational and market risks, strategies to diversify the portfolio of insurance contracts. The chapter also discloses information on the performance achieved in the reporting year: the volume of written insurance premiums and paid insurance compensations; the number of technical provisions formed by the company as of 31 December 2021; analysis of the structure of costs and other expenses; description of the complex reinsurance program and its execution; results of investment activity, financial, profit and loss result; disclosure of information on solvency indicators, which correspond to the regulations in force established. The company has sufficient eligible assets and ensures honoring its long-term obligations that characterize its activity positively.
2. Development prospects of the Company	Disclosing information on business development prospects, the company presents the policies of continuous adaptation to periodic conjunctures to diversify the existing portfolio and access new areas of business; presents the results of the constant development of relationships with strategic partners, including international reinsurance partners; presents the prospects for the development of the planned strategic objectives.
3. The main risks and uncertainties the Company faces	This chapter describes the profile of significant risks for the activity carried out, very briefly, the main directions of risk mitigation, without any concrete, applied measures to manage and minimize them.

Chapters of the report	Published information
4. Career opportunities for company employees	The personnel policies implemented in 2021 are briefly presented, with no specific information in the given chapter. The company informs on the implementation of the training plan for its staff employed in sales activities, which is mandatory for entities in the non-banking financial sector, and encourages the participation of employees in courses organized by institutions of the sector, the payment of which is guaranteed by the entity.
5. Information on redemption, acquisition, alienation of own shares.	The Company describes the additional issuance of securities that occurred during the reporting period.
6. Information on the existence of subsidiaries	The disclosed information about company subsidiaries and their regional location.
7. Corporate governance of the Company	The company discloses very brief information on the corporate governance code and its application during the reporting period. Shows the main governance structures and shareholder structure as of 31.12.2021; information on the auditing committee, but information on the audit committee, which operates under the regulations of the non-banking financial sector supervisory body, the company did not submit.
8. Subsequent events. Statements of the Executive Body on the legality of the preparation of the individual financial statements and the management report for the financial year 2021.	Information is provided on the risk assessment of the geopolitical situation in the region. The company, based on the individual financial statements published on its website, confirms that the main performance indicators: net asset value, size of technical reserves, solvency margin, and liquidity ratio meet the requirements of the regulatory acts in force issued by the Supervisory Authority and assesses the financial position as stable and the financial performance as positive.

Source: Drawn up by the author.

The comments regarding the disclosure of information in accordance with the requirements established by the regulatory framework in force, presented in the management report prepared by Compania "Intact Asigurări Generale" S.A.,

the author of the given study, are presented in table 1 separately for each chapter within its explanations for the purpose of clarity.

Following the result of the analysis of the information published on the official website of public interest entities in the banking and non-banking financial sector (banks and insurance companies) for the period 2021, it was observed that none of the entities analyzed published and prepared sustainability reports. Entities from the banking and non-banking financial sector on the official website publish: insurance companies - management report; banking institutions – the annual report, which includes financial and non-financial information regarding their activity in the reporting year. The interim management statement is published semi-annual.

State authorities regulating and supervising specific sectors of the national economy are the National Bank of Moldova³³ for the financial sector and The National Commission for Financial Markets³⁴ for the non-banking sector. As the activity of the entities in the sectors analyzed is subject to several risks, they develop and implement internal regulations on risk acceptance and management. In this area, the National Bank of Moldova (NBM) specifies some aspects of risk treatment for banks and addresses their standardization, bringing clarity to the provisions related to credit risk treatment of banking sector entities in the Republic of Moldova.

The regulatory requirements regarding the information presented in the management report also provide for information regarding environmental protection and the professional opportunities of employees, but not all analyzed reporting entities disclose this information, a fact that was established during their examination. In my opinion, only the establishment of regulatory requirements regarding the development and publication of the sustainability report and other non-financial reporting requirements, which allow reporting entities to individualize themselves, will capitalize on the information given in accordance with the type of their activity and contribute to the completion of the image of these entities of public interest in the examined sector, will provide information to the interested parties to evaluate their economic performance, as well as their impact on the environment.

Since the activity of entities in the banking and non-banking financial sector have a small negative impact on the environment and society, for the purpose of the veracity and originality of the opinions and conclusions formulated in the given article, the author analyzed the information presented on the websites of

³³ National Bank of Moldova (NBM), „*Regulation on minimum requirements for the Information and Communication Systems of banks*”, approved by HCE of the NBM no. 47 of March 14, 2018, available online: <https://www.bnm.md/ro/content/regulament-privind-cerinte-minime-pentru-sistemele-informationale-si-de-comunicare-ale> [accessed: 16 June 2022].

³⁴ National Commission for Financial Markets (NCFM), Regulatory framework, available online: <https://www.cnpf.md/ro/legi-6416.html> [accessed: 16 June 2022].

other companies in the country, following to which it was found that some entities with foreign investments present the following non-financial information:

- "MOLDOVAGAZ", the Moldovan-Russian Joint Stock Company published: "Annual report on natural gas supply activity"; Information on technical-economic indicators³⁵.
- "Petrom Moldova", Limited Liability Company: Information on charitable missions and social projects³⁶.
- Lukoil – Moldova, Limited Liability Company. Very succinct information on ecology; responsibility, industrial security, and labor protection; social and charitable partnership³⁷.
- "Premier Energy Distribution" J.S.C., FCC (Foreign Capital Company). Corporate responsibility reports. Distribution service reports³⁸.
- "Kaufland" in Moldova, Sustainability Report³⁹.

After analyzing the non-financial information published by the above-mentioned entities on their websites, conclude that each of them presents incomplete, chaotic, and very different information in terms of content, which does not correspond to international non-financial reporting standards and best practices of developed economies, which obviously and urgently shows the need to improve the non-financial reporting framework at the local level and to implement standardized models of these reports. Unification of the content of published information on different aspects, related to ecological, social, and environmental issues is required. In my view, all this proves the need for local implementation of the sustainability report.

From the information published on the analyzed websites, I found, that only the company "Kaufland" in the Republic of Moldova has published the Sustainability

³⁵ „MOLDOVAGAZ” *Moldovan-Russian Joint Stock Company Reports*, available online: <https://www.moldovagaz.md/rom/despre-companie/rapoarte-158>
<https://www.moldovagaz.md/rom/despre-companie/indicatorii-tehnico-economici> [accessed: 16 June 2022].

³⁶ Petrom Moldova, Limited liability company, *Information and social projects*, available online: <https://www.petrom.md/ro-md/promisiunea-marcii/despre-petrom-moldova/csr> [accessed: 16 June 2022].

³⁷ Lukoil – Moldova, Limited Liability Company, *Information on ecology. Responsibility. Industrial security and labor protection. Social partnership and charity*, available online: <https://lukoil.md/ro/Responsibility/Ecology>;
<https://lukoil.md/ro/Responsibility/Safety>;
<https://lukoil.md/ro/Responsibility/SocialResponsibility> [accessed 16 June 2022].

³⁸ Premier Energy Distribution S.A., *Enterprise with foreign capital. Corporate responsibility reports*, available online: <https://www.premiereenergydistribution.md/ro/rapoarte>
<https://www.premiereenergydistribution.md/ro/rapoarte/rapoarte-de-responsabilitate-corporativa> [accessed: 16 June 2022].

³⁹ Kaufland Moldova, *Sustainability report*, available online: <https://despre.kaufland.md/ro/responsabilitate/sustenabilitate.html> [accessed: 6 July 2022].

ity Report, which operates for a short time in Moldova and for the first time published the report given for the financial year 2020. These annual reports are under GRI standards and include non-financial indicators, relevant to the activity of the company, the impacts of their activity, and providing public access to information to stakeholders.

Therefore, large and public interest entities operating in different sectors of the economy at the local level, to maintain competitiveness and to provide credible information to stakeholders, according to the national regulatory framework, but also voluntarily, according to the international framework and practices of developed countries, can develop non-financial information by ensuring an efficient reporting process, which will benefit both the reporting entity and its external sphere.

In the author's opinion, all this presents a challenge for small entities in the country. It has been shown that, in addition to satisfying the demand for goods and services, they provide jobs for a large part of the workforce, but they do not have access to the necessary financing, a fact that does not allow them to expand and develop profitably. I believe that the generation of significant financial and non-financial information increases the chances of small entities in the country to obtain additional financial resources, including foreign investment, but for this purpose the reporting of small businesses in the country must align with international standards.

Progress in the implementation of international standards by the country's small business sector entities and the improvement of the reporting system at the national level are also in line with the objectives of the National Development Strategy "Moldova 2030" (NDS) so that SMEs are relevant, useful, consistent and comparable⁴⁰. In the framework of sustainable development, we can only speak of overall performance that brings together economic development, social development, and environmental protection. These priorities should also serve as the basis for non-financial reporting, which should become a priority for reporting companies and stakeholders. The most recommended non-financial reports for entities in the small business sector in the country to satisfy the information requirements of non-financial stakeholders, those reports that are practiced internationally and in countries with developed economies with a perfectly applied reporting system.

Conclusions

Researching the theoretical, methodological and practical aspects of non-financial reporting, the analysis of the normative framework, the opinions of other authors and the totalization of the discussions presented in the given

⁴⁰ National Development Strategy „Moldova 2030”, available online: https://cancelaria.gov.md/sites/default/files/strategia_nationale_de_dezvoltare_moldova_2030-t.pdf [accessed: 16 June 2022].

article regarding the quality of non-financial reporting by the reporting entities in the country, the author came to the conclusion that the reporting non-financial means a number of challenges for entities in the small business sector at the local level. However, at the same time, the implementation of non-financial reporting for these entities presents significant opportunities that contribute to the integration of the concepts of sustainable development of their business.

Studying the importance of entities from the small business sector, the information published by the National Bureau of Statistics of the Republic of Moldova, the author found that they play an important role in the economy at the level of our country with a developed and comfortable agricultural sector for the development of small business, representing the majority businesses, half of the workforce and a third of sales revenue. So, we conclude that the current economic state of the country depends, to a large extent, on the activity of the small business sector and in this sense, the author proposes that the state-level support measures for the entities in the given sector be capitalized and made more efficient to increase the contribution their share in GDP, the increase in the number of competitive entities among small businesses, the increase in the workforce employed in these entities and the turnover of the entities of the given sector in the country for the purpose of the prosperous development of their business, an environment in harmony with economic and human activity on par with the practices of countries with developed economies. In this sense, we find that non-financial information has become a central concern among business leaders, regulatory authorities, investors; among consumers and other stakeholders.

Following the analysis of the non-financial reporting framework according to the national regulations in comparison with those at the world level, European and the practices of countries with developed economies, the author found major divergences in the regulatory framework; a low level of quality and efficiency of non-financial reporting by local entities in the sectors of the national economy of public interest. At the same time, it was found that the small businesses in the country currently do not present any other reports, except the simplified financial ones or the abbreviated ones according to the local framework of reports for businesses in the given sector, which diminishes the presentation of their performance for internal and external users. So, in the opinion of the author of the given study, the regulation of the non-financial reporting framework at the local level requires urgent improvement measures and at the same time it is vitally necessary to implement non-financial reporting by the entities in the small business sector in the country for the purpose of their visibility, strengthening relations with community and increasing investments in order to develop their business.

The importance of the researched topic regarding non-financial reporting at the local level, shows that it is relevant and should be addressed in future research.

I think that the decisive factor on the changes will probably be the modernization of business models at the level of entities in the small business sector and the increase in consumer demand for new high-performance services at the local level, which have a constant and inevitable impact on their activity.

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Irina Golochalova

**ASSESSING THE USEFULNESS OF SMALL BUSINESSES'
FINANCIAL REPORTING INFORMATION:
THE NATIONAL ASPECT OF THE REPUBLIC OF MOLDOVA**

Abstract

Much research has been aimed at resolving such issues as the quality of financial reporting and harmonization of report preparation methodology. In this regard, the objective is to identify a number of problems in the accounting system of the Republic of Moldova, which reduce the usefulness of small business financial reports, and develop practical recommendations to improve the quality of the financial reporting information content. The research has been conducted using both the general scientific and special methods, i.e., system approach, comparison and content analysis, synthesis, modeling. The main methods, on the basis of which the research algorithm has been constructed, entail content analysis and comparison. A conceptual analysis of the accounting and reporting system's regulatory provisions and legal framework has been carried out; individual accounting methodology terms have been conceptually interpreted; a conceptual assessment 'Changes in Equity Statement' information perimeter and its usefulness has been conducted. The research is of scientific significance in terms of improving the conceptual apparatus and determining the development prospects for the national accounting system. The proposed changes in the regulatory and legal framework of the RM accounting system, as well as the recommended reconstruction of the Changes in Equity Statement are of practical importance.

The study shows a perspective on eliminating the ambiguity and paralogism in the conceptual apparatus of the national accounting system. It also presents a viewpoint on the modeling of financial reporting and the formation of optimal parameters for the quality and informativeness thereof.

Keywords: Financial Statements, reporting paradigm, usefulness, accounting methodology, information quality.

**OCENA UŻYTECZNOŚCI INFORMACJI ZAWARTYCH
W SPRAWOZDAWCZOŚCI FINANSOWEJ MAŁYCH PRZEDSIĘBIORSTW:
ASPEKT KRAJOWY REPUBLIKI MOŁDAWII**

Streszczenie

Wiele badań poświęcono rozwiązaniu takich kwestii jak jakość sprawozdawczości finansowej i harmonizacja metodologii sporządzania sprawozdań. Mając to na uwadze, celem artykułu jest zidentyfikowanie szeregu problemów w systemie ra-



chunkowości Republiki Mołdawii, które zmniejszają użyteczność sprawozdań finansowych małych przedsiębiorstw, a także opracowanie praktycznych zaleceń, w celu poprawy jakości zawartości informacyjnej sprawozdawczości finansowej. Badania zostały przeprowadzone z wykorzystaniem zarówno ogólnych metod naukowych, jak i specjalistycznych, tj. podejścia systemowego, porównawczego oraz analizy treści, syntezy, modelowania. Główne metody, na podstawie których skonstruowano algorytm badawczy, obejmują analizę treści i porównanie. Przeprowadzono analizę konceptualną przepisów regulacyjnych i ram prawnych systemu rachunkowości i sprawozdawczości; dokonano interpretacji pojęciowej poszczególnych terminów metodologii rachunkowości; przeprowadzono ocenę konceptualną "Sprawozdanie ze zmian w kapitale własnym" i jego użyteczność. Badania mają znaczenie naukowe polegające na udoskonaleniu aparatu pojęciowego i określeniu perspektyw rozwoju systemu rachunkowości narodowej. Proponowane zmiany w zakresie ram regulacyjno-prawnych systemu rachunkowości, a także zalecana rekonstrukcja rachunku zmian w kapitale własnym mają znaczenie praktyczne. Opracowanie ukazuje perspektywę eliminacji niejednoznaczności i paralogizmu w aparacie pojęciowym systemu rachunkowości narodowej. Prezentuje również punkt widzenia na modelowanie sprawozdawczości finansowej i kształtowanie optymalnych parametrów jej jakości i informacyjności.

Słowa kluczowe: Sprawozdania finansowe, paradygmat sprawozdawczości, przydatność, metodologia rachunkowości, jakość informacji.

Introduction

The transition to a more advanced technological mode is predetermined by the development of economic relations and productive forces. Today it is realized under the conditions of a new socio-economic paradigm of development and is characterized by the participation of only three subjects – corporations, small business enterprises and the state. Compared to corporations, small business (hereinafter, SB) enterprises have limited own potential and, as a consequence, are in worse economic conditions. Nevertheless, they contribute to a significant increase in gross domestic product, and sometimes create "success stories" of economic development of an individual state¹. The importance of the small business sector for Moldova's economy is outlined in the Small and Medium Enterprise (SMEs) Support Strategy and is formulated by the following thesis: it is a factor of sustainable economic development and national competitiveness. According to the National Bureau of Statistics of the Republic of Moldova, as of December 31, 2021, SB enterprises constitute 98.6% of the total number of enterprises operating in the country. Officially presented data on the struc-

¹ Golochalova I., *Analysis of the Statement of Stockholders' Equity in the Context of an Institutional Platform for Small Business Sector of the Republic of Moldova*, "Journal of Finance and Accounting", Vol. 7, No. 5, 2019, retrieved from: doi: <https://10.11648/j.jfa.20190705.12> [accessed: 20.02.2022].

ture, areas of activity and economic condition of the SB sector indicate a new attitude to it on the part of the state.

Its essence is in shifting the emphasis from positioning as a unit in need of state support to positioning the SB as an economic unit².

However, in a tough and highly competitive business environment, businesses in the SB sector face challenges, the key ones being:

- insufficient own financial resources and limited external funding³;
- lack of standardized and reliable information in financial reporting, based on which it is possible to make decisions about investment projects carried out by the SB sector, including innovative ones⁴;
- limitations of time resources critical to the formation of professional competencies of financial statement preparers⁵.

According to some researches, similar situations are also recorded in Ukraine, where the proportion of small enterprises is 95%, which lack the financial capacity, qualified staff and the motivation required to prepare financial statements in accordance with IFRS⁶.

To overcome the identified challenges facing the SB sector and, consequently, the national economy, state support is needed. Modernization and implementation of an effective regulatory framework for financial reporting is one of the forms of state support.

According to modern accounting methodology, the purpose of financial statement is to provide useful information to its main group of users – potential and existing investors. They are interested in information about the changes and reasons for changes in the economic resources of a business, on the basis of

² Dolghii Cr., Golochalova I., Tsurcanu V., *The Financial Reporting of Micro and Small Enterprises in Moldova*, [In:] *Financial Reporting of Micro and Small Enterprises (MSE) in Transition economies of Central and Eastern Europe*, Polskie Wydawnictwo Ekonomiczne, Warszawa 2020.

³ Guohui H., Meimei Z., Le Z., *Quality of Accounting Information, Executives' Background and Loans of Small and Medium-Sized Enterprises*, „International Journal of Economics, Finance and Management Science” 2018, retrieved from: 6 (5), retrieved from: <https://doi.org/10.11648/ijefm.20180605.13> [accessed: 08.07.2022].

⁴ Setyaningsih S., Kelle P., *Barrier factors of supply chain management implementation in small and medium-sized enterprises: Evidence from Hungary and Indonesia*, „Economics and Sociology”, 14(4), 2021. retrieved from: <https://doi.org/10.14254/2071-789X.2021/14-4/4> [accessed: 10.07.2022].

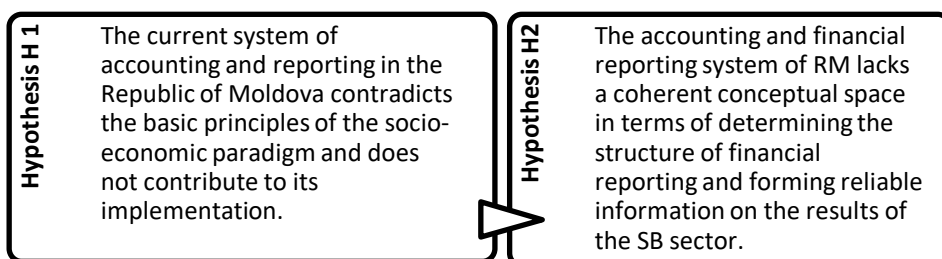
⁵ Kot S., Goldbach I.R., Ślusarczyk B., *Supply Chain Management in SMEs-Polish and Romanian Approach*, „Journal Economics and Sociology” 2018, 11 (4), retrieved from: doi: 10.14254/2071-789X.2018/11-4/9. [accessed: 22.02.2022].

⁶ Grigoroii L., N. Muntean, *The Experience of the Republic of Moldova in Reforming the Accounting System and its Harmonization with IFRS and European Directives*, „Bulletin of Taras Shevchenko National University of Kyiv”, Economics 6 (201)/2018, retrieved from: <https://doi.org/10.17721/1728-2667.2018/201-6/9> [accessed: 10.06.2022].

which investment decisions are made. Since financial statements are the main, though not the only, source of such information, the need to introduce new standards that meet modern requirements for financial reporting is steadily growing⁷. Moreover, due to the implementation of the concept of sustainable development, which interprets any business as a system of balanced economic, social and environmental aspects of activity, the traditional format of financial reporting, which does not provide disclosure of ESG (Environmental, Social, Corporate Governance)-indicators limit the information potential of investors.

Therefore, the main direction of modernization of the legislative and regulatory framework in the field of financial reporting is the development of the concept of presenting information about the results of activities of organizations operating in the new paradigm of socio-economic development. This includes those belonging to the SB sector. In this context, the study of the current state and the reform of the national accounting system is appropriate, relevant, important, interesting and instructive, as well-founded conclusions of a permanent nature will be drawn. Or, knowing the past, you build the future⁸.

In this regard, the following questions arise: is the conceptual space for presenting information that meets the principles of the socio-economic reporting paradigm formed and, consequently, is the system of accounting and financial reporting of the Republic of Moldova (hereinafter, RM) effective for the implementation of the socio-economic reporting paradigm? The answer will be a methodological study in which the author puts forward the hypotheses (H):



Substantiation of hypotheses *is aimed at achieving the purpose of this study*: is to identify a number of problems in the accounting system in the RM, which re-

⁷ Imaningati S., Ghozali I., Yuyetta E-N., *The Role of Investor Pressure on the Effect of Integrated Reporting Disclosure on the Intellectual Capital Disclosure*, "Academy of Accounting and Financial Studies Journal" 2022, Volume 26, Special Issue 1, retrieved from: <https://www.abacademies.org/articles/The-role-of-investor-pressure-the-effect-of-integrated-reporting-disclosure-the-intellectual-capital-disclosure-1528-2635-26-S1-005.pdf> [accessed: 08.07.2022].

⁸ Grigoroi L., N. Muntean, op. cit.

duce the usefulness of financial reporting prepared by small business sector organizations, and to develop practical recommendations for improving the quality of information content of financial statements.

This research is conducted on the basis of general scientific and special methods: system approach, comparison and content analysis, synthesis, analysis, modeling, study of special literature. The systematic approach of this research is the optimal combination of specific scientific methods aimed at building research methodology: formulation of the problem, proposing a hypothesis and its justification. In the process of research the author was guided by methods:

- axiomatic – to formulate the thesis;
- induction, the application of which made it possible to put forward the hypotheses H1, H2 to be argued;
- analysis, which highlighted decomposition elements and distinctive features of RM accounting and reporting methodology (table 1);
- content analysis and comparison of provisions of the regulatory framework of RM in the field of accounting and reporting, as well as IFRS and EU Directive/2013/34 (table 1), which allowed forming the evidence base of its inconsistency and substantiating the need for its modernization (table 2);
- synthesis, which allowed formulating conclusions and arguing the hypotheses put forward;
- abstraction in assessing the quality of the utility of the Changes in Equity Statement (table 4);
- finally, modeling, which achieved visualization of the format of the evidence base of the hypotheses put forward H1 and H2 (fig.1), and – proposed the general format of the Changes in Equity Statement (table 4).

In order to achieve the goal of the research - justification of the hypothesis, the author studied the works of famous scientists, published in scientific journals and as monographs. When forming the evidence base of the hypotheses, official materials were also used: legislative and normative acts, data from the Bureau of Statistics.

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1. Literature Review

The problem of the quality of financial reporting and the use of its information field by interested parties has been discussed in scientific and professional circles since the end of the 20th century. The reason for the emergence of this problem is the unresolved theoretical issue of differences and harmonization of the two main accounting models: Anglo-Saxon and continental.

Since the beginning of the XXI century the discussion has become particularly acute in the context of the adoption of International Financial Reporting Standards (IFRS) by some jurisdictions as the regulatory framework for the preparation and presentation of financial statements. In this regard, let us focus on some scientific works, some of which are methodological in nature, while others are empirical.

So, in the work of Felyage et al it is noted that the anglo-saxon model is dominated by the liberal form of registration of economic events and the preparation of reports is guided by the concept of reliable representation. The liberal model underlying the IFRS system allows for different professional judgments and interpretations regarding the provisions of the regulatory framework for the preparation of financial statements. However, despite the widespread adoption of IFRS, national accounting traditions continue to influence financial reporting behavior, which leads to the problem of financial reporting quality⁹.

According to Grigoroï and Munteanu, for the Republic of Moldova accounting reform and legislative harmonization is a necessity. This follows, first of all, from the adopted fundamental option of reforming and creating a market economy and, at the same time, fulfilling the obligation to the EU partners¹⁰.

In this context, the work of Lazarus et al, in which the reform of the accounting and financial reporting system in the RM is assessed, deserves attention. The fact of the reform is the enactment in 2019 of the Law No. 287 of the Republic of Moldova „On Accounting and Financial Reporting” and the National Accounting Standards (NAS), which are the result of the transposition of European and international norms¹¹. As the author emphasizes, the new national accounting and reporting system was supposed to mitigate the differences between the two accounting models: anglo-saxon and continental. In the process of research, Lazarus et al. (2021) concludes that decisions about the orientation of the national accounting and financial reporting system of accounting were often based on a short-term vision of it, to the detriment of quality. In order to align with international practice, many amendments were subsequently introduced, which led to the modification of NAS and, at the same time, indicates the haste in their adoption. As time has shown, the application of the eclectic

⁹ Feleaga L., Feleaga N., Dumitrashcu L-M., *IFRS financial accounting*, Publishing ASE, Bucuresti 2017. p.167.

¹⁰ Grigoroï L., N. Muntean, op. cit.

¹¹ Law No. 287 of December 15, 2017 of the Republic of Moldova „On Accounting and Financial Reporting”, with modification 27.02.2020, retrieved from: https://www legis.md/ cautare/getResults?doc_id=120938&lang=ru [accessed: 22.02.2022]; National Accounting Standards “Presentation of Financial Statements”, approved by Order of the Ministry of Finance No. 118 from August 06, 2013, with modification 09.12.2020, retrieved from: https://www legis.md/cautare/getResults?doc_id=125371&lang=ru [accessed: 14.02.2022].

approach did not justify itself in the development of the regulatory framework of accounting in RM.

Erhan and Gaugas focuses on the problem of the effectiveness of the regulatory framework of the enterprises of the SB sector of the Republic of Moldova. The author notes that, in general, the legal and institutional framework has been created, but it is characterized by inconsistency and their application is ineffective. This leads to the vulnerability of the SB sector: the regulatory framework in the field of accounting and reporting is constantly modified, the information in reporting is not useful enough for investors to make decisions, there are no sources of financing, the technological and managerial capacity is insufficient¹². Van Greuning and Koen points out in his work that not only the government, but also enterprises are interested in improving the quality of financial reporting. This is due to the fact that the timeliness and reliability of financial information play a significant role in ensuring the stability of current economic markets. The government promotes the development and application of regulatory and legal frameworks in the field of accounting and reporting, while enterprises improve the quality of their own information systems in order to improve the reputation of the company and attract investment¹³.

The importance of the quality of financial information on the adoption of economically viable decisions is devoted to the work of Rotaru et al., which proposes an original approach to the formation of the evidence base of the hypothesis. As part of this approach, a large body of scientific articles was analyzed, with the main search keyword "financial information". It was found that the largest group covers topics related to the quality of accounting and financial information, IFRS, comparability, accounting expertise. As a result of the study, the author concluded that the adoption of appropriate business decisions depends on the quality and quantity of information provided by the accounting information system. Moreover, it treats financial statements as the epicenter of information and the source of decision-making¹⁴. Herbert and Harto examines the impact of the quality of financial reporting in the SB sector on the effectiveness of decision-making¹⁵. The author concludes that financial reporting

¹² Erhan L., Gaugas T., *Policies for Small and Medium Sized Enterprises. Development in the Republic of Moldova: Results and Challenges*, IBIMA Publishing, "Journal of Innovation and Business Best Practice" 2022, Vol. 2022, retrieved from: <https://doi.org/10.5171/2022.706025> [accessed: 06.07.2022].

¹³ Van Greuning H., Koen M., *International Accounting Standards. A Practical Guide*, Sec. ed., Publishing "Vesi Mir", Moskow 2004, p. 15.

¹⁴ Rotaru D., Mihaila S., Codrean V., *The role of financial-accounting information in the decision making process*, "Journal of Social Sciences", No.5 (2), 2022, pp.155-163, [https://doi.org/10.52326/jss.utm.2022.5\(2\).14](https://doi.org/10.52326/jss.utm.2022.5(2).14), retrieved from: <https://jss.utm.md/2022/06/09/10-52326-jss-utm-2022-5-2-14/> [accessed: 10.07.2022].

¹⁵ Herbert J., Harto P., *The Influence of Financial Reporting Quality, Family Ownership, and Audit Quality on Investment Efficiency*, "Academy of Accounting and Financial Studies Journal" 2022, Vol. 26, Issue 1S, retrieved from: <https://www.abacademies.org/>

that meets the quality criterion mitigates the existing problem of asymmetry of information due to the different interests of owners and managers. Furthermore, it is argued that the quality of financial reporting is not the main "driver" for investors' decision-making. This is justified by the fact that since financial statements are prepared on the basis of accounting standards that provide for the application of professional judgment, manipulation of financial reporting is inevitable to achieve the objectives of the enterprise. Achieving the quality of financial reporting for investment decisions is the prerogative of the audit¹⁶.

In this context, attention should be paid to the work of Alekseev et al., whose work presents and discusses the results of a study on establishing the direction of likely manipulation of financial reporting data and identifying user groups of users whose professional judgments and decisions may be affected by distortions in financial reporting¹⁷. The study is to analyze the paradoxes of accounting, the emergence due to the eclecticism of the modern concept of preparing financial statements. This fact is noted in the works of famous scientists Alexander and Sokolov.

In the work of Alves the problem of the quality of financial information is considered through the prism of the influence of the principle of conservatism (prudence)¹⁸. According to the results of the study, the author concludes that the presence of institutional and management investors contributes to the increasing influence of the conservative factor on the accounting and preparation of financial statements. This is due to the fact that, owning certain shares in the capital of the enterprise, these investors are interested in protecting their interests and reducing the asymmetry of financial information¹⁹.

Let us also note the work of Golochalova, in which an analysis of the on Changes in Equity Statement as one of the forms of financial reporting of the accounting system of RM was carried out. The author highlights the peculiarities of the construction of this report and assesses the feasibility of using its information field, including by small business enterprises. The article emphasizes that the disadvantage of the report is the lack of information on the causes of changes in the elements of capital. This leads to a violation of such qualitative characteris-

articles/the-influence-of-financial-reporting-quality-family-ownership-and-audit-quality-on-investment-efficiency-13125.html [accessed: 08.07.2022].

¹⁶ Ibidem.

¹⁷ Alekseev M., Glinskiya V., Serga L., Pyatov M., *On Evaluating Likely Misstatements in Financial Statements of Economic Entities*, "Statistics Issues" 2019, Vol. 26. No. 7., retrieved from: <https://voprstat.elpub.ru/jour/article/view/934>, <https://doi.org/10.34023/2313-6383-2019-26-7-20-32> [accessed: 10.07.2022].

¹⁸ Alves S., *Ownership Structure and Accounting Conservatism: Evidence from Portuguese and Spanish Listed Companies*, "Academy of Accounting and Financial Studies Journal" 2020, Vol 24, Issue 6, retrieved from: <https://www.abacademies.org/journals/month-december-year-2020-vol-24-issue-6-journal-aafsj-past-issue.html>. [accessed: 11.06.2022].

¹⁹ Ibidem.

tics as clarity and reliability, which in turn reduces the usefulness of financial reporting for interested parties²⁰.

Al-Smadi also dwells on the problem of disclosure in the capital report prepared by SB enterprises. The need to develop the structure of the capital report is due to the fact that the activities of the SB sector in terms of disclosure are less transparent than those of large enterprises, which often causes the problem of asymmetry of information. The key to solving the problem the author considers the establishment of factors influencing the optimization of capital structure in SMEs. Among the factors on the basis of which the choice of capital structure components is made, he refers to the theory of capital structure and the composition of assets used by enterprises of the SB sector²¹.

These and other studies published in the specialized scientific literature have undoubtedly made a significant contribution to the development of the concept of qualitative financial reporting, but the problem of assessing the usefulness of the financial reporting information of SB organizations in the Republic of Moldova, remains open. This confirms the relevance of the research.

2. Conceptual Analysis and Research Hypotheses

The new vision of the SB sector in the Republic of Moldova required an appropriate institutional platform, the basic component of which are legislative framework and acts regulating the activity and development of the small business sector. The assessment of the usefulness of financial statements prepared in accordance with the national accounting system is carried out in accordance with the developed research algorithm, which is based on the methods of content analysis and comparison.

In the study, the method of content analysis has been applied to the study of the content of Law No. 287 of the Republic of Moldova „On Accounting and Financial Reporting”²² and the NAS, the Conceptual Framework for Financial Reporting (hereinafter, Concept of IFRS) and Directive 2013/34/EC, which, although invariant in structure, are different in terms of conceptual apparatus²³.

²⁰ Golochalova I., op. cit.

²¹ Al-Smadi M- O., *A Study of Capital Structure Decisions by SMES: Empirical Evidence from Jordan*, “Academy of Accounting and Financial Studies Journal” 2019, Vol. 23, Issue 1. retrieved from: <https://www.abacademies.org/articles/A-Study-of-Capital-Structure-Decisions-by-SMES-Empirical-Evidence-from-Jordan-1528-2635-23-1-340.pdf> [accessed: 20.06.2022].

²² Law No. 287 of December 15, 2017 of the Republic of Moldova „On Accounting and Financial Reporting”, with modification 27.02.2020...; National Accounting Standards “Presentation of Financial Statements” ...

²³ Conceptual Framework for Financial Reporting, retrieved from: <http://www.ctcp.gov.co/files/documents> [accessed: 14.02.2022].

2.1. Conceptual analysis of the efficiency provisions of the regulatory and legal framework of accounting and reporting system of Republic of Moldova

It is well known that the tendency of European integration of the RM requires the fulfillment of a number of conditions by the Government of the Republic of Moldova. One of them is the reform of the national system of accounting and financial reporting, which was implemented in the period of 2015–2021. The result of this process is the adoption of the new Law No. 287 and modernization of the NAS. The peculiarity of the reformed accounting system is the accumulation of the provisions of both the European Directive 2013/34/EC and IFRS regulatory frameworks that embody the methodology of different accounting models: anglo-saxon and continental.

There is no doubt that the drafters of Law No. 287 and NAS took into consideration the fact that 98.6% of the total number of operating enterprises in the RM is in the SB sector. In this regard, the provisions of these normative legal acts are mainly oriented to the needs of interested persons for information on the financial situation of this subject of the national economy. For large enterprises, the Law No. 287 provides for the use of IFRS when keeping accounts and preparing financial statements. The enterprises that qualify as medium-sized ones are free to choose, according to which standards they will keep their accounts and prepare their reports - according to the NAS or according to the IFRS²⁴. The issue of organization of accounting and preparation of financial statements by the enterprises of the SB sector in the Republic of Moldova is covered in depth enough in the work²⁵. Now let's focus on the effectiveness of the national accounting and financial reporting system, and to do so let's make a conceptual assessment of it. So, the first stage of the conceptual assessment is a content analysis of the legislative and regulatory framework in the field of accounting of RM, the Concept of IFRS and Directive 2013/34/EC (table 1)²⁶.

²⁴ National Accounting Standards "Presentation of Financial Statements"...

²⁵ Dolghii Cr., Golochalova I., Tsurcanu V., op.cit.

²⁶ Law No. 287 of December 15, 2017 of the Republic of Moldova „On Accounting and Financial Reporting”, with modification 27.02.2020...

Table 1. Content analysis of the provisions of legislative and regulatory framework of international and national level.

n/n	Criteria for comparison	Concept of IFRS	Directive 2013/34/EU and EVS 2	Legislative and regulatory framework of the RM
1	The purpose of financial reporting is to provide information:	that is relevant and truthful to existing and potential investors, creditors of the organization, when they make decisions about providing resources.	that is reliable and objective to achieve various goals while balancing the interests of its users.	necessary and accurate for a wide range of users to make economic decisions.
2	Users	are existing and potential investors, lenders and other creditors.	are a wide range, not limited to investors in the stock markets.	are owners, creditors, customers, employees, public bodies and the public.
3	A key element for assessing the financial situation:	economic resources is a right that has the potential to create economic benefits.	is an economic transaction identified on the basis of its commercial essence.	is an economic fact treated as: 1) an element of accounting along with assets, liabilities, capital, income, costs and expenses, 2) phenomena that change other elements of accounting.
4	The definition of an asset:	of an asset is an existing and controllable economic resource.	There is no clear definition. It is assumed that these are different rights to property (ownership and use, based on its purpose).	is economic resources identified and controlled by an entity as the result of past economic facts from which economic benefits are expected to flow.

n/n	Criteria for comparison	Concept of IFRS	Directive 2013/34/EU and EVS 2	Legislative and regulatory framework of the RM
5	The notion of comparability as a characteristic of reporting quality	allows users to identify and understand the similarities and differences between items	provides a common mechanism for recognizing, measuring, and presenting information.	implies comparing information about the elements of financial statements for two consecutive reporting periods.
6	The efficacy of the concept of financial statement disclosure:	is to provide useful information on: 1) the entity's economic resources; 2) its claim rights; and 3) the effect of events on changes in 1) and 2).	is the preparation of information about the assets and liabilities of an enterprise, its financial condition, profits or losses on the basis of the principle of reasonableness.	in the clear compilation and presentation of information about the financial position, financial result and other information relating to the activities of the entity.
7	The definition of fair value:	is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.	the price that would be received on the sale of property or paid on the transfer of a liability in an ordinary transaction between identified market participants with full knowledge of the transaction for its intended purpose.	the price of an asset in a sale transaction under normal conditions. The transaction is conducted between interested, independent and well-informed parties.

Source: own elaborations.

We emphasize that the Concept of IFRS flexibly responded to the requirements of the socio-economic reporting paradigm, which are reflected in the 2018 version of the concept.

It is a well-known fact that the national accounting and reporting system of RM gravitates toward the continental model of accounting. Its characteristic features are the prevalence of the legal approach based on the application of the concept of "clarity and accuracy" of financial reporting, the dominant role of the cost principle, the prescriptive chart of accounts and forms of financial statements.

On a consistent basis, the EU Council has enacted special directives regulating the accounting and reporting procedures of businesses operating within European jurisdictions. However, these directives took into account the need:

1. to implement a strategy for sustainable and inclusive growth;
2. for consistency in national standards of presentation and content of financial statements for the benefit of shareholders of businesses and third parties;
3. to improve the financial reporting rules for various types of enterprises, including those in the SB sector.

The content analysis allows us to draw the following conclusions:

- in accordance with the rules of European regulation, a legal approach is applied in the preparation of financial statements, the basis of which is the principle of the priority of property right over the control of economic resources. At the same time, in such fundamental aspects as the transition to the concept of reliability and objectivity of presentation of information and the concept of fair value for the adequate valuation of assets, Directive 2013/34/EC converges with the Concept of IFRS (table 1);
- the accounting system of RM has retained all the attributes of the continental accounting model, despite the fact that both Directive 2013/34/EC and IFRS are legally enshrined as its regulatory framework. Moreover, the national system has "acquired" such features as paralogous and uncertainty, accumulating the features of two different accounting models (table 2).

2.2. Conceptual interpretation of the units of analysis of the RM accounting and financial reporting system and assessment of its quality

The content analysis allowed the author of the study to identify differences in the approaches to the preparation of financial statements adopted in the national accounting system and the IFRS system and to identify methodological errors in the provisions of the legislative and regulatory acts of the RM governing this procedure. Undoubtedly, the identified shortcomings are the result of combining in one accounting system the properties of two essentially different international accounting models. So, at the second stage of conceptual evaluation the elements of comparison of the IFRS system and the national system of accounting and reporting are established and their general characteristics are given (table 2).

Table 2. Differences from the IFRS Concept of RM accounting system and its methodological errors.

n/n	Element of content analysis	General characteristics of the content analysis element:	
		of the IFRS	according to the legislative and regulatory acts of RM
<i>Differences between the Concept of IFRS and the provisions of the national accounting and reporting system</i>			
1	The concept of financial reporting	"Usefulness of information": 1) focused on decision-making to increase economic potential; 2) investors and creditors - the main user group; 3) based on the concept of fair value; 4) the basic element - economic resources.	"Accuracy of information": 1) is necessary for making economic decisions by a wide range of users; 2) the range of users includes public authorities and the public; 3) is based on the concept of cost; 4) the basic element is an economic fact.
2	Fair value	is focused on the assessment of future events	is focused on the evaluation of the event
3	Method of determining the revalued value	Revalued amount = Fair value at revaluation date - (Subsequent accumulated depreciation and impairment loss)	On the date of revaluation: Revalued amount = Fair value - (Accumulated depreciation and impairment loss)
<i>Methodological errors in the provisions of the national accounting and reporting system</i>			
4	The essence of information comparability	Clearly identified and different from the sequence.	Identified with the consistency
5	The essence of the key element of assessing the financial situation	Unequivocal and concrete	The dual and paralogical nature
6	Criteria recognition for asset:	<ul style="list-style-type: none">• A right with the potential to create economic benefits;• Exists as a result of past events;• Controllable.	<ul style="list-style-type: none">• It is an economic resource resulting from economic facts;• Identifiable;• Controllable;• It brings economic benefits, when used.

Source: own elaborations.

The analysis of the content of Table 2 allows us to draw the following conclusions regarding the effectiveness of the accounting and reporting system of RM:

- Its methodological errors lead to a decrease in the quality of financial reporting, on the basis of which the decisions of interested persons are made;
- the identified differences with the principles of the IFRS system indicate the existing conceptual contradiction between them, which will make difficult the implementation of the socio-economic paradigm of reporting without making changes in the legislative and regulatory framework of the RM.

In this regard, the author is of the opinion that the accounting and financial reporting system of the RM lacks a coherent conceptual space in terms of preparing financial statements and forming qualitative information about the results of small business organizations²⁷. The conducted conceptual evaluation of the provisions of the effectiveness of the regulatory and legislative framework for accounting and reporting system of RM is part of the justification of hypothesis H1. Since the hypotheses proposed by the author are interdependent, the justification of hypothesis H1 predetermines the justification of hypothesis H2. Nevertheless, below we present the author's argumentation of hypothesis H2 and on its basis we make practical suggestions aimed at improving the quality of financial reporting.

Let us disclose each of the methodological contradictions revealed by the conceptual evaluation of the accounting and reporting system of the Republic of Moldova (see table 2).

Let us first discuss the interpretation of comparability as a qualitative characteristic of financial reporting. In exploring the problem of comparability of information, Bezruchuk and Myskiv reveals its essence according to:

- philosophical definition – it is a search for similarities and differences between objects of cognition, their features and relations between them;
- methodological context – it is a method of systematic comparison of objects, phenomena, etc. on the basis of establishing equivalence between them²⁸.

Well-known scientists Hendriksen and Van Breda treat the concept of comparability through the prism of accounting theory. In their opinion, comparability is a property of information that allows users of financial statements to determine the similarities and differences between two series of economic phenom-

²⁷ Golochalova I., op. cit.

²⁸ Bezruchuk S., Myskiv L., *Problematic issues of comparability as a qualitative characteristic of useful information in financial statements*, "Problems of theory and methodology of accounting, control and analysis" 2021, 3(50), retrieved from: [https://doi.org/10.26642/pbo-2021-3\(50\)-3-7](https://doi.org/10.26642/pbo-2021-3(50)-3-7) [accessed: 14.02.2022].

ena²⁹. Exploring the problem of multivariant accounting methodology, Adintsova and Jhuravleva formulates the conclusion that changes in accounting methodology cannot affect the comparability of financial statements. From her point of view, comparability is achieved by using the same accounting methods for the same business operations at two different enterprises³⁰. Kurt 2020 holds a similar point of view, asking the question: is the freedom to choose an accounting policy useful from the point of view of the owners and managers of the company? Maybe the use of non-standard solutions in the development of accounting policies only harms and leads to a lower degree of comparability? In his opinion, the application of different valuation methods, accounting models, and disclosure approaches can lead to deviations on specific items of financial statements. As a result a low level of comparability, and consequently a decrease in the usefulness of the financial statements³¹.

Obviously, the above authors are united in the understanding that comparability is achieved by identifying objects of observation, based on the establishment of their similarities and differences. In addition, the use of a unified approach in the methodology of assessment of objects of observation makes it possible to achieve consistency in the presentation of information about the change in their value.

This interpretation of comparability corresponds to the definition of comparability in the Concept of IFRS. Thus, according to the concept of qualitative characteristics, consistency implies using the same methods for the same items either in different periods within the same entity or in the same period but by different entities. The concept of consistency is not identical to the concept of comparability, although it is related to it. Since comparability is considered a qualitative attribute of information usefulness for investors and other stakeholders, its achievement is the goal of reporting. In this process, one of the ways to achieve this goal is to present information in a consistent manner.

The national accounting and reporting system focuses on the temporal nature of information presentation to qualify it as comparable (see table 1). According to this interpretation, comparability is identified with consistency, which is methodologically incorrect.

Methodologically contradictory is also the duality of interpretation of the economic fact, which according to the Law No. 287 is designated as the key element of the assessment of the financial situation (see table 1). A visual format

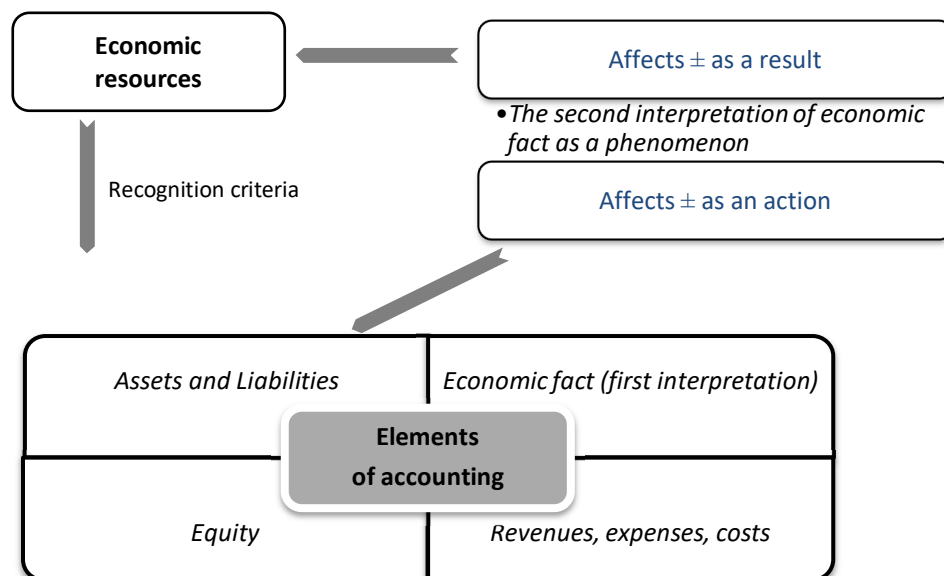
²⁹ Hendriksen El. S., van Breda M. F., *Accounting Theory*, Moscow 2000, p. 97.

³⁰ Adintsova N., Zhuravleva E., *Unification of Accounting Methodology: The Problem of Correlation Between the Concept of Multivariance and Comparability of Financial Statements*, "Bulletin of the North Caucasus Federal University", № 2 (77), 2020, retrieved from: <https://dspace.ncfu.ru/bitstream/20.500.12258/13945/1/25-29.pdf> [accessed: 20.02.2022].

³¹ Kurt A., *Why and why is comparability of reporting so important?*, "Bulletin GAAP", 2020, retrieved from: <https://gaap.ru/news/160893/> [accessed: 14.07.2022].

of the evidence base for this contradiction is the diagram presented in Figure 1³².

Fig. 1. Scheme of interrelation and interdependence of accounting elements in the reporting system of RM.



Source: own elaboration.

In accordance with the definition of an economic fact as an element of accounting (the first interpretation), it is included in the same classification grouping with assets, liabilities, equity, etc. The content of the scheme (fig.1) is based on this approval.

It is well known that the criterion for determining the element of accounting is the right of an economic entity, which it implements in relation to the object of these rights by virtue of its powers. The exception is an economic fact. An economic fact (transaction, event, phenomenon) is characterized as an action (the second interpretation), in the performance of which the objects of the subject's rights arise. Recognized rights of the subject change the state of elements of accounting: directly the state of assets, liabilities, income, expenses, and indirectly the state of equity (see fig.1). The following inference will serve as the result of these reflections: the accounting element is independently capable of changing its state, and thus affects the financial position of the reporting entity.

The paralogous of the situation is confirmed by the definition of recognition given in Law No. 287. Recognition means the reflection in the accounting and

³² Law No. 287 of December 15, 2017 of the Republic of Moldova „On Accounting and Financial Reporting”, with modification 27.02.2020...

presentation in the financial statements of an element of accounting that meets the definition and meets the criteria for its recognition. However, what are the recognition criteria for an economic fact? Of course, they do not exist in the Law, because they do not actually exist. In our opinion, there is a methodological error, made as a result of ignoring the rule of classification on the basis of a common criterion inherent in all the objects under study. This error led to the fact that in the accounting system of RM the economic fact has a dual and paralogical nature³³.

Now let us dwell on the evidence base for the third identified methodological error (see table 2). In the RM accounting system, assets are understood as economic resources, which must meet a number of criteria in order to be recognized as such. In this regard, the following questions arise: 1) what should be understood as economic resources? Neither the legislative, nor the regulatory framework of the RM in the field of accounting provides a definition of this concept. But as you know, the success of the development of any theory, concept or paradigm depends on the clarity of the conceptual apparatus; 2) is the list of criteria for recognizing economic resources as an asset indicated in NAS appropriate? The answers to these questions lie in the plane of economic theories.

So, the concept of "economic resources" owes its origin to the resource concept of strategic management. Gradually it was adopted first by management theories, and then, as by the end of the XX century came the understanding that accounting is the "language of business", and the theory of accounting. Initially, the resource concept treated resources as sources of competitive advantage and capabilities of the firm. Exploring the problem of the genesis of ideas and notions in the resource concept Katkalo emphasizes that the evolution of this concept led to the transformation of the notion of "resources". In modern concepts of management are treated as resources that have economic efficiency and form the competitive advantage of the organization³⁴:

- factors of production available in the market, if resources are undifferentiated,
- specific assets of the organization (goodwill, experience) if resources are differentiated.

This interpretation lies at the heart of the definition of "economic resources" enshrined in the Concept of IFRS, version 2018 (see table 1), which, responding to the economic approach to the preparation of financial statements, negates the meaning of the property right to a certain physical object. In addition, in order to recognize a resource as an asset as an element of financial statements,

³³ Ibidem.

³⁴Katkalo V., *Resource Concept of Strategic Management: Genesis of Main Ideas and Concepts*, "Vestnik (Herald) of Saint Petersburg University", Series 8, Issue 2 (32), 2002, p. 33, retrieved from: <https://cyberleninka.ru/article/n/resursnaya-kontseptsiya-strategicheskogo-upravleniya-genezis-osnovnyh-idey-i-ponyatiy-1> [accessed: 14.07.2022].

a necessary condition is the existence of the right of control over the economic benefits that can potentially be derived from its effective use. In this context, the Concept of IFRS notes that the assessment of the existence of control provides for the identification of specific rights to an item of accounting. That is why the IFRS system does not provide identification as a separate condition for the recognition of an asset. This approach is conceptually different from the approach to the recognition of elements of financial statements adopted by the RM accounting system.

As it was mentioned earlier, the legislative and regulatory framework of accounting of RM declared the adoption in their basis of the provisions of both Directive 2013/34/EC and the IFRS system. At the same time, the national accounting system is dominated by the methodology of the continental model of accounting. Since the continental model of accounting is based on the legal approach to the preparation of reporting, where the right of ownership prevails over the function of control, the key element, designated economic operation as determining the financial condition of the enterprise (see table 1).

In this context, it is advisable to clarify the conceptual apparatus of the national accounting system, namely: 1) to use the concept of "resource embodying a property right" instead of the concept of "economic resource"; 2) to exclude "controllability" as a condition for recognizing a resource as an asset.

The above is the argumentation of the *hypothesis H1*: the obvious need for methodological improvement of the accounting system of RM indicates the lack of conceptual space for reporting information that meets the principles of socio-economic paradigm. In this context, we cannot but agree with Grigoroi and Munteanu that, in fact, the structure of the previously existing Law on Accounting has been preserved, so we can talk about its editing, but not about a new law. The new Law No. 287 has not resolved some old problems faced by its predecessor, and therefore the application of the provisions of the law creates confusion regarding its application in practice³⁵.

3. Conceptual assessment of the usefulness of the information perimeter of the Changes in Equity Statement

The effectiveness of the accounting system is evident in the financial report formats used and the methods used to prepare them. It has already been noted that the Concept of IFRS flexibly responded to the requirements of the socio-economic development paradigm, so let us dwell on its provisions, which affect the modeling of financial statements, and in particular, the Changes in Equity Statement (hereinafter, CES). So, according to point 1.12 of the Concept of IFRS in order to fulfill the purpose of the financial statements of the compiling organizations must provide not only information about economic resources, but also about the reasons for their changes. This information is not only useful for the

³⁵ Grigoroi L., N. Muntean, op.cit.

main users of reports when they make decisions such as increasing the efficiency of equity use, attracting new investors, forecasting the growth of capital of the organization as a whole. It allows to estimate the activity of management, how rationally and effectively he fulfilled his obligations on the use and management of economic resources of the reporting organization. Since resources are a set of different rights that can create economic benefits, it is necessary to clearly separate the sources of formation of these rights: borrowed funds and capital, which consists of such forms as financial, human, social and natural capital.

It should be noted that in the context of the transition to the socio-economic development paradigm, many academic economists address the problematic issues of the impact of different forms of capital on the sustainability of economic systems through the prism of interpretation of capital, known as the capital model of Sprugg. This model is adopted by management theory, and in a general sense treats capital as – "this is what I am worth". It is important to emphasize that Sprugg's model is considered the starting point of modern accounting theory.

Now let's dwell on the structure of the CES, adopted by the current accounting system of RM, analyze its structure and evaluate with regard to compliance with the requirements of the socio-economic paradigm. According to Article 167 of the NAS "Presentation of Financial Statements", the format of this report is prescriptive and allows to characterize the existence and changes in the elements of capital during the reporting period. However, along with the generally accepted elements, the NAS provides for disclosure of such sub-elements of capital as unrecorded capital, net profit and used profit, amendments to results, etc. In a generalized form the format of the CES used by the system of NAS is presented in Table 3³⁶.

Table 3. Summary format of the CES according to NAS.

Elements	Sub-elements	Balance at the beginning	Value change		Balance at the end
			Increase	Decrease	
1. Social capital	1.1. Registered capital	X			X
	1.2. Unregistered capital		X		X
.....	X		(X)	X
5. Other elements of equity capital	5.1	X	X		X
	5.2,		X		X

Source: own elaboration.

³⁶ National Accounting Standards "Presentation of Financial Statements"...

Nevertheless, at the first stage of its analysis it becomes clear – in its structure and content it completely duplicates the "Equity" section of a financial report such as the Balance Sheet. In this context, the author asks questions: What is the conceptual purpose of this statement? In this context, the debatable question for which organizations is the national system used to CES? What is the necessity of its preparation or is it only a "tribute" to modern trends?

Let's try to answer these questions. According to the author, in the context of the transition to the socio-economic paradigm, the format of CES is determined by the following factors:

1. *the theory of capital*, which establishes its five elements: 1) authorized capital, 2) share premium, 3) reserves (maintaining the amount of capital and others), 4) revaluation reserves, 5) accumulated profits (the sixth element – the interest of non-controlling shareholders is characteristic of capital only in business consolidation);
2. *the selected equity model*: outsider (anglo-saxon) or insider (continental), the qualitative parameters of which are widely enough considered in the special economic literature. It is appropriate to emphasize that it is the outsider model of equity that is used by the IFRS system. This fact explains the requirement to disclose both changes in the value of equity and the reasons for these changes. In the context of this requirement, the structure of the CES should include a separate segment for disclosure of the reasons for changes and their cost impact on the relevant element of equity;
3. *variety of reasons for equity changes*. Depending on the type of economic events, some changes have a corrective nature, others are the result of profit redistribution; the purpose of others is to maintain the value of capital. Finally, the fourth reasons are caused by the need to assess the contribution of business in the sustainable development of society and the environment;
4. *recognition of new "drivers" of capital growth* and business value in general – such forms of equity as human capital, social-reputation capital, natural capital, which also requires representation.

Assessing the applicability of the above factors to the structure of the CES (see table 3) confirms that the national accounting and reporting system belongs to the continental model.

Guided by the above considerations, the author proposes a reconstruction of the CES format, which meets the methodology of capital accounting and provides a link between the elements of the Balance Sheet and the Income Statement, without duplicating either their structure or content. The generalized structure of the proposed CES format is presented in Table 4.

Table 4. Suggested format of the Changes in Equity Statement.

Type and reasons for changes	Elements of Equity					Result
	1)	2)	3)	4)	5)	
Corrective changes: changes in accounting policies; material errors		X	X	X	X	X
Changes related to the redistribution of profits: net profit, dividend accrual, etc.		X	X	X	X	X
Changes related to financial activities: issue of shares and repurchase of shares, placement of financial instruments, etc.		X	X	X	X	X
Changes related to the assessment of ESG behavior of business: contributions to human capital, social and reputation capital, natural capital; transformation of forms of capital	X	X	X			X
Result	X	X	X	X	X	X

Source: own elaboration

The author's approach, presented in Table 4, agrees with the vision of the structure of CES of such a number of researchers. So according to the estimates of Guohui et al. the accounting and reflection in the financial statements of the accumulated human and social capital of enterprises of the SB sector is a prerequisite for their development. In their view, this information can be used not only to improve the availability of credit or attract investment, but also to attract workers with high professional skills and competencies, political or financial standing³⁷. At the same time, as stressed by Gallardo-Vázquez and Lizcano-Álvarez it is important to establish which ESG indicators are specific to the SB sector, evaluate them and reflect them appropriately in financial statements³⁸.

It is appropriate to emphasize that in the reporting format adopted by the RM reporting system, the causes of changes and their cost impact (adjustments of the results of previous years, net profit, profit used) are presented. However, they are treated as elements of capital, which is methodologically incorrect. So, the answer is obvious - the modification of the CES format in the national accounting system is an objective necessity. In this context, the author is of the opinion that the content of the CES prepared according to NAS does not meet the requirements of the socio-economic paradigm in which the enterprises of RM, including SB, are functioning. The above is a theoretical justification and practical argumentation of the hypothesis H2 put forward.

³⁷ Guohui H., Meimei Z., Le Z., op.cit.

³⁸ Gallardo-Vázquez D., Lizcano-Álvarez J. L., *CSR-related competitiveness and legitimacy in MSMEs*, "Economics and Sociology", 13(1), 2020, retrieved from: <https://doi.org/10.14254/2071-789X.2020/13-1/4> [accessed: 11.06.2022].

Conclusions. The implementation of the research methodology was carried out on the basis of the developed algorithm:

1. conceptual analysis of the efficiency provisions of the regulatory and legal framework of accounting and reporting system of RM;
2. conceptual interpretation of units of analysis of accounting and financial reporting system of RM and assessment of its quality;
3. conceptual assessment of the usefulness of the information perimeter of the Changes in Equity Statement.

As a result of the *first step of the algorithm*, the author found that the current accounting and reporting system in the RM is qualified as mixed, because it contains the requirements of both IFRS and Directive 2013/34/EU. At the same time, the fact of domination of the continental model of accounting in the national accounting and reporting system was revealed (table 1). In addition, on the basis of the application of the comparison method, methodological errors that reduce the level of usefulness of the information in the financial statements of the enterprises of the SB sector of the Republic of Moldova were identified. The result of the application of this scientific method is embodied in Table 2. The result of the *second step* of the algorithm was a conceptual interpretation of the identified methodological contradictions and justification of the reasons for their occurrence. In this part, the author proved the duality of interpretations and paralogism of concepts accepted by the national accounting system. On the basis of the method of modeling, the scheme (fig. 1) was developed to visualize the proof of the dual and paralogical nature of the concept of economic fact, adopted in the regulatory framework of accounting and reporting of the RM. As a result of this part of the study, proposals for improving the conceptual apparatus of the NAS system have been made. As a *result of the third step* of the algorithm, the structure and information field of the CES, adopted in the national reporting system, were assessed. The factors determining the content of the report were also identified and a brief justification of their importance was given. As a result of the study, a model of the specified report (table 4), meeting the requirements of the socio-economic paradigm, was proposed. This model takes into account the provisions of the modern theory of capital and at the same time provides the relationship between the elements of the Balance Sheet and Income Statement, without duplicating either their structure or content. The results of the first two steps of the research algorithm are theoretical in nature, while the results of the third step are applied, and represent practical recommendations for modeling financial reporting forms in the NAS system. An important result of the study is the justification of the hypotheses H1 and H2, and the synthesized general and private conclusions.

Based on the results of the study, this paper formulates the main conclusions:

- 1) The current accounting and reporting system of RM is contradictory and ambiguous, which reduces the usefulness of financial reporting of organiza-

tions; 2) The accounting and financial reporting system of RM lacks a coherent conceptual space in terms of determining the structure and formation of useful information on the results of activities of enterprises of the SB sector, functioning under the conditions of the socio-economic paradigm.

Particular conclusions of the study include: 1) the identified differences with the principles of the IFRS system indicate the existing conceptual contradiction between them, which will make it difficult to implement the socio-economic reporting paradigm without making changes in the legislative and regulatory framework of RM; 2) the problems of the current national accounting system, qualified as mixed, are due to its intermediate position between the IFRS system and the EU Directive; 3) Changes in Equity Statement in the financial reporting system of the Republic of Moldova has a formal character and in order to meet the socio-economic orientation of reporting its modernization is an objective need; 4) the provisions of the Concept of IFRS provide for the design of the Changes in Equity Statement according to the requirements of socio-economic paradigm; 5) it is important to continue to improve the accounting system and develop a methodology that meets modern requirements for the presentation of useful financial statements to investors and other interested parties.

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BUSINESS INNOVATION IN EMERGING MARKETS – ANALYSING INNOVATIVE ENTERPRISES USING THE PLS-SEM AND NCA METHODS

Abstract

The study entails an examination of the factors needed for the emergence of business innovation, in the context of a developing economy, based on representative data from the Global Entrepreneurship Monitor 2021. Drawing on the theories in the literature, the impact mechanism of the entrepreneurial innovation development in our model has been assumed to involve a three-sided impact. The study builds on the entrepreneurial side effects, based on the classical Schumpeterian theory as well as incorporating the enterprises' productive-side effects into the model, defining the model as resultant from socioeconomic macrocontext effects. The analysis of our model has been tested and analyzed using partial least squares - structural equation modeling and the necessary condition analysis. Our results show that business innovation requires not one factor, but a combination of factors. The system needs visionary entrepreneurs, who can stimulate innovation, along the concept of sustainability. An economically prosperous business with international connections which views challenges as opportunities, however, also constitutes an important factor providing proper framework for new products and services. Adequacy of the socio-economic macro-context is essential as well, as it too contributes to the development of entrepreneurship and thus to the creation of entrepreneurial innovation.

Keywords: business innovation, entrepreneurial innovation, technological innovation, developing economy, PLS-SEM, NCA.

INNOWACJE BIZNESOWE NA WSCHODZĄCYCH RYNKACH – ANALIZA INNOWACYJNYCH PRZEDSIĘBIORSTW PRZY UŻYCIU METOD PLS-SEM I NCA

Streszczenie

W artykule przedstawione zostały czynniki potrzebne do pojawienia się innowacji biznesowych w krajach rozwijających się, na podstawie reprezentatywnych danych z Global Entrepreneurship Monitor 2021. Opierając się na teoriach zaczerpniętych z literatury przedmiotu, Autorzy zakładają, że mechanizm oddziaływania rozwoju innowacji biznesowych w zaprezentowanym modelu ma charakter trójstronny. Z jednej strony model opiera się na efektach ze strony przedsiębiorcy, bazujących na klasycznej teorii Schumpetera, z drugiej – do modelu włączone są produkcyjne



efekty przedsiębiorstw, a z trzeciej – model można zdefiniować jako wynik skutku makrokontekstu społeczno-ekonomicznego. Model jest testowany i analizowany przy użyciu metody cząstkowych najmniejszych kwadratów – modelowania równań strukturalnych i analizy warunków koniecznych. Zaprezentowane w artykule wyniki pokazują, że tworzenie innowacji biznesowych nie opiera się wyłącznie na jednym czynniku, ale jest wynikiem ich kombinacji. System potrzebuje wizjonerskich przedsiębiorców, którzy potrafią stymulować innowacje zgodnie z koncepcją zrównoważonego rozwoju. Jednak dobrze prosperujące gospodarczo i ekonomicznie przedsiębiorstwo z międzynarodowymi powiązaniami, które postrzega wyzwania jako szanse, jest również ważnym czynnikiem, mogącym zapewnić odpowiednie ramy dla tworzenia nowych produktów i usług. Duże znaczenie ma jednak społeczno-ekonomiczny makrokontekst, który również przyczynia się do rozwoju przedsiębiorczości, a tym samym do tworzenia innowacji przedsiębiorczych.

Słowa kluczowe: innowacja biznesowa, innowacja przedsiębiorcza, innowacja technologiczna, gospodarka rozwijająca się, PLS-SEM, NCA.

Introduction – Business Innovation

Enterprises are complex drivers of economic growth¹. Thus, enterprises' ability to innovate is a key factor in stimulating economic growth². Consequently, the study of innovation has always played a key role in business research. Recently, however, an even greater increase in research on “innovative” or “productive” enterprises has been noted³. However, most studies explore entrepreneurial

¹ Acs Z. J., Szerb L., *Entrepreneurship, economic growth and public policy*, “Small Business Economics” 2007, 28(2–3), pp. 109–122; Audretsch D. B., Keilbach M., *The theory of knowledge spillover entrepreneurship*, “Journal of Management Studies”, 2007, 44(7), pp. 1242–1254; Audretsch D. B., Peña-Legazkue I., *Entrepreneurial activity and regional competitiveness: An introduction to the special issue*, “Small Business Economics” 2012, 39(3), pp. 531–537; Audretsch D. B., Bonte W., Keilbach M., *Entrepreneurship capital and its impact on knowledge diffusion and economic performance*, “Journal of Business Venturing” 2008, 23(6); Fritsch M., *How does new business formation affect regional development?*, Introduction to the special issue, “Small Business Economics” 2008, 30(1), pp. 1–14; Noseleit F., *Entrepreneurship, structural change, and economic growth*, “Journal of Evolutionary Economics” 2013, 84, pp. 1–23, available online: <http://dx.doi.org/10.1007/s00191-00012-00291-00193> [Access: September 2022]; Spencer A. S., Kirchhoff B. A., White C., *Entrepreneurship, innovation, and wealth distribution—The essence of creative destruction*, “International Small Business Journal” 2008, 26(1), pp. 9–26.

² Wong P. K., Ho Y. P., Autio E., *Entrepreneurship, innovation and economic growth: Evidence from GEM data*, “Small Business Economics” 2005, 24(3), pp. 335–350.

³ Audretsch D. B., Keilbach M., *The theory of knowledge...*, pp. 1242–1254; Baumol W. J., *The microtheory of innovative entrepreneurship*, Princeton University Press, Princeton 2010; Davidsson P., *Nascent entrepreneurship: Empirical studies and developments*, “Foundations and Trends in Entrepreneurship” 2006, 2(1), pp. 1–76; Samuelsson M., Davidsson P., *Does venture opportunity variation matter? Investigating systematic pro-*

innovation in developed economies; thus, we know little about the extent to which enterprises in developing economies implement innovation-driven entrepreneurship. To this end, in our paper, we examine the factors that contribute to the emergence of innovation among enterprises in the context of a developing economy. We supplement the results of the literature from two sides: 1) on the one hand, we place the development of innovation in a cause-and-effect system in the case of a semi-peripheral country, 2) on the other hand, based on the theories of the literature, we determine which theoretical directions can be used to describe the development of innovation in the given country. With all of this, our aim is to provide an answer to the process of the development of innovation in the case of a semi-peripheral country, and to explain our results in accordance with existing theories.

Linking innovation and business is, by no means, a new idea. The classical theories of enterprise theory have all given prominence to the concept of innovation. Schumpeter's entrepreneurial theory has defined innovation as a central concept of entrepreneurs⁴. It creates "creative destruction", which can underpin long-term economic growth. Innovation, in this sense, is a necessary condition for the action of the "cultural innovator", that is, the entrepreneur. Contradict Schumpeter's theory, Baumol did not interpret business innovation from the demand side of entrepreneurs but from supply the side of enterprises and from the competition among them⁵. According to his theory, productive enterprises are the ones primarily encouraging entrepreneurs to innovate and not the other way around. Moreover, in Kirzner's theory, the exploration of opportunity as a source of innovation is a central element of entrepreneurship⁶.

In our paper, we work with a complex definition of entrepreneurial innovation. Based on this, business innovation in our research is a successful realisation and materialisation of something new; this can refer to gradual, radical, or revolutionary changes in techniques, products, processes, ways of thinking, or organisations⁷. Innovation is about creating positive change, which reduces costs and maximises productivity⁸. Additionally, we focus on technological innovation, technology change, and technology development. However, we make

cess differences between innovative and imitative new ventures, "Small Business Economics" 2009, 33(2), pp. 229–255.

⁴ Schumpeter J., *The theory of economic development*, Harvard University Press, Harvard 1934.

⁵ Baumol W. J., *Entrepreneurship in economic theory*, "American Economic Review" 1968, 58, pp. 64–71.

⁶ Kirzner I. M., *Competition and entrepreneurship*, University of Chicago Press, Chicago 1973.

⁷ McKeown M., *The truth about innovation*, Pearson/Financial Times, London 2008.

⁸ Taylor S., Schroeder H., *Inside Intuit: How the makers of Quicken beat Microsoft and revolutionized an entire industry*, SAGE, Los Angeles-London-New Delhi-Singapore-Washington DC-Melbourne 2003.

a distinction between an idea and an innovation, the latter of which is the first successful implementation of an idea in practice.

Based on the literature, the emergence of entrepreneurial innovation is assumed to be a three-sided effect. It is assumed, in line with the classical Schumpeterian theory, as an effect from the entrepreneur side (individual); as an effect from the enterprise itself (micro-context); and as a result of socio-economic mechanisms (macro-context).

Attempts to understand business innovation from the side of the entrepreneur can be traced back to the classical theories of Schumpeter and Weber⁹. In these theories, the understanding of the entrepreneur's personality, innovation attitude, and psychological and sociological characteristics are key elements for the creation of business innovation. Schumpeter, in his theory, linked innovation to the person (the entrepreneur) inextricably, through which the economic activity that changes the functions of production (the enterprise) is created. Innovation is, thus, assumed to be the key function of the sociological archetype of an entrepreneur¹⁰. Kirton's high-impact theory is strongly related to this. His adaptation and innovation theory explores the styles, cognitive elements of creativity, decision-making, and problem-solving processes and outlines the profile of an innovative entrepreneur. In Kriton's adaptation and innovation theory, the innovator is constructed as the opposite of the adapter. The innovator reinterprets structural and cognitive frameworks with relatively high risk-taking. In our research, we use parts of Kriton's theory, as in the mapping of the innovation capacity of a business, we emphasise the entrepreneur's personality as playing a key role. Thus, we focus on what visions can be related to entrepreneurs, how they can be placed in a creative-cognitive context, what their incentives are, why they started their business, how they perceive problems, and how they respond to them¹¹.

According to the literature, business innovation occurs mainly in firms that combine multiple abilities, knowledge, resources, and skills¹². Therefore, in the analysis of the implementation of innovation, the impact of the entrepreneur and that of the enterprise are worth examining. Higher levels of economic activity, for example, create new business opportunities, which means that entrepreneurs may become interested in entering new markets and exploiting new business opportunities by creating more competitive products. Therefore, the enterprise's economic activity positively affects innovation. Consequently, en-

⁹ Schumpeter J., op. cit.; Weber M., *Economy and society: An outline of interpretive sociology*, University of California Press, California 1978, pp. 1921–1922.

¹⁰ Schumpeter J., op. cit.

¹¹ Kriton M., *Kirton adaption-innovation inventory manual* (2nd ed.), Occupational Research Centre, Hertford 1987.

¹² Fagerberg J., *Innovation: A guide to literature*, [In:] J. Fagerberg D. C. Mowery, R. R. Nelson, (Eds.), *The Oxford handbook of innovation*, Oxford University Press, Oxford 2006, pp. 1–27.

trepreneurship will be the micro-context in which the realisation of innovation can take place along with the right combination of factors¹³. Since the 1960s, several studies have addressed the in-house research and development (R&D) department as a successful basic criterion for innovation¹⁴. The literature shows that the size of the R&D department is a stronger factor in the emergence of business innovation than the type of market in which the business is operating¹⁵. The basic tool for measuring innovation, present value benefit/cost analysis, has emerged from this research direction. This is because the present value costs of developing, deploying, and operating a new technology can be used to evaluate the decision to introduce a new technology in a given enterprise¹⁶. Of course, this does not mean that the type of market and market entry cannot be key factors in the emergence of innovation. Numerous studies have shown that new and small firms can gain rapid entry into new markets due to their excellent innovation performance, which has an incentive effect on innovation¹⁷.

Since the 2000s, certain segments of innovation research that emphasise the role of enterprises in the innovation process have begun to build their theories on the typology of the sustainable enterprise¹⁸. Indeed, the market system has seen the emergence of sustainable development companies that have created innovative techniques, products, or processes that drive environmental or social goals and succeed in the consumer market. In these enterprises, environmental and social goals are an integral part of these businesses' economic strategy¹⁹. As a result, the weight of entrepreneurial approaches to achieving social

¹³ Hayton J. C., *Promoting corporate entrepreneurship through human resource management practices: A review of empirical research*, "Human Resource Management Review" 2005, 15(1), pp. 21–41; Zotto C. D., Gustafsson V., *Human resource management as an entrepreneurial tool?* [In:] R. Barret, S. Mayson (Eds.), *International handbook of entrepreneurship and HRM*, Edward Elgar, Cheltenham 2008, pp. 89–110.

¹⁴ Arrow K. J., *Economic Welfare and the Allocation of Resources for Invention*, [In:] *The rational direction of inventive activity: A conference*, Princeton University Press, Princeton 1962.

¹⁵ Hayton J. C., op. cit., pp. 21–41.

¹⁶ Grossman G. M., Helpman E., *Endogenous innovation in the theory of growth*, "Journal of Economic Perspectives", 1994 8(1), pp. 23–44.

¹⁷ Jewkes J., Sawers D., Stillerman R., *The sources of invention*, Macmillan, New York 1958.

¹⁸ Hockerts K., Wüstenhagen R., *Greening Goliaths versus emerging Davids. Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship*, "Journal of Business Venturing" 2010, 23, pp. 56–72.

¹⁹ Dacin M. T., Goodstein J., Scott R. W., *Institutional theory and institutional change: Introduction to the special research forum*, "Academy of Management Journal" 2002, 45(1), pp. 45–56; DiMaggio P. J., *Interest and agency in institutional theory*, [In:] L. G. Zucker (Ed.), *Institutional patterns and organizations: Culture and environment*, Cambridge 1988, pp. 3–23; Holm P., *The dynamics of institutionalization. Transformation processes in Norwegian fisheries*, "Administrative Science Quarterly" 1995, 40(3), pp. 398–422;

and environmental goals in changing market contexts has strengthened in theoretical research as well. These theories build on the fact that behind the achievement of social goals and the emergence of entrepreneurial activities for environmental development are specific market failures that firms seek to address through innovation²⁰.

Importantly, neither the individual (entrepreneur) nor the enterprise itself is constantly in an innovative spirit. Rather, innovation implies that when an opportunity arises, entities can seize it. This suggests that the socio-economic environment plays a key role in the mechanism of action of innovation. Agreeing with Stevenson and Jarillo, we believe that the emergence of innovative enterprises is not merely an entrepreneurial skill or exclusively an attribute of a particular enterprise, but a process²¹. This process is embedded in a socio-economic-environmental context, examining which in the case of developing economies is particularly important. This is because although, ideally, an entrepreneur or a business should be innovative, in many emerging markets, the scope for innovation is often limited. For example, due to a lack of capital, imitating already developed products and services is considered more convenient and less of an investment than bringing new products and services to market. However, other contextual effects such as the monetary policy or the supportive effect of the social atmosphere on innovation are also influential²². Investigating developing countries in this sense is imperative due to their scarcity of important resources. Thus, for companies in developing countries opportunities for innovation and for demonstrating entrepreneurship skills are much less and rarely explored and pursued. This is supported by the fact that these companies tend to place more emphasis on the development side of R&D investment than on the research side; thus, they emphasise incremental rather than radical progress. This results in a lower expected return on business innovation value²³. Furthermore, in most developing countries, entrepreneurs do not earn high social prestige for all the value they bring to the economy. Hence, the contextual role of culture must be included in the analysis of innovation to have

Ostrom E., *Governing the commons: The evolution of institutions for collective action*, Cambridge University Press, Cambridge 1990.

²⁰ Cohen B., Winn M., *Market imperfections, opportunity and sustainable entrepreneurship*, "Journal of Business Venturing" 2007, 22, pp. 29–49; Cohen B., Smith B., Mitchell R., *Toward a sustainable conceptualization of dependent variables in entrepreneurship research*, "Business Strategy and the Environment" 2008, 17(2), pp. 107–119.

²¹ Stevenson H. H., Jarillo J. C., *Preserving entrepreneurship as the company grows*, "Journal of Business Strategy" 1990, 6(1), pp. 10–23.

²² Fagerberg J., op. cit., pp. 1–27.

²³ Xu X., Sheng Y., *Productivity spillovers from foreign direct investment: Firm-level evidence from China*, "World Development" 2012, 40(1), pp. 62–74; Zhang Y., Li H., Li Y., Zhou L.-A., *FDI spillovers in an emerging market: The role of foreign firms' country origin, diversity and domestic firms' absorptive capacity*, *Strategic Management Journal* 2010, 31(9), pp. 969–989.

a systemic understanding of innovative enterprises in developing markets. In this case, according to the relational, constructivist approach, culture includes cultural identities, and thus, cultural resources can be interpreted as entities created in the interactions between different social groups²⁴. The constructivist approach to culture is a particularly useful for understanding the macro-context of innovation. This is because innovations are cultural and material in nature at the same time²⁵; thus, technological innovations reflect sociocultural trends and introduce new cultural interpretations and practices²⁶.

However, the inclusion of the entire macro-context in the analysis is not an easy task due to its complexity. In addition to culture, social regulators must also take into account the analysis of social “rules of the game”²⁷, and the values of regulators that are rooted in social, organisational, or individual needs to be included as well²⁸. Additionally, moving away from explicit knowledge, cognitive effects that explore deeper beliefs and values that unconsciously guide either the entrepreneur or company behaviour should be considered²⁹. In our research, we create a simulation of the macro-context, in which we examine the effect of the macro-context on innovation only through cognitive, contextual beliefs.

The triple (entrepreneur–business–environment) theoretical impact mechanism is an appropriate context for exploring business innovation in developing countries. As mentioned earlier, the study of developing countries deserves special attention in the field of innovation research for several reasons. Indeed, developing countries are countries with strong entrepreneurial intensity³⁰,

²⁴ Soderberg A. M., Vaara E. (Eds.), *Merging across borders: People, cultures and politics*, Copenhagen Business School Press, Copenhagen 2003; Weick K. E., *Sensemaking in organizations*, SAGE, Los Angeles-London-New Delhi-Singapore-Washington DC-Melbourne 1995.

²⁵ Jancsary D., Meyer R., Höllerer M. A., Boxenbaum E., *Institutions as multimodal accomplishments: Towards the analysis of visual registers*, Emerald 2018.

²⁶ Ibidem.

²⁷ North D. C., *Institutions, institutional change and economic performance*, Cambridge University Press, Cambridge 1990; Scott W. R., *Institutions and organizations: Ideas and interests*, SAGE Los Angeles- London-New Delhi-Singapore-Washington DC-Melbourne 2007.

²⁸ Bruton G. D., Ahlstrom D., Li H.-L., *Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future?*, “Entrepreneurship Theory and Practice” 2010, 34(3), pp. 421–440; March J. G., Olsen J. P., *Discovering institutions: The organizational basis of politics*, Free Press, Washington 1989; Scott W. R., op.cit.

²⁹ Bandura A., *Social foundations of thought and action: A social cognitive theory*, Prentice Hall, Hoboken 1986; Bruton G. D., Ahlstrom D., Li H.-L., *Institutional theory...*, pp. 421–440.

³⁰ Vaz T. D., Nijkamp P., *Knowledge and innovation: The strings between global and local dimensions of sustainable growth*, “Entrepreneurship and Regional Development” 2009, 21(4), pp. 441–455.

as the functioning of an informal economy and economic constraints strengthen the presence of small businesses. Conversely, as real incomes are low in developing countries, an entrepreneurial career is more favourable, and sometimes, it is the only option that allows individuals to earn a decent income. Furthermore, a growing trend suggests that networks are the entities that facilitate the flow of knowledge within and between regions and are key sources of innovation and economic growth³¹. According to endogenous economic growth models, the sources of regional economic growth are increasingly based on the impact of the production, distribution, and use of knowledge within and between regional economies³². The knowledge-based economy, which focuses on innovation, is built through the aforementioned networks³³. Regions can become “incubators for new ideas” and create opportunities for entrepreneurship and the discovery of valuable new knowledge³⁴. For this reason, it is essential to analyse developing countries in innovation research, as their interaction with developed countries outlines the process of innovation.

1. Methodology: Process Tracing, PLS-SEM, and NCA

Our research fits into the methodological framework of process tracing, which is primarily an inductive methodological approach useful in theory development³⁵. Our theoretical framework includes hypothetical, interrelated events and processes that require the (re)constitution of agents through social and economic structures, and an analysis of cognitive processes and process tracing was performed to examine complex mechanisms of action³⁶. In our research,

³¹ Huggins R., Izushi H., *Competing for knowledge: Creating, connecting and growing*, Routledge, Abingdon-on-Thames 2007; Huggins R., Johnston A., *Knowledge networks in an uncompetitive region: SME innovation and growth*, “Growth and Change” 2009, 40(2), pp. 227–259.

³² Grossman G. M., Helpman, op.cit. pp. 23–44; Harris R. G., *The knowledge-based economy: Intellectual origins and new economic perspectives*, “International Journal of Management Reviews” 2001, 3(1), pp. 21–40; Ibert O., *Towards a geography of knowledge creation: The ambivalences between ‘knowledge as an object’ and ‘knowing in practice’*, “Regional Studies” 2007, 41(1), pp. 103–114; Ibert O., *Towards a geography of knowledge creation: The ambivalences between ‘knowledge as an object’ and ‘knowing in practice’*, “Regional Studies” 2007, 41(1), pp. 103–114; Zucker L. G., Darby M. R., Furner J., Liu R. C., Hongyan M., *Minerva unbound: Knowledge stocks, knowledge flows and new knowledge production*, “Research Policy” 2007, 36(6), pp. 850–863.

³³ Romer P., *Increasing returns and long run growth*, “Journal of Political Economy” 2007, 94(5), pp. 1002–1037.

³⁴ Glaeser E. L., *2002 Learning in cities*, “Journal of Urban Economics” 2002, 46(2), pp. 254–277; Ikeda S., *The meaning of ‘social capital’ as it relates to the market process*, “Review of Austrian Economics” 2008, 21(2/3), 167–182.

³⁵ Bennett A., Checkel J. T. (Eds.), *Process tracing*, Cambridge University Press, Cambridge 2015.

³⁶ Blatter J., Haverland M., *Designing case studies*, Palgrave MacMillan, London 2012.

process tracing was applied to investigate and test theoretical causal chains that contain both the mechanisms of action and the agents.

Process tracing analysis was performed using partial least squares-structural equation modelling (PLS-SEM). PLS-SEM is a method of analysing complex systems; it provides a system-wide interpretation. On the one hand, from a structural analysis point of view, it approaches the data points with substantive hypothesis testing to explore the relationships between exogenous and endogenous latent variables, and on the other hand, it builds on and analyses system theory at the system level³⁷. When examining complex systems such as business innovations³⁸, examining the explanatory variables separately is insufficient; analysing them at the system level would be more worthwhile. The effects in the model of business innovations form a nonlinear³⁹, third-order system⁴⁰, which is far from the equilibrium⁴¹ and has multiphase correlations⁴² that can be described by autopoiesis⁴³, structure, hierarchy⁴⁴, and control parameters, respectively. Therefore, being a multivariate technique that can capture latent dimensions and examine their combined effects at a systemic level, SEM is an appropriate method for researching business innovations in developing economies⁴⁵. It allows the simultaneous examination of the whole set of equations and, where appropriate (e.g., when evaluating interactions), the correction of errors in the equations, as it simultaneously estimates the model

³⁷ Hair J., Hult G. T. M., Ringle C., Sarstedt M., *A primer on partial least squares structural equation modeling (PLS-SEM)*, Sage, London 2016.

³⁸ Byrne D., Callaghan G., *Complexity theory and the social sciences: The state of the art*, Routledge, London 2013.

³⁹ Nicolis G., *Introduction to nonlinear science*, Cambridge University Press, Cambridge 2012.

⁴⁰ Deacon T. W., *Three levels of emergent phenomena*, [In:] A. Murphy, L. Stoeger (Eds.), *Evolution and emergence: Systems, organisms, persons*, Oxford University Press, Oxford 2007, pp. 81–110.

⁴¹ Reed M., Harvey D. L., *Social science as the study of complex systems*, [In:] L. D. Kiel, E. Elliott (Eds.), *Chaos theory in the social sciences*, University of Michigan Press, Michigan 1996, pp. 295–324.

⁴² DeLanda M., *Intensive science and virtual philosophy*, Continuum, London 2005, pp. 81–110.

⁴³ Maturana H., Varela F., *Autopoiesis and cognition: The realization of the living*, Springer, Berlin 1980.

⁴⁴ Cilliers P., *Boundaries, hierarchies and networks in complex systems*, "International Journal of Innovation Management" 2001, 5(2) pp. 134–147.

⁴⁵ Dijkstra T. K., Henseler J., *Consistent and asymptotically normal PLS estimators for linear structural equations*, "Computational Statistics & Data Analysis" 2015, 81(1), pp. 10–23, available online: <https://doi.org/10.1016/j.csda.2014.07.008> [Access: September 2022].

parameters and the fit of the model⁴⁶. All this enables it to compare the coefficients simultaneously. SEM, thus, provides a uniform framework for fitting and flexibly testing a number of linear and nonlinear models.

PLS-SEM seeks to maximise the full explained variance of endogenous constructs/indicators when estimating model parameters⁴⁷. Meanwhile, it does not make a priori distribution assumptions; thus, it does not work based on pre-determined (“thumb”) statistics⁴⁸. As a result, it treats the constructs as a complex system and uses the full variance to estimate the parameters of the model and not to explain it. PLS-SEM is a two-layer modelling process. The first layer (measurement model) consists of the latent variables that are generated from the measured variables. Thus, the first layer captures the relationship between the manifest and the latent variables. The creation of measurement models can be reflective or formative.⁴⁹ The second layer (structural model) identifies the causal relationships between the latent variables. The evaluation of the measurement models is based on the value of multicollinearity (variance inflation factor [VIF]) developed for determining the reliability of internal consistency, the reliability of indicators (average variance extracted [AVE]), the convergence validity, and the heterotrait-monotrait ratio (HTMT)⁵⁰. In the case of reliable and valid measurement models, it is possible to move on to the evaluation of the structural model, for which several metrics were used as well. In the models, we measured the direct, indirect, and total effects, and their strength is expressed as the standardised path coefficients (β s) and their significance⁵¹. Path coefficients range from -1 to +1, where higher absolute values indicate stronger (predictive) relationships between constructs. The commonly used p value and the explanatory force f^2 were also used to evaluate the model. Perhaps the best-known statistic to quantify the magnitude of the prediction error for the whole model is the root mean square error of predictions (RMSE), but this measure is rarely used for PLS-SEM. Rather, the PLS-SEM methodology uses the standard-

⁴⁶ Johnson J. S., Sohi R. S., *The curvilinear and conditional effects of product line breadth on salesperson performance, role stress, and job satisfaction*, “Journal of the Academy of Marketing Science” 2014, 42(1), pp. 71–89.

⁴⁷ Hair J., Matthews J. F., Matthews L. M., Sarstedt M., *PLS-SEM or CB-SEM: Updated guidelines on which method to use*, “International Journal of Multivariate Data Analysis” 2017, 1(2), pp. 107–123, available online: <https://doi.org/10.1504/IJMDA.2017.10008574> [access: September 2022].

⁴⁸ Reinartz W., Haenlein M., Henseler J., *An empirical comparison of the efficacy of covariance-based and variance-based SEM*, “International Journal of Research in Marketing” 2009, 26(4), pp. 332–344, available online: <https://doi.org/10.1016/j.ijresmar.2009.08.001> [access: September 2022].

⁴⁹ The reflective approach seeks to maximise overlap between indicators, while the formative model seeks to minimise it.

⁵⁰ Jöreskog K. G., Wold H. O., *Systems under indirect observation: Causality, structure, prediction*, North Holland, Amsterdam-New York- Oxford 1982.

⁵¹ Hair J., Matthews J. F., Matthews L. M., Sarstedt M., op. cit., pp. 107–123.

ised root mean square residual (SRMS) and the Bentler and Bonett index, also known as the normed fit index (NFI). SRMS converts both the sample covariance matrix and the theoretical covariance matrix into correlation matrices. The SRMS allows the measurement of the differences between the average magnitude of observed and expected correlations as an absolute measurement for the model's fit criterion. The NFI uses the Chi^2 value from the null model as a measure of fit of the model⁵².

To further explore the mechanisms of effects in our model, we supplemented our PLS-SEM study with necessary condition analysis (NCA), which is a methodology developed to complement multiple regression and structural equation modelling⁵³. NCA helps identify specific bottleneck criteria; in other words, NCA can show which predictors are essential and to what extent, to achieve a given outcome variable. For each observed variable, NCA uses a rectangular coordinate system to represent the values of the predictor (X-axis) and the outcome variable (Y-axis). The size of the empty area in the upper left corner of the coordinate system (drawn by the ceiling line) determines the need for the X predictor for the Y output⁵⁴. Although different techniques can be used to calculate the ceiling line⁵⁵, the most robust method is the application of ceiling envelopment with free disposal hull (CE-FDH), which is the result of a piecewise linear function. According to the NCA, the bottleneck table summarises the extent to which the X_n predictors limit the Y result. Therefore, the bottleneck analysis shows the magnitude of the effect (d_n) and the ratio of the observed area (S_n) to the unobserved area (C_n), which can be expressed by the following equation: $d_n = C_n / S_n$. Dul introduced the general thresholds for interpreting the effect sizes d .⁵⁶ In addition to measuring the effect size, NCA also provides an opportunity to test statistical significance using bootstrapping, thereby also allowing screening for false positives⁵⁷.

2. Sample and Variables

Our research sample is based on the 2021 Hungarian Global Entrepreneurship Monitor (GEM) data. The Hungarian sample was developed by random multi-

⁵² Lee Y., Choi J., *A structural equation model of predictors of online learning retention*, "The Internet and Higher Education" 2013, 16(1), pp. 36–42.

⁵³ Dul J., *Necessary condition analysis (NCA) logic and methodology of "necessary but not sufficient" causality*, "Organizational Research Methods" 2016, 19(1), pp. 10–52; Richter N.F., Schubring S., Hauff S., Ringle C. M., Sarstedt M., *When predictors of outcomes are necessary: Guidelines for the combined use of PLS-SEM and NCA*, "Industrial Management & Data Systems" 2020, 120(12), pp. 2243–2267.

⁵⁴ Dul J., *Necessary condition analysis...*, pp. 10–52.

⁵⁵ Ibidem, pp. 10–52.

⁵⁶ $0 < d < 0.1$ "small" effect size, $0.1 \leq d \leq 0.3$ "medium" effect size, $0.3 \leq d \leq 0.5$ "large" effect size, $0.5 \leq d \leq 1$ "very large" effect size.

⁵⁷ Dul J., *Conducting necessary condition analysis*, SAGE, Los Angeles-London-New Delhi- Singapore-Washington DC-Melbourne 2020.

stage stratified sampling, as a result of which the sample is representative of the regional location of Hungarian small and medium sized enterprises (SMEs) and the age and gender of Hungarian entrepreneurs. The sample constituted 2016 responses. However, for the present analysis, we further narrowed our sample to those respondents who had businesses or planned to start a business. Therefore, we worked with a sample of 366 responses after data cleansing.

In our analysis, we sought a causal explanation of the enterprises implementing innovation, for which we used the space stretched by 16 measured variables (Table 1). The 16 measured variables plotted eight latent variables, which were grouped according to the theoretical categories (entrepreneur–enterprise–environment). Based on this, we measured the effect of individual entrepreneurial innovation with three latent variables, the effect of entrepreneurship with three latent variables, and the effect of the cognitive macroenvironment on the development of innovation with one latent variable. We measured the effect of the entrepreneur on innovation, as well as the extent to which the goal of the entrepreneur was to change the world and achieve high income and wealth (ROB), the extent to which the entrepreneur can be considered creative and visionary (CV), and the extent to which the entrepreneur makes decisions based on sustainability goals (BDES). We measured the effects of the company on the innovation, as well as the extent to which the company sees a crisis as an opportunity (CO), if the company has a new product or service or if it has renewed itself in some other way in the past year (EOIPS), and whether the company is on a turbulent, growing trajectory economically and has international connections (OITB). We measured the effect of the macro-context from the cognitive side, and we considered in the analysis whether the entrepreneur is convinced that the media gives a prominent role to entrepreneurs in the socio-economic context and whether the entrepreneur is convinced that the businesses in the socio-economic environment address social problems (OB). As an outcome variable, we used the emergence of innovative technology (IT), which embodies business innovation, as it includes whether a particular enterprise has a new technology, process, product, or service.

Table 1. Measured and Latent Variables Included in the Analysis.

Variable name	Question	Latent variables	Abbreviation	Theory-based categories
sumotiv1	Please tell me the extent to which the following statements reflect the reasons you are trying to start a business. To make a difference in the world.	Reason for business: make a difference and high income	ROB	Individual/innovator context
sumotiv2	Please tell me the extent to which the following statements reflect the reasons you are trying to start a business. To build great wealth or have a very high income.			
creativ	Other people think you are highly innovative.	Creative Visionary	CV	
vision	Every decision you make is part of your long-term career plan.			
susdg_env	When making decisions about the future of your business, you always consider environmental implications such as preservation of green areas, reduction of the emission of pollutants and toxic gases, selective garbage collection, and conscious consumption	Environmental and Social Impact of Business Decisions	BDES	
susdg_soc	When making decisions about the future of your business, you always consider social implications such as access to education, health, safety, inclusive work, housing, transportation, quality of life at work, etc.			
omcstnat	Do you have any customers in the following locations? Elsewhere in your country?	Crisis as an opportunity	CO	Context of business innovations
sucpnewopp	The coronavirus pandemic has provided new opportunities that you want to pursue with this business.			
omnewprod	Are any of your products or services new to people in the area where you live, people in your country, or the world?	An enterprise that offers an innovative product or service.	EOIPS	
suacts	Over the past twelve months, have you done anything to help start this new business?			

Variable name	Question	Latent variables	Abbreviation	Theory-based categories
omcrgrow	And compared to one year ago, are your expectations for business growth much lower, somewhat lower, about the same as a year ago, somewhat higher, or much higher?	Owned international turbulent business	OITB	Context of business innovations
omcstexp	Do you have any customers in the following locations? Outside your country?			
omown	Do you personally own all, part, or none of this business?			
nbmedia	In my country, you will often see stories in the public media and/or the Internet about successful new businesses.	Observation of the business context	OB	Socio-economic context
nbsocent	In my country, you will often see businesses that primarily aim to solve social problems.			
omnewproc	Are any of the technologies or procedures used for this product or service new to people in the area where you live, the people in your country, or the world?	Innovative technology	IT	Innovation

The measured variables were characterised as having a small, random amount of missing data (3–5%). Therefore the missing data were replaced with the artificial intelligence-based bagging methodology. In the machine learning bagging method, different training databases were generated for each joint occurrence, which were randomly generated by sampling from the original sample set⁵⁸. Then, the algorithm estimated the missing values on these, selecting the most appropriate values.

Of the sampled enterprises, 18.7% have implemented some form of technological innovation (omnewproc), and only 15.1% of enterprises have developed a new product or service (omnewprod). This means that only about one-fifth of businesses are innovative businesses. Of these innovative businesses, 38.3% are young businesses. Surprisingly, the vast majority of them operate in the low-tech sector (91.5%), and all are SMEs (100%). Innovative enterprises operate mostly in the capital (27.7%) and county capitals (25.5%), as well as in the developed regions of the country (36.6%). There is a particularly high proportion of men (78.7%) and those who have a high level of education (72.3%)

⁵⁸ Friedman J. H., Popescu B. E., *Importance sampled learning ensembles*, “Journal of Machine Learning Research” 2003, 94305, pp. 1–32.

among their CEOs. The CEOs of the enterprises are middle aged on average (44.3 years std: + - 11.61) and earn several times the average income of a Hungarian.

3. Hypotheses

In our research, we aim to determine the factor effects that distinguish innovative companies in the emerging market of a developing country from the needs-based companies. Based on the literature, we assume a triple-side framework for our innovation model in which the impact of the individual, that is, the entrepreneur, the impact of business performance, and the macro-context (i.e. the cognitive socio-economic environment) are identified as factors that affect the emergence of innovation. Thus, our hypothesis system explores the relationship between entrepreneurship and innovation in a developing country.

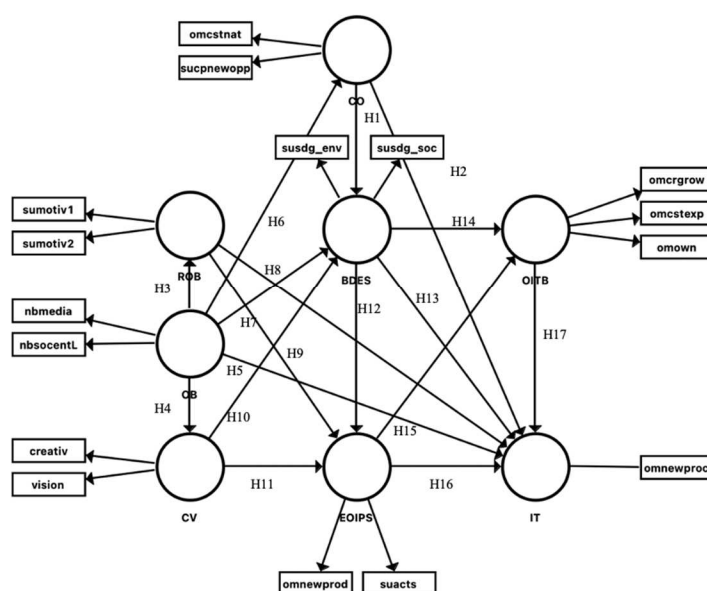
We formulated 17 hypotheses, which are presented in Table 2. Each hypothesis assumes the presence of a particular mechanism of effect among the latent variables. The system of these mechanisms of effects outlines the business innovation model operating in the developing country, which is shown in Figure 1.

Table 2. Description of Hypotheses.

Hypothesis	
No.	Description
H1	Crisis as an Opportunity has a positive impact on the development of Innovative Technology.
H2	Crisis as an Opportunity has a positive impact on Business Decisions.
H3	Observation of the Business Context has a positive impact on the Reason for Business.
H4	Observation of the Business Context has a positive impact on Creative Visionary.
H5	Observation of the Business Context has a positive impact on the development of Innovative Technology.
H6	Observation of the Business Context has a positive impact on Crisis as an Opportunity.
H7	Observation of the Business Context has a positive impact on Business Decisions.
H8	Reason for Business has a positive impact on the development of Innovative Technology.
H9	Reason for Business has a positive impact on an enterprise that offers an innovative product or service.
H10	Creative Visionary has a positive impact on Business Decisions.
H11	Creative Visionary has a positive impact on an enterprise that offers an innovative product or service.
H12	Business Decisions has a positive impact on the enterprise that offers an innovative product or service.
H13	Business Decisions has a positive impact on the development of Innovative Technology.

Hypothesis	
No.	Description
H14	Business Decisions has a positive impact on an Owned International Turbulent Business.
H15	An enterprise that offers an innovative product or service has a positive impact on an Owned International Turbulent Business.
H16	An enterprise that offers an innovative product or service has a positive impact on the development of Innovative Technology.
H17	An Owned International Turbulent Business has a positive impact on the development of Innovative Technology.

Figure 1. The System of the Research Hypotheses, the Measured Variables, and the Latent Variables of the PLS-SEM Model.



Source: Own elaboration.

The Model of Business Innovation

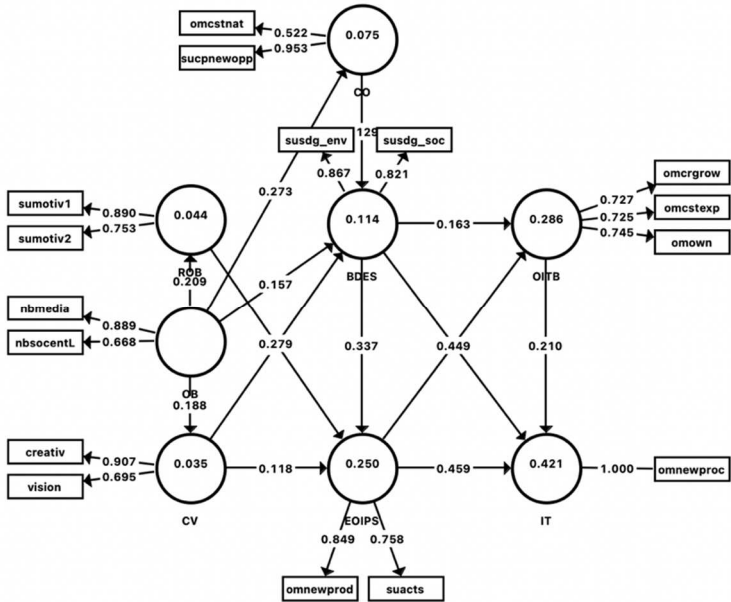
In the PLS-SEM-based model⁵⁹ of innovative enterprises, we used first-order latent variables, which are indicated by circles in Figure 1. The model was created from a total of eight first-order latent variables, each of which is built into the base model as a reflective measurement model. The indicators of the measured variables of the reflective models were lower than 0.095 in all cases, thus

⁵⁹ The analysis was performed with the SmartPLS 3v software; Ringle C. M., Wende S., Becker J.-M., *SmartPLS 3*, SmartPLS, 2015.

avoiding redundancy (See Appendix Table 1). As a result, the reliability of reflective constructs is higher than the recommended minimum threshold. The AVE values for the constructs are also higher than the cut-off value (0.50); thus, the criterion for the convergence validity of the models is met. As conceptually similar indicators have been included in the measurement models, the HTMT values must be less than 0.90. All cases fulfil this requirement, which implies that the reflective models also meet the discriminant criterion. Table 2 in the Appendix summarises the factor scores and collinear statistics (VIF) of the measured variables. In our model, the VIF values for the measured variables are adequate in all cases (above 1.0), which indicates that collinearity is absent. Furthermore, reflective factor scores above 0 are also suitable.

A 5.000-sample bootstrap method⁶⁰ was used to test the significance of the path coefficients. The SRMR of the model is .10, which is a good fit⁶¹, and the NFI is .912, which indicates an acceptable fit⁶². Our results, therefore, show that the model fits the statistical criteria.

Figure 2. PLS-SEM and Bootstrap (N = 366).



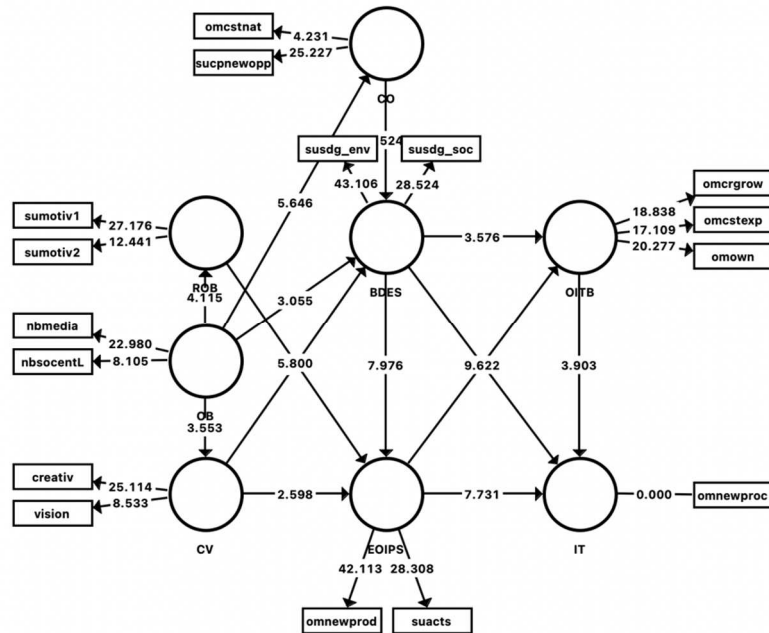
Source: Own elaboration.

⁶⁰ The bootstrap method is a non-parametric procedure that allows testing the statistical significance of different PLS-SEM results, including the significance testing of the path coefficient, R^2 values, VIF, and HTMT values.

⁶¹ Hu L.-T., Bentler P. M., *Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification*, "Psychological Methods" 1998, 3(4), pp. 424–453.

⁶² Lohmöller J.-B., *Latent variable path modeling with partial least squares*, Physica-Verlag, Heidelberg 1989.

Figure 3. Path Coefficients and Factor Weights.



Source: Own elaboration.

The t-values for the structural model are shown in Figure 2 and Table 3. The table and the figure show only the significant path coefficients.

Table 3. Results of the Bootstrap Procedure.

	Path coefficient(β)			T Statistic	p value
	Original Sample	Bootstrap	STDEV		
BDES -> EOIPS	0,34	0,34	0,04	7,98	0,00
BDES -> IT	0,11	0,11	0,04	2,58	0,01
BDES -> OITB	0,16	0,16	0,05	3,58	0,00
CO -> BDES	0,13	0,13	0,05	2,52	0,01
CV -> BDES	0,21	0,21	0,05	4,17	0,00
CV -> EOIPS	0,12	0,12	0,05	2,60	0,01
EOIPS -> IT	0,46	0,46	0,06	7,73	0,00
EOIPS -> OITB	0,45	0,45	0,05	9,62	0,00
OB -> BDES	0,16	0,16	0,05	3,06	0,00
OB -> CV	0,27	0,28	0,05	5,65	0,00
OB -> EOIPS	0,19	0,19	0,05	3,55	0,00
OB -> ROB	0,21	0,21	0,05	4,12	0,00
OITB -> IT	0,21	0,21	0,05	3,90	0,00
ROB -> EOIPS	0,28	0,28	0,05	5,80	0,00

Based on our significant model (Figure 3), business innovation is shaped by all three dimensions (the entrepreneur, enterprise, and socio-economic context), but in different ways. As a direct effect, technological innovation is affected by the latent variables of Environmental and Social Impact of Business Decisions ($\beta = .11$), an innovative product or service ($\beta = .46$), and the possession of an Owned International Turbulent Business ($\beta = .21$). However, to realise these direct effects a number of other effects must be also present. Environmental and Social Impact of Business Decisions should be affected by Crisis as an Opportunity ($\beta = .13$), Creative Visionary ($\beta = .21$), and Observation of the Business Context ($\beta = .16$). For the effect of an enterprise that offers an innovative product or service to the innovative technology, the effect of Reason for Business ($\beta = .28$) is needed, as well as the effect of Environmental and Social Business Decisions ($\beta = .34$) and Creative Visionary ($\beta = .12$). The impact of an Owned International Turbulent Business requires the Environmental and Social Impact of Business Decisions ($\beta = .16$) and the impact of an enterprise that offers an innovative product or service ($\beta = .45$). Finally, it is important to highlight the impact of the Observation of Business Context on the model as it applies to Crisis as an Opportunity ($\beta = .27$), Creative Visionary ($\beta = .19$), and Reason for Business ($\beta = .21$).

In summary, the business innovation of a developing country takes place in a complex system. The environmental context does not have a measurable direct effect on the appearance of innovation, but it is an important factor in the model, as it indirectly affects both the entrepreneur's perceptions and the enterprise. It motivates the entrepreneur to create a business that changes the world and helps achieve sustainable goals and promotes the emergence of creative and visionary entrepreneurs. For the enterprise, the environment strongly influences the extent to which the business handles the crisis as an opportunity. Entrepreneurship has a direct impact on the development of innovation, as unsurprisingly, businesses with new products and services are the engines of innovation. Furthermore, we can see that businesses that are in a turbulent economic trajectory and have international connections also have a strong direct impact on business innovation. Enterprises also have an indirect impact, as businesses that see a crisis as an opportunity that drive the entrepreneur to set sustainability goals for themselves. Finally, entrepreneurs themselves directly shape the appearance of innovation, as decisions that promote sustainability goals generate innovation. Concurrently, the entrepreneur also plays an important role as an indirect influence: as the visionary, a creative entrepreneur has substantial authority over their company's decision to develop a new service or product and set sustainable goals.

4. A Prerequisite for Business Innovation

Turning from the analysis of the mechanism of effects of our model to the necessary bottleneck conditions of innovation in our NCA, based on Richter et al.'s suggestion, we used the cross-loadings of latent variables obtained using PLS-SEM as a starting point for performing the NCA⁶³. The non-decreasing CE-FDH function was generated on the scatter plot of the predictor and outcome variables⁶⁴. The use of the CE-FDH ceiling line was also justified by the fact that the discrete data were within a relatively small range and showed a limited number of levels⁶⁵. The NCA allowed us to separate the observation space from the non-observation space and, thus, identify the extent to which the attributes that create each innovation are necessary boundary conditions for business innovation.

According to Dul et al., for a condition to be considered necessary, it must meet three criteria: i) have a theoretical justification, ii) have an effect size $d > 0$, and iii) have a low p value ($p < .05$)⁶⁶. Based on this, we first examined the effect sizes (d) of the latent variable scores using a significance test using the 10.000 random sample recommended in the literature⁶⁷. The NCA results (Table 4) show that the only condition that meets all the criteria for business innovation is the OITB latent variable ($d = 0.099$, $p = .043$). The necessary precondition for innovation is, therefore, that the company has international connections, is on a turbulent growth path, and is privately owned.

Table 4. NCA Effect Sizes.

	CE-FDH	p value
BDES	0.300	0.000
CO	0.000	1.000
CV	0.114	0.180
EOIPS	0.000	1.000
OB	0.033	0.358
OITB	0.099	0.043
ROB	0.000	1.000

Figure 4 shows the scatterplot of the OITB boundary condition in a coordinate system. The upper bound (CE-FHD) indicates the minimum level of the OITB characteristic required to achieve a certain level of business innovation. The figure also shows the OLS regression line as a reference point.

⁶³ Richter N. F., Schubring S., Hauff S., Ringle C.M., Sarstedt M., op. cit., pp. 2243–2267.

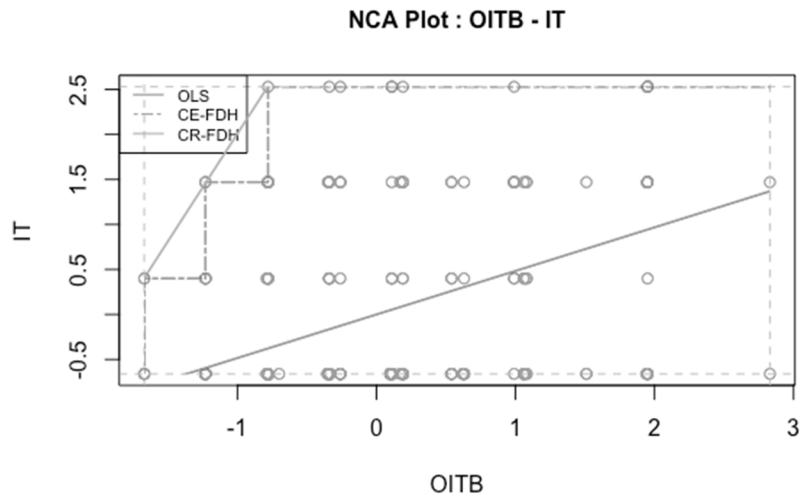
⁶⁴ Dul J., *Necessary condition analysis (NCA)*...

⁶⁵ Dul J., van der Laan E., Kuik R., *A statistical significance test for necessary condition analysis*, "Organizational Research Methods" 2020, 23(2), pp. 385–395.

⁶⁶ Dul J., *Conducting necessary condition analysis*...

⁶⁷ Dul J., *Necessary condition analysis (NCA)*...; Ibidem.

Figure 4. Scatterplot of the Predictor Variable OITB Versus the IT Outcome Variable.



Source: Own elaboration.

Subsequently, a bottleneck analysis was performed on the data (Table 5). Table 5 shows the required minimum values for the predictive variables for the outcome variable (IT). According to Table 5, to achieve a medium level of innovation (50–70%), the level of OITB required must be at least 10.8%. Furthermore, for high-level (100%) IT, the OITB should be 19.7%. This implies that if a certain minimum degree of international networking and economic turbulence (19.7%) is not achieved by an enterprise, business innovation will not take place. According to Table 5, BDES, CV, and OB are also necessary boundary conditions for IT. However, these attributes do not have significant p values and, thus, do not meet the criteria for being considered as relevant necessary conditions⁶⁸. Based on our analysis, they can be considered random or false positives.

⁶⁸ Dul J., *Conducting necessary condition analysis...*

Table 5. Bottleneck Table (Percentages).

IT	BDES	CO	CV	EOIPS	OB	OITB	ROB
0	NN	NN	NN	NN	NN	NN	NN
10	4.4	NN	NN	NN	NN	NN	NN
20	9.0	NN	NN	NN	NN	NN	NN
30	13.5	NN	NN	NN	NN	NN	NN
40	18.0	NN	NN	NN	NN	2.0	NN
50	22.5	NN	NN	NN	NN	4.9	NN
60	27.0	NN	NN	NN	NN	7.9	NN
70	31.5	NN	3.3	NN	1.0	10.8	NN
80	36.0	NN	13.7	NN	3.9	13.8	NN
90	40.6	NN	24.0	NN	6.9	16.8	NN
100	45.1	NN	34.4	NN	9.8	19.7	NN

In summary, the NCA shows that a privately owned enterprise with turbulent economic growth and with international connections is the only necessary precondition for business innovation and that these conditions must be at least 19.7% to be able to create business innovation in a enterprise.

As a summary of our research results, Table 6 presents the verification of our hypotheses.

Table 6. Verification of the Research Hypotheses.

	t-value	P value		Hypothesis	Relationship	Result
CO -> IT		.06		H1	Not significant	Not verified
CO -> BDES	2,52	.01	***	H2	Significant, positive	Verified
OB -> ROB	4,12	.00	***	H3	Significant, positive	Verified
OB -> CV	3,55	.00	***	H4	Significant, positive	Verified
OB -> IT		.34		H5	Not significant	Not verified
OB -> CO	5,65	.00	***	H6	Significant, positive	Verified
OB -> BDES	3,06	.00	***	H7	Significant, positive	Verified
ROB -> IT		.81		H8	Not significant	Not verified
ROB -> EOIPS	5,80	.00	***	H9	Significant, positive	Verified
CV -> BDES	4,17	.00	***	H10	Significant, positive	Verified
CV -> EOIPS	2,60	.01	***	H11	Significant, positive	Verified
BDES -> EOIPS	7,98	.00	***	H12	Significant, positive	Verified
BDES -> IT	2,58	.01	***	H13	Significant, positive	Verified
BDES -> OITB	3,58	.00	***	H14	Significant, positive	Verified
EOIPS -> OITB	9,62	.00	***	H15	Significant, positive	Verified
EOIPS -> IT	7,73	.00	***	H16	Significant, positive	Verified
OITB -> IT	3,90	.00	***	H17	Significant, positive	Verified

Note. $p < .001^{***}$, $.001 < p < .01^{**}$, $.01 < p < .05^{*}$, $p < .05 < p < .10$.

We could not verify H₁, H₅, and H₈ among our hypotheses, but all the other hypotheses were verified.

Conclusions

In our paper, we examined, in the case of a developing country, based on representative data, the effects necessary for business innovation, and which theoretical approach can be used to explain the operation of this complex casual system. Based on the literature, entrepreneurial innovation is assumed to be a three-sided effect. First, we defined it according to the classical Schumpeterian theory as an effect from the individual, from the entrepreneurial side; as an effect from enterprises; and, finally, as a cognitive socio-economic mechanism of effect.

Our data show that the proportion of innovative enterprises is low, accounting for about one-fifth of all enterprises. These businesses are typically SMEs, located in the more economically developed parts of the country, in large cities, and the vast majority of them are run by middle-aged men with a high level of education.

To explore the impact mechanisms that lead to innovations, we analysed our data using the PLS-SEM methodology. Our results show that business innovation in a developing country results from the combined effect of a complex tripartite system. In this system, the entrepreneur and the enterprise itself have a direct impact on the creation of innovation, and the macro-environment has an indirect effect on the emergence of innovation through the perception of the entrepreneur and the crisis management of the enterprise. Using NCA, we then determined that the prerequisite for the creation of innovation is that the company has international connections, is on a turbulent economic trajectory, and is privately owned.

The emergence of innovation, therefore, requires the co-occurrence of a multi-lateral mechanism of effects, in which a creative and visionary entrepreneur must create an enterprise with which they “[want] to change the world” while gaining a satisfactory amount of wealth. An important result of our study is that innovation in developing countries can be closely linked to sustainable goals, as both the entrepreneur and the business must prioritise goals and decisions in keeping with social and environmental sustainability. However, not only is an entrepreneur needed for business innovation but the enterprise itself must achieve a level of economic development embedded in an international network. In addition, the enterprise needs to handle crisis issues and obstacles as opportunities. All this can create the appearance of a new product and service in the company, which has a direct positive impact on the appearance of innovation. Finally, the socio-economic environment must also be conducive to the development of innovation. While this dimension does not have a direct impact on innovation, it does have an indirect impact on both the entrepreneur and the business. It follows from all of this that the development of innovation in Hungary can primarily be explained by Schumpeter’s theory.

Our study is not without limitations. For our model, we used the sample of a developing country; therefore, the study can be made completer and more accurate if other developing countries are analysed and then their results compared with these. It is easy to imagine that the innovation models of other Central-Eastern European countries are created based on a different causal system, so they can also be explained by other theories. Our research can be further refined by including additional macro-contextual variables as well. In our research, we included only cognitive variables to measure the macro-context, but this could be extended to include either performance requirements or risk-taking variables, as well as measures of context regulators, values, and institutions⁶⁹.

In summary, the materialisation of business innovation is the result of a complex three-dimensional mechanism of effects that requires not a single factor but a combination of factors. But the strongest explanatory theory among these was the Schumpeterian theory. In all of this, there is a need for entrepreneurs who can “dream” and stimulate innovation along the lines of sustainability. However, having a macro-environment is equally important, as it would allow them to implement these innovations and develop their entrepreneurial spirit. Furthermore, there is a need for an economically prosperous business with international connections, which can provide an appropriate framework for creating new products and services, and the tendency to see challenges as opportunities and not as problems. The combined effect of all this is needed for the creation of business innovation, which can lead to economic growth.

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Appendix

Table 1. Reliability and Validity of the Latent Variables.

	Composite Reliability	Average Variance Extracted (AVE)
BDES	0.83	0.71
CO	0.73	0.59
CV	0.79	0.65
EOIPS	0.79	0.65
IT	1.00	1.00
OB	0.76	0.62
OITB	0.78	0.54
ROB	0.81	0.68

Table 2. Factor Scores of Measured Variables and Their VIF (Collinear Statistics) Values.

	Factor Scores	VIF
creativ	0,91	1,12
nbmedia	0,89	1,07
nbsocent	0,67	1,07
omcrgrow	0,73	1,12
omcstexp	0,73	1,19
omcstnat	0,52	1,06
omnewproc	1,00	1,00
omnewprod	0,85	1,10
omown	0,74	1,24
suacts	0,76	1,10
sucpnewopp	0,95	1,06
sumotiv1	0,89	1,16
sumotiv2	0,75	1,16
susdg_env	0,87	1,22
susdg_soc	0,82	1,22
vision	0,69	1,12

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MICRO AND SMALL ENTERPRISES' FINANCIAL STATEMENT INFORMATION FROM THE FINANCIAL RATIO ANALYSIS PERSPECTIVE

Abstract

Purpose of the article is to evaluate the compliance, in all material respects, of the information provided in the financial statements of micro and small enterprises, from the financial ratio analysis perspective. To achieve this objective, the financial statements prepared by micro and small companies have been analyzed with regard to the form thereof, the most important ratios for micro enterprises have been determined, followed by a financial ratio analysis of micro enterprises preparing small company financial statements has been performed. It has been determined that, in all material respects, the information contained in the financial statements of small entities is complete, whereas the information presented in the financial statements of micro enterprises is incomplete. It is impossible to calculate all the main micro-enterprise ratios based on short financial statements.

It is therefore recommended that micro businesses prepare their financial statements in the form of small enterprise financial statements.

In order to survive on a competitive market, enterprises of this category need to assess their financial performance continuously and consistently. The EU and member states' declared simplification of micro-business financial reporting can prevent business decision-makers from obtaining reliable information from financial statements which is necessary and for financial analysis. The practice shows that, when the financial statement information requirements are the same for both small and micro companies, many micro businesses opt to prepare small-company financial statements, rather than statements of their business category. The existing regulation should be revised with regard to this situation.

Keywords: micro business, small business, financial statements, financial information, financial ratios.

JEL: M41, G32.



INFORMACJE DO SPRAWOZDAŃ FINANSOWYCH MIKRO I MAŁYCH PRZEDSIĘBIORSTW Z PERSPEKTYWY ANALIZY WSKAŹNIKÓW FINANSOWYCH

Streszczenie

Celem artykułu jest ocena kompletności, pod każdym istotnym względem, informacji zawartych w sprawozdaniach finansowych mikro i małych przedsiębiorstw, z punktu widzenia analizy wskaźników finansowych. Aby osiągnąć ten cel, przeanalizowano formy sprawozdań finansowych sporządzanych przez mikro i małe przedsiębiorstwa, określono najważniejsze wskaźniki dla mikro przedsiębiorstw oraz przeprowadzono analizę wskaźnika finansowego mikroprzedsiębiorstwa, sporządzającego sprawozdania finansowe małych firm. Ustalono, że informacje zawarte w sprawozdaniach finansowych małych jednostek są kompletne, podczas gdy informacje zawarte w sprawozdaniach finansowych mikroprzedsiębiorstw są niekompletne we wszystkich istotnych aspektach. Obliczenie wszystkich głównych wskaźników mikroprzedsiębiorstw na podstawie krótkich sprawozdań finansowych jest niemożliwe, dlatego zaleca się, aby mikroprzedsiębiorstwa przygotowywały sprawozdania finansowe małych firm. Aby przetrwać na konkurencyjnym rynku, przedsiębiorstwa tej kategorii muszą konsekwentnie oceniać swoje wyniki finansowe. Ponieważ UE i kraje członkowskie deklarują uproszczenie sprawozdawczości finansowej dla mikroprzedsiębiorstw, uniemożliwia to decyzyjnym biznesowym uzyskanie ze sprawozdań finansowych niezbędnych i wiarygodnych informacji do analizy finansowej. Jeżeli wymogi dotyczące wszystkich informacji zawartych w sprawozdaniach finansowych są takie same w małych i mikro firmach, to praktyka pokazuje, że wiele mikro firm woli sporządzać sprawozdania finansowe małych firm niż własnej kategorii. Obowiązujące regulacje powinny zawierać ocenę tej okoliczności.

Słowa kluczowe: mikro przedsiębiorstwo, małe przedsiębiorstwo, sprawozdania finansowe, informacje finansowe, wskaźniki finansowe.

Introduction

In recent years, the importance of micro, small and medium-sized enterprises has gained increasing attention. However, it is recognised that micro enterprises are the most important, as they form the backbone of the economies of the Member States of the European Union (EU). In A Small Business Act for Europe, the European Commission put forward the principle: "Think small first"¹. One of the objectives of the Act was to highlight the

¹ "Think Small First": a "Small Business Act" for Europe, 2008 m. birželio 25 d. Nr. COM(2008) 394 final, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, Nr. SEC(2008) 2101 ir SEC(2008) 2102, Brussels 2008, p 2, available

importance of small and medium-sized enterprises. Small enterprises remain important. Baumann and Kritikos point out that micro enterprises tend to make up the majority of all companies, especially in industrialised economies².

Micro and small companies are of great economic importance in each country, as this category of organisations makes up a significant proportion of the businesses operating in all EU countries and has a major impact on national economies³. According to Lithuanian Statistics, in 2020, micro and small enterprises (with the number less than 50 employees) (MSE) accounted for 84% of all active enterprises and they produced 17% of total value added, made 32% investments to fixed assets, employed 23 % of all employees, exported 10% of exported goods. They are also important taxpayers, as a large part of the revenue that national budgets raise comes from taxes paid by these companies⁴. Small companies also create a significant number of new products and thus contribute to economic development and expansion⁵. In addition, a study by the European Agency for Safety and Health at Work suggests that micro and small organisations have an indirect impact on large companies through value chains⁶. Small enterprises are business partners of large companies and have a positive impact on their performance and efficiency through the supply and distribution of products and services⁷. It is worth noting that a high number of micro enterprises is not only characteristic of developing countries, but also of developed and advanced countries⁸.

online: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52008DC0394&from=EN> [accessed: 11.06.2022].

² Baumann J., and Kritikos A. S., *The Link Between R&D, Innovation and Productivity: Are Micro Firms Different?*, "Research Policy" 2016, 45(6), pp. 1263–1274, available online: <https://doi.org/10.1016/j.respol.2016.03.008> [Accessed: 19.06.2022].

³ Lopriore M., *Supporting Enterprise Development and SME in Europe*, "EIPAScope" 2009, (2), pp. 31–36, available online: <http://aei.pitt.edu/id/eprint/12383> [accessed: 10.06.2022]; Ievins J., Malahova J., Ketners K., *Possibilities of Labour Protection Improvement in Micro- and Small Enterprises* [In:] A. Auzina (Ed.), *Economic Science for Rural Development: Proceedings of the International Scientific Conference*, Lauksaimniecības universitātes, Jelgava 2016, pp. 72–78.

⁴ Pletnev D. A., Barkhatov V. I., Naumova K. A., *SME's Criteria in National Economies and Its Scale: A Comparative Study*, "Vestnik Cheliabinskogo Gosudarstvennogo Universiteta" 2021, 452(6), pp. 147–161, available online: DOI 10.47475/1994-2796-2021-10617 [accessed: 10.07.2022].

⁵ Davulis G., *Mažos ir vidutinės verslo įmonės Lietuvoje bei jų makroekonominis efektyvumas*, "Studijos šiuolaikinėje visuomenėje" 2015, 6(1), pp. 175–185.

⁶ European Agency for Safety and Health at Work (EU-OSHA), Wadsworth E., Walters D., *Darbuotojų saugos ir sveikatos užtikrinimo veiklos labai mažose ir mažosiose Europos Sąjungos įmonėse sąlygos ir priemonės: SESAME projektas: santrauka*, Publications Office, 2016, available online: <https://data.europa.eu/doi/10.2802/366689> [accessed: 19.06.2022].

⁷ Davulis G., op. cit., pp. 14–161.

⁸ Versli Lietuva, *Labai mažos įmonės Lietuvoje: ekonominė reikšmė ir augimas*, 2018, available online: <https://www.verslilietuva.lt/wp-content/uploads/2020/01/>

A number of authors also highlight the social significance of micro companies. MSE create a significant share of jobs and are important employers, employing the majority of individuals⁹. In the EU, micro enterprises are the source of employment for more than half of the population¹⁰. Davulis highlights that small companies also provide an opportunity for business founders to realise their ideas and, at the same time, to contribute to the reduction of a social problem: unemployment¹¹. Verslios Lietuvos, a study of Lithuanian micro enterprises, found that the number of employees in micro enterprises has increased significantly over the last ten years¹². Micro enterprises thus contribute to social stability by creating jobs for society and are an important part of social development¹³.

Some authors refer to the innovative dimension of micro enterprises. These enterprises are active innovators¹⁴. Baumann and Kritikos argue that a large proportion of micro-enterprises are innovators¹⁵. They invest in R&D and successfully translate this investment into innovation without falling behind larger firms. Davulis points out that different academic literatures consider around 30-60% of SMEs to be innovative and that innovativeness helps them to adapt to changing market conditions and remain flexible¹⁶. This is supported by Faherty and Stephens¹⁷, who identify the flexibility of micro enterprises as a key characteristic that allows an innovative idea to be quickly evaluated and implemented in this category of organisations. However, these authors point out that micro enterprises have small budgets and their managers are more concerned with the competitive environment than with the development of innovative strategies. Thus, although a large proportion of the smallest companies are innovative, the innovative dimension of these companies is an important but not decisive aspect of their importance.

2018.12.31- LM%C4%AE-Lietuvoje-reik%C5%A1m%C4%97-ir-augimas.pdf [accessed: 10.09.2022].

⁹ Lopriore M., op.cit., pp. 31–36; Ievins J., op.cit. pp. 72–78; Pletnev D. A., Barkhatov V. I., Naumova K. A., op.cit., pp. 147–161.

¹⁰ European Agency for Safety and Health at Work (EU-OSHA), Wadsworth E., Walters D., op. cit.

¹¹ Davulis G., op. cit., pp. 147–161.

¹² Versli Lietuva, op. cit.

¹³ Cao Y., You J., Shi Y., Hu W., *Studies on Improving the Performance of Small and Micro Enterprises through Green Innovation*, “Problemy Ekorozwoju” 2022, 17(1), pp. 151–161, available online:

<https://doi.org/10.35784/pe.2022.1.14> [accessed: 17.07.2022].

¹⁴ Ibidem; Davulis G., op. cit., pp. 147–161.

¹⁵ Baumann J., and Kritikos A. S., op. cit.

¹⁶ Davulis G, op. cit., p. 175–185.

¹⁷ Faherty U., Stephens S., *Innovation in Micro Enterprises: Reality or Fiction?*, “Journal of Small Business and Enterprise Development”, 2016, 23(2), pp. 349–362, available online: <https://doi.org/10.1108/JSBED-11-2013-0176> [accessed:19.06.2022].

Despite the importance of the smallest enterprises and their large number, micro enterprises face intense competition. In order to survive and consolidate their position in a competitive market, companies in these categories need to consistently assess and monitor their financial situation. One of the most effective and best methods of assessing the financial situation is the financial analysis. There is a wide range of ratios in the scientific literature. Very small enterprises have a small number of employees, a high workload and time savings, which is why these enterprises should select the most important ratios.

The analysis of the ratios is carried out using information provided by the financial statements. Simplifications are made for micro enterprises and they are allowed to prepare short financial statements. But the question is do short financial statements fulfil the qualitative features of financial information – is information provided complete in all material respects, comparable and really useful for decision-making.

Meanwhile, the possibilities of analysis of financial statements for all categories of companies and the assessment of the financial situation of micro enterprises on the basis of the information in the financial statements is mostly analysed by Mackevičius and Subačienė¹⁸. Dziukevičius and Jonaitienė, Kanapickienė and Špicas in Lithuania, Al-Hroot, Lukason, Laitinen, and Suvas, Ptak-Chmielewska and Klietnik, Valaskova, Lazaroiu, Kovacova, and Vrbka analysed the most popular or appropriate ratios for micro and small enterprises¹⁹. The choice of a set of financial statements for micro-enterprises is studied in detail in a

¹⁸ Mackevičius J., Subačienė R., *Labai mažų įmonių finansinės būklės analizės metodika, naudojant finansinių ataskaitų duomenis*, [In:] V. Baltrūnienė (Ed.), *Ekonomikos vystymasis: procesai ir tendencijos: IV-osios tarptautinės mokslinės- praktinės konferencijos, įvykusios Vilniaus kolegijos Ekonomikos fakultete 2017 m. balandžio 26 d., medžiaga*, Vilniaus kolegija, Vilnius 2017.

¹⁹ Dziukevičius A., Jonaitienė B., *Searching for the Best Financial Ratios Evaluating Companies Operating in Different Lithuanian Sectors*, "Business: Theory and Practice" 2015, 16(2), pp. 174–184, available online: <https://doi.org/10.3846/btp.2015.533> [accessed: 18.07.2022]; Kanapickienė R., Špicas R., Credit Risk Assessment Model for Small and Micro-Enterprises: The Case of Lithuania, "Risks" 2019, 7(2), pp. 67–89, available online: <https://doi.org/10.3390/risks7020067> [accessed: 20.06.2022]; Al-Hroot Y. A., *The Influence of Sample Size and Selection of Financial Ratios in Bankruptcy Model Accuracy*, "Economic Review Journal of Economics and Business", 13(1), 2015, pp. 7–19; Lukason O., Laitinen E. K., Suvas A., *Failure Processes of Young Manufacturing Micro Firms in Europe*, "Management Decision" 2016, 54(8), available online: <https://doi.org/10.1108/MD-07-2015-0294> [accessed: 10.06.2022]; Ptak-Chmielewska A., *Predicting Micro-Enterprise Failures Using Data Mining Techniques*, "Journal of Risk and Financial Management" 2019, 12(1), pp. 30–46, available online: <https://doi.org/10.3390/jrfm12010030> [accessed: 10.07.2022]; Klietnik T., Valaskova K., Lazaroiu G., Kovacova M., Vrbka J., *Remaining Financially Healthy and Competitive: the Role of Financial Predictors*, "Journal of Competitiveness" 2020, 12(1), pp. 74–92, available online: <https://doi.org/10.7441/joc.2020.01.05> [accessed: 20.06.2022];

research paper by Lithuanian authors Balkytė, Kvekšienė and Striaukaitė²⁰. Among the other authors analysing the main features of financial information, it is worth mentioning Gandziuk Grigoras-Ichim and Morosan-Danila²¹. But the completeness of information provided in Lithuanian financial statements for micro enterprises is not analysed. Herefore, the *purpose of the article* is to evaluate the completeness in all material respects of the information provided in the financial statements of micro and small enterprises from financial ratio analysis perspective. Here, Lithuania can be taken as an example (case) of EU member state to show the regulation tendencies and problems for micro and small enterprises.

Theoretical background

The decision usefulness theory states that the best accounting standards is one that supplies the most useful financial information to the users of that information as they make their decisions²². While, since 2006, the International Accounting Standards Board (IASB) has held decision-usefulness to be the primary objective of financial reporting, the requirements for financial statement information set out in International Accounting Standard (IAS) 1 (2010) are usefulness to users (users' decision-making), completeness in all material respects and reliability²³.

Lapitkaia and Leahovcenco argue that disclosures should focus on materiality²⁴. IAS 1 (2010) states that information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity. According to Gandziuk, as information influences consumer decision-making, all material information must be presented in the reports, taking into

²⁰ Balkytė G., Kvekšienė M., Striaukaitė L., *Compliance of Financial Statements of Small and Very Small Companies with the Provisions of Business Accounting Standards*, „Social Research“ 2020 43(2), pp. 5–14, available online: <https://doi.org/10.21277/st.v43i2.314> [accessed:11.06.2022].

²¹ Gandziuk O., *The Financial Statements of User Requirements*, „Baltic Journal of Economic Studies“ 2016, 2(2), pp. 24–31, available online: DOI: 10.30525/2256-0742/2016-2-2-24-31 [accessed: 19.06.2022]; Grigoras-Ichim C. E., Morosan-Danila L., *Hierarchy of Accounting Information Qualitative Characteristics in Financial Reporting*, „The USV Annals of Economics and Public Administration“, 2016, 16(1(23)), pp. 183–191.

²² Cordery C. J., Sinclair R. M. S., *Decision-Usefulness and Stewardship As Conceptual Framework Objectives: Continuing Challenges*, February 16, 2016, available online: <https://ssrn.com/abstract=2918784> [accessed: 17.07.2022].

²³ International Accounting Standard (IAS) 1, 2010, available online: <https://www.iasplus.com/en/standards/ias/ias1> [accessed:20.07.2022].

²⁴ Lapitkaia L., Leahovcenco A., *Requirements for The Disclosure of Financial Information for SMES in Accordance With European and National Legislation*, „CSIE Working Papers Series“, 2018, (8), pp. 21–28.

account the needs of consumers²⁵. An entity shall present separately each material class of similar items. An entity shall present separately items of a dissimilar nature or function unless they are immaterial²⁶.

Jianu and Jianu consider reliability to be one of the most important attributes of the information presented in financial statements. According to Gandziuk, information is reliable when it is presented without errors and is not misleading²⁷. According to the author, information should correctly and accurately reflect transactions and other economic transactions and be neutral. Neutrality is highlighted as one of the characteristics of reliable information. Grigoras-Ichim and Morosan-Danila argue that information is considered to be neutral when it reflects the true situation of the firm without improving or worsening the current situation²⁸. These authors also identify verifiability and accurate presentation as characteristics of reliable information. They define verifiability as the ability to ensure that the information is free from error. Meanwhile, accurate presentation is associated with completeness. This means that reliable financial statements must contain all the information necessary for users to make decisions.

According to Gandziuk and Grigoras-Ichim and Morosan-Danila, the information in the accounts is comprehensible to its users if it is clearly disclosed²⁹. Grigoras-Ichim and Morosan-Danila point out that financial statement data should be presented in a way that is comparable with data from entity's financial statements of previous periods or with relevant financial information from other entities. Gandziuk adds that comparability helps users of information to assess trends in a company's financial position and performance³⁰.

Therefore, the materiality, comparability, completeness, reliability and usefulness to decision-makers of the disclosed information of each entity are particularly important features because users make decisions based on the information in the financial statements.

The company's financial performance is of great importance to shareholders and investors³¹. Financial analysis is used to assess these results and the overall

²⁵ Gandziuk O., op. cit.

²⁶ International Accounting Standard (IAS) 1, 2010, available online: <https://www.iasplus.com/en/standards/ias/ias1> [accessed: 20.07.2022].

²⁷ Jianu I. Jianu I., *Reliability of Financial Information from the Perspective of Benford's Law*, "Entropy" 2021, 23(5), pp. 557–579, available online: <https://doi.org/10.3390/e23050557> [accessed: 20.07.2022];

Gandziuk O., op. cit.

²⁸ Grigoras-Ichim C. E., Morosan-Danila L., op. cit., pp. 183–191.

²⁹ Gandziuk O., op. cit.; Grigoras-Ichim C. E., Morosan-Danila L., op. cit., pp. 183–191.

³⁰ Ibidem.

³¹ Mbona R. M., Yusheng K., *Financial Statement Analysis: Principal Component Analysis (PCA) Approach Case Study on China Telecoms Industry*, "Asian Journal of Accounting

situation of the company. The information provided by accounting and financial analysis is the basis for decision-making³². Financial analysis is useful to a company in many ways. It is worth noting that financial analysis involves not only examining past and present data, but also assessing likely future trends³³. In addition, the analysis helps to understand whether the company is using its financial resources efficiently when generating revenue³⁴.

The most important source of information for financial analysis is the financial statements³⁵. It is therefore essential that the information in the financial statements is reliable³⁶.

Several types of financial analysis can be carried out using financial statements. Ignasiak-Szulc, Juščius, and Bogatova argue that the most important types of financial analysis are horizontal, vertical, and relative (ratio) analyses³⁷. Ignasiak-Szulc et al. point out that horizontal analysis does not analyse the reasons for changes in items and its results do not allow conclusions to be drawn about the overall result achieved³⁸. According to Barakat and Yalcintas, vertical analysis refers to the relationship of sub-items in the financial statements to a specific underlying item as a percentage of that underlying item³⁹. According to Ignasiak-Szulc et al., vertical analysis allows assumptions

Research" 2019, 4(2), pp. 233–245, available online: <https://doi.org/10.1108/AJAR-05-2019-0037> [accessed: 10.08.2022].

³² Hasanaj P., Kuqi B., *Analysis of Financial Statements: the Importance of Financial Indicators in Enterprise*, "Humanities and Social Science Research" 2019, 2(2), pp. 17– 27, available online: <https://doi.org/10.30560/hssr.v2n2p17> [accessed: 19.06.2022].

³³ Hasanaj P., Kuqi B., op. cit.

³⁴ Zelgalve E., Zaharčenko A., *Transformation of the Role of Financial Analysis in Enterprise Management*, "Management of Organizations: Systematic Research" 2012, (64), pp. 147–167, available online: <https://doi.org/10.7220/MOSR.1392.1142.2012>. 64.10 [accessed: 10.09.2022].

³⁵ Lia D. A. Z., Natswa S. L., *Assessment of Financial Ratio Analysis for Evaluation of Small Medium Enterprises (SME) Performance (Study on IRT Ramayana Agro Mandiri Batu City 2016-2019)*, "International Journal of Multicultural and Multireligious Understanding" 2021, 8(8), pp. 202–217, available online: <https://doi.org/10.18415/ijmmu.v8i8.2889> [Accessed:20.06.2022]; Mackevičius J., Subačienė R., op.cit.; Marioara A., *The Role of the Annual Financial Statements in the Management of the Company*, "Analele Universitatii Constantin Brancusi Din Targu Jiu: Seria Economie" 2013, 1(1), pp. 13–18; Mbona R. M., Yusheng K., op. cit. pp. 82–95.

³⁶ Mackevičius J., Valkauskas R., *The Method for Setting the Reliability of Financial Analysis Information*, "Information & Media" 2016, 76, pp. 82–95, available online: <https://doi.org/10.15388/Im.2016.76.10383> [accessed: 10.08.2022].

³⁷ Ignasiak-Szulc A., Juščius V., Bogatova J., *Economic Evaluation Model of Seaports' Performance Outlining Competitive Advantages and Disadvantages*, "Inžinerinė Ekonomika" 2018, 29(5), pp. 571–579, available online: <https://doi.org/10.5755/j01.ee.29.5.21363> [accessed: 20.07.2022].

³⁸ Ignasiak-Szulc A., Juščius V., Bogatova J., op. cit., pp. 571–579.

³⁹ Barakat S., Yalcintas M., *Use of the Financial Statements in the Management of a Company's Financial Crisis: a Case Study from Jordan*, "Istanbul Ticaret Universitesi

to be made about the reasons for changes in certain items⁴⁰. Meanwhile, relative (or ratio) analysis is identified by these authors as the best and fastest method to obtain the most relevant information.

The analysis of ratios is identified as the most important type of financial analysis by most authors⁴¹. Ignasiak-Szulc et al. argue that relative indicators are much more important and obvious than absolute indicators⁴². Kliestik et al. point out that ratios also help to assess the soundness of a company and to identify and eliminate potential financial risks for stable development⁴³. Collier points out that these ratios provide meaningful information when compared with the company's historical performance⁴⁴, competitors' performance, industry averages or the company's own predefined targets. According to this author, the comparison helps to understand the trend in the organisation's performance and the areas for improvement.

Research sources and methodology

For evaluating the completeness in all material respects of the information provided in the financial statements of micro and small enterprises is taken the state and company case analysis. State analysis is performed using the set of financial statements of one EU state member – Lithuania, and presenting the financial analysis in one micro company.

Directive 2013/34/EU of the European Parliament and of the Council was adopted in 2013⁴⁵. The Law on Corporate Financial Reporting of the Republic of Lithuania (from 1 May 2022, the name of this law is the Law on Corporate Reporting) was changed and the new version of the Law started to apply from 2016. Thus, the current Law distinguishes four different categories of companies based on the balance sheet value of assets, annual revenue and number of employees (Table 1) and their statements. Here it should be stated that the European Commission Recommendation 2003/361/EC identifies

Sosyal Bilimler Dergisi” 2020, 19(39), pp. 1246–1264, available online: <https://doi.org/10.46928/iticusbe.792328> [accessed: 11.06.2022].

⁴⁰ Ignasiak-Szulc A., Juščius V., Bogatova J., op. cit., pp. 571–579.

⁴¹ Hasanaj P., Kuqi B., op.cit.; Kliestik T., Valaskova K., Lazaroiu G., Kovacova M., Vrbka J., op.cit., pp. 74–92; Lia D. A. Z., Natswa S. L., op.cit.; Mbona R. M., Yusheng K., op. cit. pp. 82–95.

⁴² Ignasiak-Szulc A., Juščius V., Bogatova J., op. cit., pp. 571–579.

⁴³ Kliestik T., Valaskova K., Lazaroiu G., Kovacova M., Vrbka J., op. cit., pp. 74–92.

⁴⁴ Collier P. M., *Accounting for Managers: Interpreting Accounting Information for Decision Making*, (5th ed.), John Wiley & Sons, Hoboken 2015.

⁴⁵ Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC, available online: EUR-Lex - 02013L0034-20141211 - EN - EUR-Lex (europa.eu) [accessed: 17.07.2022].

three categories of enterprises using different values of total assets and revenue. According to the EU Recommendation, the value of the assets and/or net revenue of a micro enterprise must not exceed EUR 2 million⁴⁶. Only the number of employees of an enterprise has the same value identifying the category of company in EU and Lithuania.

Table 1. Categories of companies and their statements in Lithuania.

Indicators and statements	Company's size			
	Micro	Small	Medium	Large
Total assets (Eur)	≤ 350 000	≤ 4 000 000	≤ 20 000 000	> 20 000 000
Annual revenue (Eur)	≤ 700 000	≤ 8 000 000	≤ 40 000 000	> 40 000 000
Number of employees	≤ 10	≤ 50	≤ 250	> 250
Balance Sheet	+ short	+ shortened	+	
Income (loss) statement	+ short	+	+	
Statement of cash flows	–	+/-	+	
Statement of changes in equity	–	+/-	+	
Explanatory notes	–	+	+	
Annual report	–	–	+	

Source: made by authors according to the The Law on Corporate Financial Reporting of the Republic of Lithuania (2001).

The number of employees is the main indicator used by researchers. According to Houston and Reuschke⁴⁷, a micro enterprise is generally understood as an enterprise with fewer than 10 employees. Similarly, Pletnev et al., after analysing the classification of enterprises according to national legislation in

⁴⁶ *Commission Recommendation of 6 May 2003 Concerning the Definition of Micro, Small and Medium-sized Enterprises*, 2003 m. gegužės 6 d. Nr. 2003/361/EC, "Official Journal of the European Union" 2003, Nr. L 124, available online: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2003:124:FULL&from=EN> [accessed: 17.07.2022].

⁴⁷ Houston D., Reuschke D., *City Economies and Microbusiness Growth*, "Urban Studies" 2017, 54(14), pp. 3199–3217, available online: <https://doi.org/10.1177/0042098016680520> [accessed: 19.06.2022].

more than 70 countries on different continents, found that the main criterion for classifying the size of enterprises, and the one that is the most similar in the countries analysed, is the number of employees⁴⁸. It was found that if the number of employees is until 10, the enterprise is classified as a micro enterprise, while if the number of employees is between 10 and 50, the enterprise is generally classified as a small enterprise. Thus, the further analysis uses this indicator of the categorisation of enterprises where companies which have less than 10 employees are named micro enterprises, companies with 10 – 50 employees are named small, and together they consider micro and small enterprises (further MSE).

The Law on Financial Accounting of the Republic of Lithuania (2001) requires that all companies should keep accounting with double entry, except entities with unlimited civil liability which are not value added tax payers and which do not have any employees in the accounting year and in the previous financial year⁴⁹. They can choose the simple record for accounting. Therefore, only sole proprietorships and partnerships, which revenue are less than 45 000 Euros (are not required to be registered value added tax payers) and don't have employees can keep simplified accounting. But all Lithuanian companies must maintain their accounting records in such a way as to enable them to prepare their financial statements in accordance with Lithuanian or International Financial Reporting Standards. Thus, each enterprise is required to prepare a set of financial statements for its financial year in accordance with its accounting policies (chosen system of accounting standards: limited liability companies choose between International or Lithuanian Financial Reporting Standards, and sole proprietorships and partnerships choose between International, all Lithuanian Financial Reporting Standards or one Lithuanian accounting standard for sole proprietorships and partnerships). All forms of required financial statements are presented in accounting standards and should be followed by all companies without any changes in rows.

As shown in table 1, the set of financial statements for micro enterprises is the shortest: it must include a short balance sheet and a short income and loss statement. If micro companies have financial commitments and guarantees not disclosed in the balance sheet, long-term reward plans, advances and loans received by the company's directors and members of the management and supervisory bodies, the number of treasury shares held, their nominal value and their share in the share capital, the payment of treasury shares, treasury shares disposed of and acquired and the reasons for acquisition during the period, they should disclose the detailed information in annual report or under

⁴⁸ Pletnev D. A., Barkhatov V. I., Naumova K. A., op.cit., pp. 147–161.

⁴⁹ Lietuvos Respublikos finansinės apskaitos įstatymas, 2001 m. lapkričio 6 d. Nr. IX-574. Valstybės žinios, 2001, Nr. 99-3515, available online: <https://e-seimas.lrs.lt/portal/legalActEditions/lt/TAD/TAIS.154657> [accessed: 20.06.2022].

the short balance sheet⁵⁰. Small companies are required to draw up a shortened balance sheet, an Income (loss) statement and annual report. Statements of cash flows and changes of equity are not required to prepare by small companies, but they can be presented together. The information to be disclosed by micro-enterprises below the balance sheet must be disclosed by small enterprises in the annual report⁵¹. Medium-sized and large enterprises shall draw up a complete set of financial statements.

According to accounting and financial reporting laws, SME may choose not to apply the simplifications provided for them. In this case, micro-entities are required to prepare a set of financial statements that is mandatory for small entities, while small entities may choose to prepare statements of cash flows and changes in equity. Thus, small enterprises can choose which set of financial statements to prepare based on their needs and capabilities.

The research is carried out using a qualitative case study approach. According to Kardelis, qualitative research does not aim to test hypotheses, but to answer questions by analysing a situation and finding an explanation⁵². Moreover, as Quintao et al. argue, a case study is a comprehensive and sequential research approach that involves planning, data collection and analysis⁵³. Thus, the choice of case study for qualitative research was based on its suitability for this research. It will seek to answer an open question by interpreting the data from the analysis of the relative indicators of the financial statements of a specific company which represent all SME as their financial statements are regulated by laws and are the same.

The study uses the 2020 financial statements of small partnership (SP) "X" – a company operating in Lithuania, whose main activity is the production of labels. It was established and started its activities just over 2 years ago. In 2020, the average number of employees of SP „X“ was 3. The value of the assets on the company's balance sheet and the annual net sales revenue are also below the upper limits of the indicators for the smallest category of companies. In 2020, the value of the company's assets was less than EUR 350 000 and its revenue did not exceed EUR 700 000. Consequently, the values of all the indicators used to categorise companies show that SP „X“ is a micro enterprise. It is also a manufacturing organisation and has stocks, which makes it possible to calculate more relative ratios.

⁵⁰ Ibidem.

⁵¹ Ibidem.

⁵² Kardelis K., *Mokslinių tyrimų metodologija ir metodai: edukologija ir kiti socialiniai mokslai: vadovėlis (5-asis patais. ir papild. leid.)*, Mokslo ir enciklopedijų leidybos centras, Vilnius 2016.

⁵³ Quintao C., Andrade P., Almeida F., *How to Improve the Validity and Reliability of a Case Study Approach*, "Journal of Interdisciplinary Studies in Education" 2020, 9(2), pp. 274–285, available online: <https://ojed.org/jise> [accessed: 10.07.2022].

For evaluating the completeness in all material respects of the information provided in the financial statements of SME it would be performed financial analysis of financial ratios. Accounting-based financial ratios are grouped: profitability, turnover, leverage and solvency⁵⁴.

According to Lukason et al., Blanco-Oliver et al., Mackevičius ir Subačienė, Ptak-Chmielewska, Kanapickienė ir Špicas, Pavlovič et al., Ansari et al., Ibrahim and Isiaka, Zimon et al., who identified the most important financial ratios for MSE, there were selected the main ratios that should be calculated for SME in this research and practice (table 2)⁵⁵.

⁵⁴ Baranes A., Palas R., Shnaider E., Yosef A., *Identifying Financial Ratios Associated with Companies' Performance Using Fuzzy Logic Tools*, "Journal of Intelligent and Fuzzy Systems" 2021, 40(1), pp. 117–129, available online: DOI: 10.3233/JIFS-190109 [Accessed: 17.06.2022]; Carreras-Simo M., Coenders G., *Principal Component Analysis of Financial Statements. A Compositional Approach*, "Revista de Metodos Cuantitativos Para La Economia y La Empresa" 2020, 29, pp. 18–37, available online: <https://www.upo.es/revistas/index.php/RevMetCuant/article/view/3580/3930> [accessed: 17.07.2022]; Lia D. A. Z., Natswa S. L., op.cit.; Widarti W., Desfitriana D., Zulfadhli Z., *Business Process Life Cycle Affects Company Financial Performance: Micro, Small, and Medium Business Enterprises during the Covid-19 Period*, "International Journal of Economics and Financial Issues" 2020, 10(5), pp. 211–219, available online: <https://doi.org/10.32479/ijefi.10516> [accessed: 10.09.2022].

⁵⁵ Blanco-Oliver A., Irimia-Dieguez A., Oliver-Alfonso M. D., Vazquez-Cueto M. J., *Hybrid Model Using Logit and Nonparametric Methods for Predicting Micro- Entity Failure*, "Investment Management and Financial Innovations" 2016 13(3), pp 35–46, available online: [https://doi.org/10.21511/imfi.13\(3\).2016.03](https://doi.org/10.21511/imfi.13(3).2016.03) [Accessed: 17.06.2022]; Ibrahim U. A., Isiaka A., *Working Capital Management and Financial Performance of Non Financial Quoted Companies in Nigeria*, "International Journal of Research In Business and Social Science" 2021, 10(3), pp. 241–258, available online: <https://doi.org/10.20525/ijrbs.v10i3.1116> [Accessed: 20.07.2022]; Ansari Z., Hejazi R., Zeraatkish Y., Abadi Z. K. M., *Financial Performance Evaluation of Companies Using Decision Trees Algorithm and Multi-Criteria Decision- Making Techniques with an Emphasis on Investor's Risk-Taking Behavior*, "Advances in Mathematical Finance and Applications" 2021, 6(3), pp. 1–12, available online: <https://doi.org/10.22034/amfa.2020.1897171.1405> [accessed: 11.06.2022]; Lukason O., Laitinen E. K., Suvas A., op. cit.; Pavlovič M., Radoičič J., Milanović M., *Profitability Analysis of Apple Production in the Republic of Serbia*, "Ekonomika Poljoprivrede" 2020, 67(3), pp. 817–830, available online: <https://doi.org/10.5937/ekoPolj2003817P> [accessed: 10.06.2022]; Ptak-Chmielewska A., op. cit., pp. 30–46; Zimon G., Nakonieczny J., Chudy-Laskowska K., Wojcik-Jurkiewicz M., Kochanski K., *An Analysis of the Financial Liquidity Management Strategy in Construction Companies Operating in the Podkarpackie Province*, "Risks" 2022, 10(5), pp. 5–19, available online: <https://doi.org/10.3390/risks10010005> [accessed: 10.09.2022].

Table 2. SME main financial ratios and their formulaes.

	Financial ratio	Formula
Solvency	Current ratio	Current assets/current liabilities
	Quick ratio	(Current assets – Inventories)/ current liabilities
	Cash ratio	Cash and near cash items/ current liabilities
	Working capital to assets ratio	(Current assets – Current liabilities)/Assets
	Debt ratio	Liabilities/Assets
	Equity to liabilities ratio	Equity/Liabilities
Profitability	ROA	Net profit/Assets
	ROE	Net profit/Equity
	Gross profitability	Gross profit/Revenue
	Net profitability	Net profit/Revenue
Efekt.	Turnover of assets	Revenue/Assets
	Turnover of inventories	Costs of goods sold/Inventories

Source: made by authors based NASDAQ OMX Vilnius, 2010, p. 11–14, 19–20, 23, 28, 32, 36; and Mackevičius and Subačienė, 2017, p. 206.

The literature review has identified the most commonly cited and recommended ratios for the analysis of MSE. According to Mackevičius and Subačienė, the best way to determine the financial position of micro companies is to calculate and assess 10 to 15 selected relative ratios (profitability and solvency)⁵⁶. In addition, as mentioned above, Lukason et al. argue that the majority of companies at risk of bankruptcy can be identified by poor values of profitability and solvency ratios⁵⁷. This is also supported by Obradovic, Mizdrakovic, and Obradovic, who found in their study that around 99% of bankrupt companies had solvency problems⁵⁸. Therefore, since it is important for micro enterprises to survive in a competitive business environment and to

⁵⁶ Mackevičius J., Subačienė R., op.cit.

⁵⁷ Lukason O., Laitinen E. K., Suvas A., op.cit.

⁵⁸ Obradović A., Mizdraković V., Obradović M., *Liquidity and Solvency of Healthy and Bankrupt Entities: Do Financial Statements Show Any Differences?*, “International Review” 2020 (3–4), available online: DOI: 10.5937/intrev20031230 [accessed: 10.06.2022].

avoid bankruptcy, they need to pay particular attention to the profitability and solvency ratios.

Research results

Performing the state analysis, it is appropriate to analyse the structure of the financial statements for MSE in Lithuania, as the financial analysis uses the financial statements and the information they contain.

A comparison of the MSE short and shortened balance sheet forms is shown in table 3. The shortened balance sheet is more detailed than the short balance sheet. The differences are apparent in the fixed assets, current assets and equity items. The short balance sheet distinguishes fixed assets only between tangible assets and other fixed assets, while the shortened balance sheet distinguishes, in addition to the items already mentioned, intangible assets and financial assets. The short balance sheet divides current assets into inventories and other current assets, while the current assets section of the shortened balance sheet includes inventories, receivables, short-term investments and cash and cash equivalents. Equity of MSE is not detailed and the short balance sheet presents a single total amount of equity, while the shortened balance sheet breaks down equity into the categories of share capital, share premium, revaluation reserve, reserves and retained earnings (loss).

Table 3. The comparison of short and shortened forms of balance sheet of MSE in Lithuania.

SHORT BALANCE SHEET	SHORTENED BALANCE SHEET	EQUITY AND LIABILITIES	EQUITY AND LIABILITIES
ASSETS	ASSETS		EQUITY
FIXED ASSETS	FIXED ASSETS		Share capital
	Intangible assets		Share premium
Tangible assets	Tangible assets	EQUITY	Revaluation reserve
Other fixed assets	Financial assets		Reserves
	Other fixed assets		Retained earnings (loss)
CURRENT ASSETS	CURRENT ASSETS	GRANTS, SUBSIDIES	GRANTS, SUBSIDIES
Inventory	Inventory	PROVISIONS	PROVISIONS
	Short-term receivables	ACCOUNTS PAYABLE AND OTHER LIABILITIES	ACCOUNTS PAYABLE AND OTHER LIABILITIES
Other short-term assets	Short-term investments	Long-term liabilities	Long-term liabilities
	Cash	Short-term liabilities	Short-term liabilities
PREPAYMENTS AND ACCRUED EXPENSES	PREPAYMENTS AND ACCRUED EXPENSES	ACCRUALS AND DEFERRED REVENUE	ACCRUALS AND DEFERRED REVENUE
TOTAL ASSETS	TOTAL ASSETS	TOTAL EQUITY AND LIABILITIES	TOTAL EQUITY AND LIABILITIES

Source: made by authors based on 2 Lithuanian Accounting Standard, 2015, p. 12–15.

Compared short and shortened forms of MSE profit (loss) statements is shown in table 4. Both forms have only three identical items: sales revenue, income tax and net profit (loss). In general, the short profit (loss) statement shows only sales revenue and other income, while the shortened profit (loss) statement distinguishes between sales, investments in company shares, loans, interest and other similar revenues. The short form of the statement also includes purchases of inventories and consumption of resources and changes in inventory, but the shortened form does not include such items. In addition, as Kanapickienė and Špicas point out, for micro enterprises, the profit (loss) statement does not distinguish between cost of sales, distribution and general

and administrative expenses⁵⁹. Costs are reported here by nature (employment-related costs, depreciation, amortisation and impairment of assets and other costs) rather than by purpose.

Table 4. The comparison of short and shortened forms of profit (loss) statement of MSE in Lithuania.

SHORT INCOME (LOSS) STATEMENT	SHORTENED INCOME (LOSS) STATEMENT
Sales revenues	Sales revenue
Other revenues	Cost of goods sold
Inventories purchased and resources consumed	Change in fair value of biological assets
Change in inventories	Gross profit (loss)
Staff costs	Distribution costs
Depreciation, amortisation and impairment	Administrative expenses
Other expenses	Other operating income
	Income from participating interests
	Income from other investments and loans
	Other interest receivable and similar income
	Value adjustments of financial assets and short-term investments
	Interest payable and similar expenses
	PROFIT (LOSS) BEFORE TAX
Income tax	Income tax
Net profit (loss)	Net profit (loss)

Source: made by authors based on 3 Lithuanian Accounting Standard, 2015, p. 7– 8.

Key financial ratios were calculated based on the available short balance sheet and profit (loss) statement of SP „X“ (table 6).

⁵⁹ Kanapickienė R., Špicas R., op. cit.

Table 6. Results of financial ratios' calculations.

	Financial ratios	Formulas	Calculation	Value	From short statements
Solvency	Current ratio	Current Assets/ Current Liabilities	23530/4093	5,75	+
	Quick ratio	(Cash and Near Cash + Short Term Investments + Account Receivables)/ Current Liabilities	(23530 – 3189)/4093	4,97	+
	Cash ratio	(Cash and Near Cash Items + Mrktable Sec and Other ST Invts)/ Current Liabilities	–	–	–
	Working capital to assets ratio	(Current Assets – Current Liabilities)/ Assets	(23530 – 4093)/29963	0,65	+
	Debt ratio	Total Liabilities / Total Assets	4735/29963	0,16	+
	Equity to liabilities ratio	Equity/Liabilities	25228/4735	5,33	+
Profitability	ROA	Net profit/Assets	16439/29963	54,86 %	+
	ROE	Net profit/Equity	16439/25228	65,16 %	+
	Gross profitability	Gross profit/Revenue	–	–	–
	Net profitability	Net profit/Revenue	16439/65514	25,09 %	+
Effect.	Turnover of assets	Revenue/Assets	65514/29963	2,19	+
	Turnover of inventories	Costs/Inventories	–	–	–

Source: calculated by authors.

The cash ratio, gross profitability and turnover of inventories cannot be calculated on the basis of the financial information in the short balance sheet and profit (loss) statement of MSE because these statements do not have required items. It means that the financial information in the short forms of financial statements is not complete in all material respects. Thus, a MSE that chooses to prepare short set of financial statements would not be able to assess its cash ratio, gross profitability and turnover of inventories without the use of sub-accounts. If micro enterprise choose to prepare a set of financial

statements for small companies it would have the ability to calculate and measure all the relative profitability, turnover and solvency ratios that are most important for micro enterprises.

Financial statements of SP „X“ is an example of financial statements of all micro companies in Lithuania because the stated forms of financial statements are mandatory for all micro companies, then problems to calculate well-known financial ratios to make financial analysis for many purposes arise for all micro companies. Therefore, we may conclude that micro companies are more likely to experience financial difficulties in their daily life because of the absence of detailed control.

Other results of relative research of practice in micro companies shows this problem. A study by Balkytė et al. found that micro enterprises often choose to opt out of the exemptions provided to them and to prepare more complete sets of financial statements⁶⁰. The authors examined the compliance of the 26 MSE financial statements with the provisions of IAS. It was revealed that 10 companies (38%) opted for the permitted exemptions and the remaining 16 companies (62%) did not apply the simplifications: 1 prepared a full set of financial statements and 8 enterprises prepared the forms of financial statements for small companies. The Accounting, Auditing, Asset Valuation and Insolvency Policy Department of the Ministry of Finance (2018) surveyed 65 organisations, of which 69% were in the micro enterprise category and identified a short profit (loss) statement as one of the difficulties encountered in accounting⁶¹. Thus, both surveys together suggest that micro enterprises that do not benefit from the possible simplifications tend to prepare a set of financial statements for small enterprises because of the greater clarity of the preparation and the complete in all material respects information for financial analysis.

Conclusions

MSE are of major economic and social importance. In terms of financial accounting regulations, certain simplifications are granted to MSE: they can prepare a short profit (loss) statement and a short balance sheet as EU regulation let to all EU member states. The most important of these are completeness in all material respects, materiality, reliability and usefulness to users for decision-making process.

The analysis of ratios is identified by most researchers as the best and quickest method of financial analysis. It provides reliable data for assessing the financial health of an enterprise. On the basis of the ratios recommended by researchers

⁶⁰ Balkytė G., Kvekšienė M., Striaukaitė L., op. cit.

⁶¹ Accounting, Auditing, *Asset Valuation and Insolvency Policy Department of the Ministry of Finance*, 2018, available online: Del-VAS-taikymo-palengvinimo.pdf (lrv.lt) [accessed: 11.06.2022].

and the characteristics of the smallest companies, it has been found that micro enterprises should calculate and assess the following ratios: current, critical, cash, debt ratios and working capital to assets ratio, equity to liabilities ratio, return on assets and return on equity (ROA and ROE), gross and net profitability, turnover of assets and turnover of inventories.

The case analysis of state which as EU member regulate forms of financial statements showed that short forms for micro companies and shortened forms for small companies in Lithuania are different. Short balance sheet have not intangible assets, financial assets, receivables, cash rows, all equity items are presented in one single total amount of equity. While short and shortened profit (loss) statements differ very significantly because the costs and revenues are reported here by nature (employment-related costs, depreciation, amortisation and impairment of assets and other costs) rather than by purpose in the form for micro enterprises. Both forms have only three identical items: sales revenue, income tax and net profit (loss). The short profit (loss) statement shows only sales revenue and other income, while the shortened profit (loss) statement distinguishes between sales, investments in company shares, loans, interest and other similar revenues. The short form of the statement also includes purchases of inventories and consumption of resources and changes in inventory, but the shortened form does not include such items.

The case analysis of micro company showed that the disclosures in the financial statements of small enterprises are indeed complete, whereas those of micro enterprises are not complete in all material respects. The information in the financial statements of the small enterprise category is sufficient to calculate the main financial ratios, whereas the information in the financial statements of micro enterprises does not allow the calculation of cash ratio, gross profitability and turnover of inventories ratios. The main problem with micro enterprises is that, although this category of enterprises could benefit from the simplifications allowed to them, prepare short financial statements and analyse the key ratios on the basis of these statements, they tend to opt for a set of financial statements in the small enterprise category for unclear reasons. If management of the company wants to assess its financial position (calculating and exploring the main financial ratios), it is therefore recommended that micro enterprises should prepare a set of financial statements for small enterprises.

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ANALYSIS OF ACCOUNTING QUALITY RISK IN THE MSE REPORTING SECTOR

Abstract

Micro and small enterprises (MSEs) in the Central and Eastern European countries (CEECs) have been under pressure from both political and economic changes. To build trust, MSEs must disclose information as clearly as possible, through transparent financial reporting. The article aims to study the impact of eight accounting quality risk indicators, based on MSE-sector financial reporting in the EU countries, particularly in the CEECs. The qualitative research methodology consists of a descriptive study of the financial reporting risks, emphasizing the types of reports and the association thereof with company characteristics. The study covers a sample of 70 US stock market listed MSEs, which are included in the Audit Analytics database, an online platform collecting information contained in financial statements. The period considered relevant was 2002–2022. A total of 289 flags were identified, 7.97% of which represented CEECs. According to the results, the Altman Z-Score indicator showed the highest (nearly half of the identified flags) impact of the accounting quality risk on the financial statements of MSE in the EU. The Altman Z-Score and the Deviation from Benford's Law index exhibited significant impact on the MSE financial reports in CEECs. Considering the rapid evolution of the possible risks affecting MSE financial statements, as well as the fact that this topic has not been researched thoroughly, the findings are of relevance. Originality/contribution: The contribution of this article can be viewed through the prism of the scarcity of research in this area, which is why this sphere presents potential for further and broader discussion.

Keywords: Financial Reporting; Accounting Quality Risk, MSE sector, Altman Z-Score, Benford's Law.

ANALIZA RYZYKA JAKOŚCI RACHUNKOWOŚCI W SEKTORZE SPRAWOZDAWCZOŚCI MŚP

Streszczenie

Mikro i małe przedsiębiorstwa (MŚP) w krajach Europy Środkowej i Wschodniej (CEE) znajdują się pod presją zmian politycznych i gospodarczych. Aby zbudować zaufanie, MŚP muszą przekazywać informacje w sposób jak najbardziej klarowny, co osiąga się poprzez przejrzysty proces sprawozdawczości finansowej. Celem artykułu jest zbadanie wpływu ośmiu wskaźników ryzyka jakości rachunkowości w sektorze sprawozdawczości finansowej MŚP w krajach UE, w szczególności



w krajach Europy Środkowo-Wschodniej. Metodologia badań jakościowych polega na opisowym badaniu ryzyka w sprawozdaniach finansowych, z podkreśleniem jego rodzajów i związku z cechami przedsiębiorstwa. Badanie opiera się na próbie 70 MŚP, notowanych na amerykańskim rynku giełdowym i włączonych do bazy danych Audit Analytics, platformy internetowej zawierającej informacje ze sprawozdań finansowych spółek. Okres 2002–2022 został uznany za odpowiedni; zidentyfikowano 289 flag, z których 7,97% należy do krajów Europy Środkowo-Wschodniej. Zgodnie z wynikami, wskaźnik Altmana miał największy wpływ na ryzyko jakości rachunkowości w sprawozdaniach finansowych MŚP w UE, tj. prawie połowy zidentyfikowanych flag. Wskaźnik Altmana oraz wskaźnik Odchylenie od Prawa Benforda znacząco wpływały na sprawozdania finansowe MŚP w krajach Europy Środkowo-Wschodniej. Biorąc pod uwagę szybką ewolucję ryzyka, które może mieć wpływ na sprawozdania finansowe MŚP oraz fakt, że temat ten nie został dokładnie zbadany, uważamy go za istotny. Wkład tego artykułu do literatury przedmiotu może być postrzegany w świetle faktu, że nie istnieje zbyt wiele badań na ten temat.

Słowa kluczowe: Sprawozdawczość finansowa, ryzyko jakości rachunkowości, sektor MŚP, Wskaźnik Altmana, prawo Benforda.

Introduction

Micro and small enterprises (MSEs) are the engines of the European economy. These types of enterprises are the basis for the growth of the world economy because, thanks to these entrepreneurs, many jobs are created, and thus social stability takes place. According to the statistics, MSEs are creating 9 out of 10 businesses, stimulating innovation worldwide but especially in the European Union. Considering this, we need to consider that these types of companies are vital for the competition in the field of work and among employees.

Since these companies represent an essential point in the European Union, it is understandable that it must consider many European-level developments.

The European community is trying to offer these companies all the conditions and possibilities to improve their capacities and reach their maximum potential, rising to the optimal global level. Considering that we are dealing with micro and small enterprises, it goes without saying that their size differs depending on specific criteria such as the number of employees, share capital, etc. In the economic field, it is important that MSEs be differentiated in order to benefit from the European Union support. Therefore micro and small enterprises must overcome all barriers like lack of knowledge, technical problems or negative influences from the market in which it operates.

This paper is structured in three parts; in the first part, we find some theoretical aspects, thus creating the conceptual framework of the research field, followed by the research methodology based on qualitative statistical analysis. The third part of this article details the results of this study combined with the

comments generated by this research. In the final part of this paper, we summarized the conclusions, the limitations we faced and future possible research directions.

1. Literature review

Over the years, the countries of Central and Eastern Europe have undergone political, social and economic transformations. Even if the economy of these companies is still developing, it is to be appreciated that they are trying to keep up with market laws.

Since 2000, there has been a growing need to harmonize and simplify financial reporting for MSEs globally. To meet this need, the International Accounting Standards Board (IASB) has begun work on developing an appropriate standard for MSEs. With the help of a working group specially formed to achieve this standard and the entity's constant concerning opinions, the IASB published the International Financial Reporting Standard for Micro and Small Enterprises – IFRS for MSEs¹.

The process of implementing IFRS for micro and small enterprises brings some advantages that we need to take into consideration:

- Improving access to capital,
- Improving the quality of the financial reporting,
- Improving the stability of the accounting framework.

However, very often, it is concluded that attention needs to be drawn to the disadvantages of MSEs:

- Existence of unprofitable investment cases.
- Taxes and requirements too high.
- Too little market demand for products or services offered by some small or medium-sized enterprises.
- The entrepreneur may not have all the skills needed to run the business, so sometimes difficulties may arise in the process of organizing activities, and if the entrepreneur intends to expand its business sector and is not sufficiently prepared for it, it may suffer a failure.
- The legislation, the policy of the country in which the company operates and the monopoly situations can negatively influence its development;
- Difficulties in obtaining loans or persuading investors to receive the financial resources needed to grow the business may arise.
- Also, the high-interest rate often leads to the inability of the company to adapt to all requirements and bankruptcy.
- Insufficient information and experience in the field.

¹ European Federation of Accountants and Auditors, *International Financial Reporting Standard (IFRS) for Small and Medium-sized Enterprises (SMEs)*, 2009, available at: <https://www.iasplus.com/en/news/2009/July/news4969> [access: May 2022].

During the implementation of these processes, the emphasis is always on the needs of users of the company's financial results². Applying the complete set of IFRS to micro and small enterprises might be much since the proportion if it is too high for small firms. Implementing the IFRS requirements for MSEs is substantially reduced compared to implementing the complete set of IFRS since not all information provided by the rules is appropriate for the user's needs. Holt mentions that the many full IFRS presentations are more relevant to capital market investment decisions than micro and small enterprises³.

The IFRS for MSEs can provide a non-publicly liable entity with the opportunity to adopt a reporting framework that can reduce its complexity and accounting and financial reporting costs. However, a careful analysis of accounting and reporting requirements and other qualitative criteria is required before adopting this standard⁴.

IFRS for MSEs is an essential path toward worldwide intersection of financial reporting practices for SMEs. Applying this standard would reduce the differences between international accounting practices and open up new opportunities for MSEs, such as increasing the quality and comparability of financial statements but also the possibility of attracting new investors⁵.

Albu conducted an empirical study regarding the criteria based on which the IFRS coverage area for MSEs can be chosen. This study showed that size should not be the only criterion, but should two criteria for defining this area are considered⁶.

The process of harmonization in the definition of MSEs at the global level should be based on qualitative rather than quantitative criteria, as each economy often influences quantitative and value limits. Although some quantitative definitions could be adapted in several economies, the value levels of these

² Bunea C., P. M. C., Petroianu O. G., *Consensual and Controversial Issues on IFRS for SMEs*, 2011, Retrieved from: <https://www.yumpu.com/en/document/view/38583219/consensual-and-controversial-issues-on-ifrs-for-smes> [access: June 2022].

³ Holt G., *IFRS for SMEs*, 2014, available at: <http://www.accaglobal.com/za/en/discover/cpd-articles/corporate-reporting/ifrs-smes.html> [access: May 2022].

⁴ Ernst & Young, *IFRS for SMEs: Implications for US Private Entities*, 2009, available at: <http://www.ey.com/UL/en/AccountingLink/Current-topics-IFRS-matters> [access: May 2022].

⁵ Neag R., Mașca E., Pășcan I., *Actual Aspects Regarding IFRS for SME – Opinions, Debates and Future Developments*, "Annales Universitatis Apulensis Series Oeconomica" 2009, vol. 1, nr 11.

⁶ Albu C. N., *How Relevant is Size for Setting the Scope of the IFRS for SMEs*, "Accounting and Management Information Systems" 2013, vol. 12, nr 3, pp. 424–439.

criteria should be adapted depending on the sector of activity and the stage of development of economies⁷.

The main difficulty in performing IFRS for MSEs is that the notion of small and medium-sized enterprises covers a wide variety of entities, regardless of the size, category or knowledge demand. In several countries, some entities follow the definition of MSEs given by the IASB but are not classified as such⁸.

Adopting measures to simplify financial reporting at the European level can only be effective if all Member States approve it and combine reporting for different purposes to reduce the difficulties of maintaining different accounting and financial reporting systems⁹. On the other hand, the Federation of European Chartered Accountants has expressed its support for high-quality financial reporting standards for companies, as they promote coherence and transparency and help entities to respond appropriately to new developments in business practice. In this regard, the Federation of European Chartered Accountants has supported IFRS for MSEs, through which entities with branches, subsidiaries, or operate in several countries experience simplification in financial reporting using a single standard and accounting framework¹⁰.

Further harmonization of accounting in Europe, including the use of IFRS for MSEs within the European Union, would require addressing barriers in all areas of accounting, in particular the relationship with taxation and profit sharing. The Federation of European Chartered Accountants considers that Member States should be allowed to consider concerns such as taxation for them and decide, at the Member State level, whether or not to allow the implementation of IFRS for MSEs¹¹.

⁷ Buculescu M. M., *Procesul de armonizare în definirea întreprinderilor mici și mijlocii. Argumente pentru o definire cantitativă versus o definire calitativă*, "Economie teoretică și aplicată" 2013, vol. XX, nr 9 (586), pp. 91–103.

⁸ Tiron T. A., Muțiu A., *Pro and Contra Opinions Regarding a SME Accounting Standard*, "Annales Universitatis Apulensis Series Oeconomica" 2008, vol. 1, nr 10, pp. 12–16.

⁹ Rotilă A., *Proiectul european de simplificare pentru IMM-uri în domeniul contabilității și al auditului*, "EIRP Proceedings" 2008, vol. 3, available at: <http://www.proceedings.univ-danubius.ro/index.php/eirp/article/view/1084/1003> [access: June 2022].

¹⁰ European Federation of Accountants and Auditors, *International Financial Reporting Standard (IFRS) for Small and Medium-sized Enterprises (SMEs)*, 2009, available at: <https://www.iasplus.com/en/news/2009/July/news4969> [access: May 2022].

¹¹ European Federation of Accountants and Auditors, *FEE Position on EC Consultation on IFRS for SMEs*, 2010, available at http://www.fee.be/images/publications/accounting/FEE_Position_on_EC_Consultation_on_IFRS_for_SMEs_1003121632010171233.pdf [access: May 2022].

Implementing this standard is inappropriate for entities in European Union due to cultural diversity and accounting systems. However, they must simplify their financial reporting content¹².

Among the primary users of the financial reports of MSEs are the managers/owners, which are the main interested in tax information and those on the company's availability. This is the reason is why accountants should determine the most suitable accounting regulations for the company for which they prepare financial reporting so that the information they send to managers is not limited to those contained in the administrative reporting required by the state¹³.

The importance of a qualitative reporting process is observed in developing a financial accounting structure as suitable as possible for the company and a regulatory framework by the legislation in force. Although the process of qualitative financial reporting is quite recognized by researchers and is at the same time a current problem of enterprises, this aspect becomes essential in the case of financial disasters. According to IASB, a high-quality financial reporting structure provides valuable information to stakeholders, especially in decision-making.

Thus, it is recommended that micro and small enterprise managers find ways to improve the transparency of annual financial reports. In doing so, several indicators have been developed to measure the quality of accounting risk in the financial statements. In order to have a better understanding of what the analyzed indicators refer to, we considered it relevant to detail them.

We considered the Out of Period Adjustment (OP) index the first accounting quality risk indicator. This indicator refers to a specific adjustment to the immaterial errors found in the previous periods. Impairment (I) is the second indicator, indicating if a company disclosed an impairment based on extensible business reporting language (XBRL) tagging disclosures. The third indicator (Change in Accounting Estimates/CAE) suggests that there is a possibility of a change in the estimate, as it is defined in Accounting Changes and Error Corrections (Topic 250) (ASC 250-10-20). The Financial Restatement (FR) indicator shows a recently disclosed financial restatement. Another indicator found in the financial reports of the analyzed companies is the complexity of the accounting disclosure (ADC). This indicator follows the methodology developed by Barac, which states that the ratio of custom to standard tags is more than

¹²Deaconu A., Popa I., Buiga A., Fulop M., *Conceptual and Technical Study Regarding Future Accounting Regulation for SMEs in Europe*, "Theoretical and Applied Economics" 2009, nr 1, pp. 19–32.

¹³ Buculescu M. M., Velicescu B. N., *An Analysis of the Convergence Level of Tangible Assets (PPE) According to Romanian National Accounting Regulation and IFRS for SMEs*, "Accounting and Management Information Systems" 2014, vol. 13, nr 4, pp. 774–799.

2 Standard Deviations significant than the industry group average, based on two-digit NAICS codes¹⁴.

According to Audit Analytics explanations legend, the deviation from Benford's law (DBL) mentions that a flag will appear if the company's financial reports considerably deviate from the law¹⁵. Using the Kolmogorov-Smirnov test, a "notable" flag will appear if the KS Score is greater than the critical value with 95% confidence. A "significant" flag will occur if a company fails the KS test and the MAD Score increases in two consecutive years. The Beneish indicator specifies whenever a company's M-Score exceeds the threshold of -1.78. Therefore, the company has a higher probability of manipulating earnings. Finally, the last indicator, Altman Z-Score, assumes that if the company falls below the threshold identified as the distress zone, it will be indicated with a notable flag. Second, if the Z or Z score decreases for two consecutive years and falls within the "grey zone", then that will likewise be indicated by a notable flag. The second flag is meant to catch cases where the Z-Score is not yet in the distress zone, but the decreasing Z-Score value indicates deteriorating financial health.

Research methodology

According to the research method, this paper presents a qualitative descriptive study of the accounting risk indicators identified by auditors in the company's financial reports. The case study focuses on observing the evolution of the indicators and their type and the link between identified indicators from the company's financial reports and their specific characteristics.

Considering the nature of the case study, we decided to select the sample from the database provided by Audit Analytics, an online platform consisting of published information extracted from the company's financial statements. By the time of creating this sample, we considered some criteria to be relevant. First, we considered the value of the company's revenue to follow the imposed legislation on micro and small enterprises. Usually, the maximum ceiling at which a company can still be considered micro or small is 10 million EUR. The platform currently provides information from the companies listed on the US stock exchange; therefore, the numerical values are expressed in dollars. Also, it is essential to mention that the lowest value managed to be set in the Audit Analytics platform was \$ 10 million in revenue¹⁶.

To present relevance in the present study, we selected only companies with revenues of less than one million dollars, approximately one million euros. Another criterion for creating the sample was the period between 2002 and 2022, selecting only foreign countries. Therefore, following the imposed criteria,

¹⁴ Barac Z. A, *Financial Reporting Quality Measurement - Approaches, Issues and Future Trends*, Conference Paper, 2021.

¹⁵ Audit Analytics 2022 IVES Group...

¹⁶ Ibidem.

a sample of 70 MSEs resulted. For the 70 identified companies, approximately 289 red flags were found regarding accounting quality risk indicators, of which 7.97% belong to CEECs. The geographical structure of the sample is shown in Table no. 1.

Table 1. Sample structure.

Countries	Number of companies	AQRM flags	Reports number
Belgium	3	24	19
Bulgaria	1	5	3
Cyprus	3	12	8
Czech Republic	2	6	4
Denmark	7	26	18
France	6	31	18
Germany	7	11	8
Greece	9	47	31
Ireland	10	58	35
Italy	4	11	6
Latvia	1	2	1
Lithuania	1	5	4
Luxembourg	2	2	2
Netherlands	6	25	17
Norway	1	3	2
Poland	1	1	1
Portugal	1	2	2
Romania	1	4	3
Spain	1	3	2
Sweden	3	11	8
Total	70	289	192

Source: own processing.

During the analysis, we established around 35 financial report statements dispersed between 2003 and 2022.

Considering the table presented above, we can see that Ireland has the most significant number of micro and small enterprises (10 companies), where most accounting quality risk flags have been identified (58 flags), representing 20.06% of the total AQRM flags. Observing the sample, we notice six out of ten central and eastern European countries: Bulgaria, Czech Republic, Lithuania, Latvia, Poland, and Romania.

Considering only the CEE countries, we realize that the Czech Republic, whose MSEs, have presented the most annual financial reports in which the auditors have identified accounting qualitative risk indicators. For this country, we have identified two companies whose financial reports have been found with six accounting quality risk indicators for 2006–2021.

At the same time, we can see that Bulgaria, although only one company met all the required criteria, returned three reports containing five AQRM flags. We also notice that Romania, with the only micro-enterprise, presented during the relative three consecutive years four flags that indicate the possibility of irregularities regarding the risk of the quality of the accounting process. Finally, the last micro-enterprise of a CEE country belongs to Poland, with only one AQRM indicator found for the year 2021.

Results

Following the sample presented above, we analyzed the frequency of the accounting quality risk indicators identified in the financial statements of European countries and CEE countries. The detailed performed analysis is represented in table no. 2 below.

Table 2. AQR Indicator Frequency.

AQR Indicator	Frequency in European countries	Percentage by flags	Frequency in CEECs countries	Percentage by flags
Out of Period Adjustment	4	1%	0	0%
Impairments	20	7%	0	0%
Change in Accounting Estimates	13	4%	0	0%
Financial Restatement	30	10%	2	9%
Accounting Disclosure Complexity	38	13%	3	13%
Deviation from Benford's Law	40	14%	6	26%
Beneish M-Score	9	3%	0	0%
Altman Z-Score	135	47%	12	52%
Total	289	100%	23	100%

Source: own processing.

Table 2 shows that the average frequency of identified qualitative accounting risk indicators in the financial statements was 46.71%, practically almost half of the possible irregularities found in the annual financial reports. The *out of period adjustment* indicator represents the lowest percentage for companies in

Europe (1%), while for companies in eastern and central Europe, it did not show any alarm signal.

Another critical indicator we can observe in this analysis is the *Deviation from the Benford Law*, being identified for the companies from the European countries in the proportion of 14%, while for the countries positioned in the east and centre of Europe in a higher proportion, namely 26%. For both situations, this indicator ranks as the second most identified accounting quality risk, which means that in a series of data numbers, the frequency distribution of the first digit was not uniform but negatively exponential. This indicator detects bank, election, credit card or tax fraud. In the United States, it is considered evidence if it is proven in court for fraud cases.

The last indicator that the auditors considered is Altman Z-Score, the most significant accounting quality indicator found in both analyses. Looking at the table above, we see that this indicator represents 47% of the total flags identified for companies in European Union countries. In contrast, the indicator exceeds 52% of the total number of identified signals for Eastern and Central European countries.

Altman Z-Score is one of the models known and used in a company's bankruptcy risk analysis norm. This model uses several essential indicators to understand a company's health, from operating profit margin, asset quality, working capital or capitalization. These indicators say a lot about the insolvency risk of a company in the medium and long term. The model is advantageous when talking about 'bad' companies, but it does not show 'good balance sheet' companies with liquidity problems because it does not include cash flows.

What is very interesting is the fact that this indicator was highlighted in the annual financial reports of all companies in Eastern and Central Europe for the period between 2011 and 2022.

To have an overview, we considered it relevant to observe the areas of activity for which the accounting quality risk indicators were identified. The primary industries the companies activate are set out in table no.3, by Standard Industrial Classification (SIC) code.

Table 3. Industries.

SIC Code	Divisions	Flag number in European countries	Percentage by flags	Flag number in CEECs countries	Percentage by flags
1	Mining, Construction	9	3%	1	4%
2	Manufacturing – Groups 20–29	134	46%	N/A	N/A
3	Manufacturing – Groups 30–39	41	14%	5	22%
4	Transportation, Communications, Electric, Gas, And Sanitary Services	37	13%	N/A	N/A
6	Finance, Insurance and Real Estate	6	2%	N/A	N/A
7	Services – Groups 70–79	49	17%	17	74%
8	Services – Groups 80–89	13	4%	N/A	N/A
	Total	289	100%	23	100%

Source: own processing.

From table no. 3 results that the companies with the field of activity directed in the area of construction and mining represent 39% of the financial documents of the CEECs on which the financial auditors identified AQRM flags. In contrast, for the European micro and small enterprise, it represents only 3%. An essential category is represented by the manufacturing sector (pharmaceutical and chemical products). Regarding the analysis performed at the European level, 134 flags were identified, thus representing the highest percentage in which irregularities were identified (46%).

On the other hand, we notice that the indicator did not represent significance in the analysis of Eastern and Central European companies. Regarding the analysis of the services sector included in groups 80-89 (services-computer programming, data processing), we realize this is the sector that represented the reddest signals in CEECs. We notice that the percentage is above the AQRM average of the flags identified in the financial statements (74%). In this sector of activity, the companies from the Czech Republic, Lithuania, Latvia and Romania carry out their business, thus resulting in seven annual financial reports with a high risk on the quality of the accounting process.

Another interesting aspect that we can observe in the table above is that although there were 23 flags identified in the analysis, they did not appeal to the transport, communications, electricity, gas and sanitary services sector.

This aspect shows us that although Covid-19 caused many problems, this aspect did not determine the occurrence of accounting risks in the abovementioned areas.

According to the results, we realize that some activities could be more affected by the accounting quality risks than others, depending on how national regulations are managed.

Conclusions

The lack of transparency or opacity and, therefore, the uncertainty of regulatory policy has a negative impact, in particular, on MSEs, creating additional costs for them, including because the latter have fewer resources and skills to deal with these factors.

Transparent, fair rules, access to information on the procedures required to enter the domestic and export market, and free competition are primarily for the benefit of MSEs. The law aims to promote the sustainable development of micro and small enterprises by improving the legal framework and the economic environment in which they are created and operate. The law aims to ensure and increase the competitiveness and performance of micro, small and medium enterprises and to facilitate the prompt adjustment to economic and technological changes.

According to the results of this study, we realize that deviation from Benford's Law and Altman Z-Score were the most identified indicators for both European enterprises and as well as for the CEECs. This fact indicates that the auditors have paid particular attention to the possibility of detecting fraud or insolvency, as the two indications point to this.

At the same time, we realize that the fields of activity found in the category Manufacturing – Groups 20–29 and Services – Groups 70–79 represented the most risks in which external and internal factors affect the quality of the accounting process. The object of this paper was to highlight the main accounting quality risk indicators found by the auditors in the financial statements and how this may affect the company's value. The results of the study showed that there was an average trend of 3-4 reported situations per year, with a substantial increase over the last years for CEECs.

The main conclusion from the study is that the uncertainties reported by the auditors depend more on the company's field of activity and how it is managed; therefore, the MSE sector should be coordinated according to the accounting regulations regarding the principles and the content of the financial reports.

The contribution of this article can be seen in the light of the fact that there is not much research on this topic, which is why the field can be discussed more widely. Since all the information was extracted from only one database (Audit Analytics), this paper faced a series of limitations, such as the small number of

identified company's lack of financial reports from all central and eastern European countries¹⁷.

This article can only be the beginning of a series of research in this area, considering the numerous possibilities for future studies. For future research directions, we can consider using a larger sample and why not even using a database whose information includes companies listed on the European Capital Exchange. At the same time, we can consider developing a bibliometric analysis, thus creating a qualitative statistical analysis for an econometric model analysing the factors that influence the content of financial documents.

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