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Are Small and Medium-Sized Enterprises the Strength of the Polish Economy?

MICHAŁ ZUBEK

*Human Capital Institute, Collegium of Business Administration,
SGH Warsaw School of Economics*

Abstract

The research conducted under the micro-project *Intellectual Capital and Technological Development of Small and Medium-Sized Enterprises in Poland* focused on the impact of intellectual capital on the technological development of SME. The purpose of this research was to determine the influence of intellectual capital on the technological advancement of these enterprises. Due to the broad approach to economic development and the significant role of SMEs in the economy, a series of three articles was chosen as the publication format. This publication serves as an introduction, addressing the essence and importance of the SME sector. The article aims to confirm the impact of the SME sector on the economic development of the country, which is considered significant based on statistical data. The data reveal a favourable statistical picture of SMEs, showing an increase in the number of business entities and their positive impact on the labour market and GDP growth. The findings underscore the need for continued efforts to eliminate ineffective management practices within the various components of intellectual capital. The subject matter of the research cycle continues in the next two papers. The second article, entitled “The Role of Intangible Resources in Shaping the Value of Knowledge-Based Enterprises” emphasises the need and necessity of implementing in small and medium-sized entities. The third article, considers it important to identify, measure, and value these assets. Detailing the

methods of doing so, it summarises the research results and points to intangible assets as the main determinants of company management in a knowledge-based economy. It demonstrates the significant impact that small and medium-sized businesses could have on the development of the national economy if the management of intellectual capital in these enterprises adhered to the principles of conscious and rational use of knowledge assets. As a result of the increasing importance of a company's intellectual capital – including its human resources, structural, and relational values – small and medium-sized enterprises must change their previous intuitive, approach to their management to a conscious and strategic approach. This transition will enable them to remain competitive in the market in an era of widespread technological and other changes affecting the product and labour market. In view of the volatile environment and the development of a knowledge-based economy, the ability to manage intangible assets becomes particularly important for the development of enterprises, both large and those in the SME sector. Effective management of intellectual capital should be considered a key competence in this area. Although the tools for managing this invisible potential are discussed in the literature and practically applied in large companies, they are only beginning to be adopted by small and medium-sized enterprises. Given the significant contribution of these entities to national income generation and job creation, it is necessary to adapt and implement the concept of intangible asset management to suit the operating conditions of small business.

Keywords: small and medium-sized enterprise (SME) sector, intellectual capital, knowledge-based economy, economic development gap between book value and market value of small and medium-sized enterprises

JEL Classifications Code: A1

Introduction

This article is an introduction to a series of articles treating the impact of intellectual capital on the development of enterprises in the SME sector. The results of the research fill the research gap defined as the lack of recognition to what extent the level of intellectual capital determines the development of SMEs that constitute the strength of the Polish economy. Over the past several years, it has been observed (...) a continuous widening of the gap between the market and book value of individual companies (...) (Urbanek, 2006, p. 179).

Appreciating the role of small and medium-sized business in the development of the national economy, it should be hypothesized that the existing gap between the book value and the market value of small and medium-sized enterprises does not sufficiently signal to owner-managers the importance of intellectual capital and the need to manage this potential in order to achieve or maintain an earned position in today's competitive market.

As a consequence of the changes taking place in the economy, the small and medium-sized enterprise sector is becoming increasingly important. Its role not only in the economic sphere but also in social life cannot be overestimated. Through the activation of economic processes, especially through the adaptation of innovative solutions, they modernise the industrial structure, through a flexible approach to customer needs, they respond quickly to market changes. Small and medium-sized enterprises, thanks to the creation of new jobs, alleviate social tensions, providing opportunities for self-employment and changes in social status to enterprising people (Piasecki, 2001, p. 77–79). Thanks to these characteristics, the small and medium-sized business sector is seen as one of the most important pillars of the economy, and its development is a manifestation of healthy competition both domestically and on the global stage. Beginning in the 1970s, both in Europe and the United States, and in Poland since the early 1990s, i.e. since the rapid systemic changes favouring the development of small and medium-sized enterprises took place, there has been an increase in the importance of this sector. Its development is recognised worldwide as one of the measures of economic growth. This is because it is known that countries where small and medium-sized enterprises are the backbone of the economy are characterised by greater resilience to economic crises. Nowadays, these companies are no longer perceived as technologically and market backward, small-scale entities, complementing the market offer of large enterprises. Increasingly, it is SME companies that are the engine of progress and are the first not only to implement new solutions adapted from others, but also to create innovative high-tech solutions.

The hypothesis for this article is that small and medium-sized enterprises are of vital importance, and the proper use of their potential can, both in a tangible and intangible sense, determine the development of the national economy. The purpose of the article is to confirm the impact of the SME sector on the economic development of the country, while showing the conditions of small and medium-sized enterprises and the barriers particularly hindering their ability to reap the benefits of the intellectual and human capital at their disposal. In pursuit of this goal, the phases of development of the SME sector in Poland were presented, as well as its quantitative changes. In addition, by illustrating its effects on GDP creation, employment and the extent of potential utilisation at the company's disposal, distinguishing between financial capital and intellectual capital, including human capital, the article attempts to diagnose qualitative changes in this group of economic entities.

The research material used by the author consisted of literature sources and their critical analysis, PARP reports on the state of the small and medium-sized enterprise sector in Poland, data from the Central Statistical Office. In addition, these were also the results of the author's own research done on the basis of the financial reporting of small and medium-sized enterprises listed on the NewConnect alternative market.

The author's clue, to seek information about small and medium-sized enterprises in the field of accounting, was the statement of K.H. Chan (2009, p. 4–21), "that accounting can meet the challenge of valuing and communicating about intellectual capital that plays a special role in building a company's market position". Annual balance sheet reports of companies listed on the WSE, as documents compulsorily filed by issuers, are attainable, robust and reliable information therefore can be used in such methods of intellectual capital valuation as:

1. intellectual capital valuation based on a company's market value, i.e. *Market-to-book Value* (MV/BV), and valuation based on Tobin's Q ratio;
2. intellectual capital valuation based on return on assets, i.e.: the *Value Added Intellectual Coefficient* (VAIC) method, i.e. intellectual value *added coefficient*, and the *Knowledge Capital Earnings* (KCE) method. By reporting the value of intellectual capital and its components, it is possible to see the true picture of a company's value, which is not the same as its book value.

The research methods used were based on critical content analysis of literature sources, and foundational data in the form of statistics from reports:

1. PARP on the state of the small and medium-sized enterprise sector in Poland;
2. The report "Entrepreneurship in Poland 2018" Ministry of Entrepreneurship and Technology (2018);
3. Central Statistical Office;
4. Recommendations, findings and recommendations of the European Union, i.e. *Recommendation of the Commission 96/280/EC*, OJ L 107, 30.04.1996;
5. *Recommendation of the Commission 2003/361/EC*, OJ L 124, 20.05.2003;
6. European Union Commission Regulation (EC) 800/2008;
7. The results of the author's own research within the framework of the ongoing project, contributing to the determination of what sales revenues were achieved by SME companies in 2017–2021¹.

The essence of the small and medium-sized enterprise sector

According to the terminology used in the jurisprudence of the Court of Justice of the European Union (CJEU), and previously the European Court of Justice (ECJ), "an enterprise is an economic entity engaged in economic activity regardless of its legal form". The new definition of SMEs, which came into effect on January 1, 2005, is

¹ Own elaboration based on the micro-project *Intellectual capital and technological development of small and medium-sized enterprises in Poland* carried out within the framework of maintenance and development of research potential, financed in an internal competition mode at the College of Business Administration at the Warsaw School of Economics in Warsaw in 2022 (Zubek, 2022).

an important step toward improving the business environment for SMEs, and aims to promote entrepreneurship, investment and growth. The definition was developed after extensive consultation with those directly affected, demonstrating that taking into account the views of SMEs is crucial to the successful implementation of the Lisbon goals. Reflecting this definition in the Polish legal system is the definition of micro, small and medium-sized enterprise contained in Articles 104, 105 and 106 of the Law on Freedom of Economic Activity² and Article 7(1) (1) of the Polish Law of March 6, 2018 – Entrepreneurs’ Law³. These laws, in accordance with the recommendations of the European Commission, define quantitative criteria, which are based on the number of employees, annual turnover value and total assets (vide Table 1). Regarding the precise definition of small and medium-sized enterprises, reference should be made to the European Commission Recommendation⁴, according to which three basic groups of enterprises are distinguished based on the number of employees, annual turnover, or total balance sheet value. Based on these three quantitative determinants, the European Commission classified enterprises as micro, small and medium-sized. It is noteworthy that the delimitation in effect since 1996 introduced minor transformations; however, these did not affect the previously distinguished categories. Only the amount of annual turnover and the value of the total annual balance sheet changed, while the types and number of employees remained unchanged (Table 1).

Table 1. Comparative summary of updated and previous SME definitions by the European Commission

Distinguishing factors	Microenterprises		Small enterprises		Medium-sized enterprises	
	By 1996	After 1996	By 1996	After 1996	Until 1996	After 1996
Number of employees	0–9 people	Less than 10 people	10–49 people	Less than 50 people	50–249 people	Less than 250 people
Annual turnover	Undefined	Less than €2 million	Under €7 million	€2–10 million	Less than €40 million	Less than €50 million
Total annual balance sheet	Undefined	Less than €2 million	Less than €5 million	€2–10 million	Less than €27 million	Less than €43 million

Source: own study based on *Recommendation of the Commission* 96/280/EC, OJ L 107, 30.04.1996, p. 4–9, *Recommendation of the Commission* 2003/361/EC, OJ L 124, 20. 05. 2003, p. 36–41.

² Act of July 2, 2004 on freedom of economic activity, Journal of Laws 2004. No. 173, item 1807, as amended.

³ Law of March 6 Entrepreneurs’ Law, Official Gazette 2019, item 1292.

⁴ *Recommendation of the Commission* 96/280/EC, OJ L 107, 30.04.1996, p. 4–9.

According to the European Commission Recommendations [2003/361/EC], the only authentic basis for determining the conditions for qualifying an enterprise as an SME is the recognition that “micro, small and medium-sized enterprises (SMEs) are the engine of the European economy. They are a major source of employment, awaken the spirit of entrepreneurship and innovation in the EU, and are thus crucial to boosting competitiveness and employment”.

The characteristics of small and medium-sized enterprises are determined not only on the basis of the quantitative criteria outlined above but also on the basis of qualitative criteria that relate to a variety of enterprise characteristics. These characteristics primarily refer to the characteristics of the entrepreneur (business owner), such as independence in decision-making and problem-solving in various areas of business operation. The entrepreneur is attributed with various attributes such as creative thinking, independence, and willingness to take risks (Lemańska-Majdzik, 1986). It is also noted that “the entrepreneur on a daily basis makes decisions about economic activities guided by the most varied considerations arising from his knowledge and skills, especially in the analysis of the environmental conditions in which he comes to operate. The entrepreneur, as a leader, exerts a significant influence on the effectiveness and efficiency of the change management process, takes advantage of opportunities that come his way and counteracts threats especially those that create crisis situations, mobilises all possible resources and seeks solutions to level or reduce losses under risk conditions” (Dominiak, 2005, p. 38).

Managing a small and medium-sized enterprise in a knowledge-based economy requires a lot of skills from the entrepreneur and manager. This necessity arises not only from the nature of their business, but also from limited resources and the constant need to respond swiftly and efficiently to changes in the environment and to capitalise on these changes. Entrepreneurs invest considerable effort in remaining active in the market, engaging with customers, suppliers, competitors, and business environment institutions. They skilfully use relational resources to influence stakeholders, manage relationships, operate within interpersonal networks, and establish inter-organisational ties.

Impact of transformational changes on the small and medium-sized enterprise sector in Poland

Looking at the Polish SME sector from a historical perspective, special attention should be paid to the conditions of the Polish economy during the communist era. At the start of the transition, Poland inherited a challenging, structural, organisational, and work culture legacy, as well as a technologically backward economy, which in many

cases resembled an industrial open-air museum from the early 20th century. The period of centrally planned economy, which lasted in Poland until the late 1980s, limited the economic initiatives of Polish society, favouring large, state-owned enterprises. There were few craftsmen, merchants and individual farms, and the main role of small and medium-sized enterprises was to supplement of the market with goods not produced by large (state-owned) companies. Only in the late 1980s did conditions begin to emerge that facilitated the free development of entrepreneurship. The development of the Polish SME sector can be distinguished into three phases:

- **The initial phase of entrepreneurial development** dates back to the late 1980s and **early 1990s**. At that time, a significant growth of small private businesses (stores, craftsmen) could be observed. The conditions for the free development of entrepreneurship appeared during this period, and the attempts to reform the centrally managed economy involved changes in legislation in the area of doing business. These changes included limiting state interference in pricing policy and creating the possibility for state enterprise to declare bankruptcy;
- **The period of the “economic explosion”** marks the initial phase of political and economic transition that began with rapid systemic changes conducive to the development of the small and medium enterprise sector. This period started in 1989 with the enactment of two important laws that laid the foundation for the future development of SMEs.
 1. The Law on Business Activity⁵, which allowed all entities to freely undertake business activities and abolished all previous limits that existed for the private sector; and
 2. The Law on Business Activity with Foreign Participation⁶, which created more favourable conditions for foreign investors;
- **period of market self-regulation**, or the restructuring phase. This period dates back to the late 1990s. It is characterised by the emergence of new market players alongside the liquidation of existing state-owned enterprises. These enterprises unable to navigate the new economic, market, and legal landscapes, began to deteriorate financially and, consequently, to declare bankruptcy. As he notes, “the process of the collapse of old companies and the birth of new ones, and thus the formulation of the SME sector, is part of economic development, which he expressed by formulating the thesis of >creative destruction<, he said that capitalism could not exist without the constant formation of new companies on the ruins, those that have collapsed. Thanks to this, a healthy capitalist economy is still subject to >reincarnation<, it is in a constant process of transformation

⁵ Law of December 28 on economic activity, Official Gazette 1988 No. 41, item 324, as amended.

⁶ Law on Business Activities with Foreign Participation, Official Gazette 1988 No. 41, item 325.

leading it to higher and higher levels, and investment activity is to ensure the emergence of more efficient economic structures” (Schumpeter, 1960, p. 104).

The process of adjustment to the requirements of membership in the European Union, while continuing the transformation processes (1996–2004), fundamentally changed the conduct of business in Poland. On May 1, 2004, Poland’s accession to the structures of the European Union took place, marking another phase in the development of small and medium-sized enterprises. This phase was characterised by opportunities to change the realities of doing business in free market conditions and the need to adapt to the principles of competitiveness. The challenge for countries undergoing economic transformation, including Poland as a member country of the European Union, is to choose such an economic strategy and economic policy instruments that can ensure the most effective use of not only traditional, but also new factors in the growth of SME competitiveness, which in a knowledge-based economy are undoubtedly knowledge, intellectual capital, and especially human capital.

As shown, the SME sector is a special segment of the Polish economy, often collaborating with large companies as subcontractors. This sector is distinguished by its ability to quickly adapt and respond to market changes, its ability to create jobs for local communities at low job cost, and its presence across all areas of the economy. The COVID-19 pandemic showed that SMEs can reorganise swiftly when necessary, a flexibility quickly often not possible for large companies. Small and medium-sized enterprises are trying to adapt their management concepts and methods to meet the requirements of large enterprises. Although, as the author’s own research shows, this adaptation is often incomplete because they do not sufficiently take into account the impact of intangible assets on their market value.

He concretises the importance of small and medium-sized enterprises in regional and local socioeconomic development by highlighting specific activities and behaviours of enterprises within this sector, such as (Piasecki, 1998, p. 101):

- High dynamics in risk-taking by companies;
- The ability to generate new jobs;
- Rationalisation of resource allocation;
- Innovation and modernisation of the industrial structure;
- significant role in entrenching market principles in people’s attitudes;
- role in the development of competition.

What distinguishes the SME sector is the dynamics of its development, especially in the context of the post-industrial knowledge economy, which determines the emergence of new companies offering competitive products and services. This dynamic necessitates the restructuring of companies and entire sectors of the economy. The current policy for developing the small and medium-sized enterprise sector, in addition to promoting entrepreneurship and innovation, must also focus on implementing

a controlling approach to business management, including in particular the use of tools and methods to support their intellectual development. According to the annual “Report on the State of the Small and Medium-Sized Enterprise Sector in Poland” prepared by the Polish Agency for Enterprise Development, the number of small and medium-sized business entities is increasing (Report on the state..., 2021; Report on the state..., 2022). However, these reports do not indicate a corresponding increase interest of owners and managers in the intangible capital of enterprises. The lack of interest contributes to losses incurred due to inadequate management of knowledge assets that these companies possess.

Statistical overview of the SME sector in Poland

The SME sector plays a crucial role in stimulating the country’s economic growth by activating innovation processes and thus modernising the economy. Moreover, it significantly affects the social side of life. As B. Piasecki (2001, p. 77–79) notes, “the SME sector, by generating new jobs, influences the alleviation of social tensions, provides opportunities for employment, success and changes in social status to enterprising people”. Given its importance, the SME sector holds a particularly important place in the Polish economy. Key indicators such as economic growth, unemployment rates, as well as international competitiveness depend on the development, economic and financial condition of this sector.

Table 2. Number of enterprises¹ by size group from 2010 to 2020

	2010		2015		2017		2020	
	number	%	Number	%	number	%	number	%
Total	1,726,700	100	1,914,100	100	2,077,000	100	2,261,800	100
large	3,200	0.2	3,400	100	3,600	100	3,700	100
SMES	1,723,500	99.8	1,910,700	99.8	2,073,400	99.8	2,258,100	99.8
	Structure of the small and medium-sized enterprise sector							
SMES	100,0 100,0 100,0 100,0							
micro	1,655,100	96.0	1,838,400	96.2	2,004,300	96.7	2,194,200	97.2
small	52,600	3.1	56,700	3.0	53,800	2.6	49,500	2.2
average	15,800	0.9	15,600	0.8	15,300	0.7	14,400	0.6

¹ Non-financial companies.

Source: own study based on the publication GUS – Activity of non-financial enterprises in 2010, 2015, 2017 and 2020 and PARP Report (2021).

The beginning of the 1990s ushered in an increase in the number of small and medium-sized enterprises. Changes in the number of business entities in Poland over the past decade are shown in Table 2.

In 2021, the number of business entities amounted to 2,261,800, of which the group of businesses classified as SMEs numbered 2,258,100 companies and showed an increase of 31%, i.e., 534,600 businesses over the decade (2020/2010). Invariably since 2010, the SME sector (micro, small and medium-sized enterprises) constitutes the overwhelming majority of enterprises in Poland – 99.8%, which is comparable with the EU-28. Among this group of companies, the most numerous is the group of micro-enterprises, which in 2020 included 2,194,140 entities, i.e., 97.2% of all SMEs, while in the year closing the first decade of the 20th century it was 1,655,100 companies, and their share in the SME sector is 96.0%. The share of small companies in the structure of the Polish SME sector in 2020 was 2.2% (49,500), while medium-sized entities – 0.6% (14,400) (Report on the state..., 2021, p. 12–19). An interesting peculiarity of the Polish SME sector is its family aspect. A study by the Central Statistical Office (CSO) titled “*Determinants of entrepreneurship development in the SME sector*” shows that among the interviewed respondents, 33.9% declare running a family business (Center for Statistical..., 2018). Among entities employing between 10 and 49 people, family businesses account for 35.4%.

Both the statistical materials of the Central Statistical Office and the reports of the Polish Agency for Enterprise Development indicate a very strong fragmentation and dispersion of small and medium-sized companies, with the dominance of the smallest entities. In the document “Strategy for Responsible Development until 2020 (with an Outlook until 2030)” adopted by the Council of Ministers on February 16, (2016, p. 98) this fact was recognised as one of the weaknesses of SMEs (especially against the background of the European Union). This shows that the SME sector is of particular interest to state authorities. According to the document, micro, small and medium-sized enterprises will undergo a structural change that will increase their efficiency. One of the expected outcomes of the State’s actions is an increase in the availability of long-term financing instruments and the expansion of their offerings. In addition, the government is also expected to reduce the number of microenterprises that do not employ any worker. As a result, one-person businesses will expand their structures and thus grow. One of the measures to increase efficiency in the SME sector is to improve the quality of service from government offices and give preferential treatment to micro businesses.

The increase in the number of business entities within the framework of small and medium-sized enterprises is an opportunity for the development of the labour market, especially in the current era of the knowledge economy. In this context,

skilled workers, forming the most valuable capital in the enterprise, contribute to building and maintaining a competitive market position.

As of December 31, 2020, the small and medium-sized enterprise sector employed almost 10 million people, i.e. 67.8% of the total number of employees in the enterprise sector. The percentage structure of employment in the Polish economy does not differ from that recorded in the EU-28 at 66.8%. As in previous years, the largest number of people worked in microenterprises (nearly 4.2 million people, i.e. 41.8% of the total number of employed in the enterprise sector), much less in medium-sized companies (more than 1.5 million people), and the fewest in small businesses (slightly more than 1.0 million people).

Compared to 2019, there is a slight increase in the number of employees in micro (1.4%) and small enterprises (0.8%), and at the same time a decrease in medium-sized companies by 2.3%. In view of the diagnosed increase in the number of medium-sized companies, the decrease in the number of people employed in them is associated with the improvement of employees' skills enabling them to be promoted and open their own companies or be employed in large enterprises.

The share of the SME sector in the creation of gross domestic product has steadily increased. While in the initial phases of the sector's development it was around 30%, it already reached 48.5% in 1999–2001 and 47.5% in 2005 (Wojnicka, Klimczak, 2006, p. 37). The second decade of the 21st century closes with a rate of 49.6% (Skowrońska, Tarnawa, 2022, p. 19).

Over the period 2010–2020, the share of total enterprises in GDP creation increased by 1.2 p.p. (from 71.1% to 72.3%), mainly due to small and medium-sized companies, whose share in GDP creation during this period increased from 47.2% to 49.6%. It affected all groups forming the SME sector, i.e. micro-enterprises – from 29.9% to 30.6%, small entities – from 7.4% to 8.8%, and medium-sized companies – from 9.9% to 10.2% (Skowrońska, Tarnawa, 2022, p. 20).

According to the PARP report, the entire enterprise sector generates nearly three-quarters of the value of GDP (72.3%), with small and medium-sized enterprises generating nearly one in every two zlotys of GDP, or 49.6%. According to the data for 2019, microenterprises have the largest share of GDP creation, which amounted to 30.6% (Table 3).

Analysing the scope of business activities carried out by SMEs, it can be concluded that the majority of companies in this sector, registered in the REGON system from 2010–2021 were engaged, according to the PKD classification, in trade (21.6%), services (52.8%), construction (15.4%), and industrial production (10.0%).

Table 3. Share of gross value added produced by enterprises in GDP 2010–2019

Years	GDP in million zloty	Share of total business entities	of which SME participation			
			SMEs total	Including companies		
				micro	small	medium
2010	1,416,447	71.6	47.6	29.6	7.7	10.4
2011	1,528,127	71.8	47.3	29.4	7.8	10.1
2012	1,596,378	73	48.5	29.7	7.8	11
2013	1,662,678	73.5	50.1	30.8	8.8	10.6
2014	1,719,146	73.4	50	30.2	8.9	11
2015	1,799,321	74	49.9	30.5	8.1	11.3
2016	1,858,468	73.6	49.8	30.2	8.5	11.1
2017	1,989,314	72.3	49.1	30.3	8.2	10.7
2018	2,120,480	72.7	49.1	29	9.1	11.1
2019	2,293,199	72.3	49.6	30.6	8.8	10.2

Source: own study based on the PARP Report on the State of the Sector... (2021, p. 20).

**Table 4. Total sales revenue of randomly selected SME enterprises in 2017–2021
by industry**

	As of 31.12.2017		As of 31.12.2021		
	Value in thousands.	Structure	Value in thousands.	Structure	Dynamics
Total [*]	1,710,905.9	100%	2,845,813.6	100%	166.3
Fuels and Energy (200)	186,205.6	10.90	923,911.9	32.46	496.2
Chemistry and recycling (300)	15,030.3	0.87	15,735.7	0.56	104.7
Production (400)	431,343.6	25.21	721,330.2	25.35	167.2
Consumer goods (500)	56,880.2	3.32	1,281,956	4.50	225.4
Trade and services (600)	401,555.3	23.47	641,625.9	22.55	159.8
Health care (700)	6,506.1	0.38	67,321	2.36	1034.8
Technology (Telecommunications and Information Technology) (800)	613,384.8	35.85	347,690.8	12.22	56.7

^{*} Without finance and insurance (industry 100).

Source: own study based on the microproject *Intellectual capital and technological development of small and medium-sized enterprises in Poland* carried out within the framework of maintenance and development of research potential, financed in an internal competition mode at the Collegium of Business Administration at SGH Warsaw School of Economics in 2022 (Zubek, 2022).

The development of the SME sector in Poland is also evidenced by the revenues generated from total sales, which, according to PARP, amounted to PLN 5,260

trillion in 2020 (excluding the finance and insurance sector). The share of individual industries in the creation of this value determined based on the author's own research on a random selection of 76 small and medium-sized non-financial companies listed on the NewConnect market from 2017–2021, shows that their revenues for 2021 constituted 54.1% of the SME sector's annual revenues, as shown in Table 4 (Report on the State..., 2022, p. 7).

Over the period under review, the revenues of the companies surveyed increased by 66.3%, with the highest growth observed in the health care industry, which saw a tenfold increase. Companies in the fuel and energy industry showed a fivefold increase in sales revenue. Revenues in the consumer goods industry increased more than doubled. Other industries also showed an increase: – manufacturing by 67.2%, trade and services by 59.8%, and – chemicals and recycling, respectively by 4.7%.

Small and medium-sized companies operating in the technology sector (telecommunications and IT), meanwhile, saw their share of total sales revenue of the sample fall from 35.85% at the end of 2017 to 12.22% in 2021. This change was influenced by the model of providing roaming services in accordance with the RLAH (*Roam Like at Home*) system, effective in the European Union and European Economic Area (EU/EEA). This system, which has brought cost-beneficial changes for consumers in the telecommunications market at both at the retail and wholesale levels has been well received by the public and has led to a significant increase in the use of telecommunications services while roaming in EU countries. Additionally, the maximum additional charges that a service provider can apply under the *Fair Use Policy* –the mechanism that allows operators to monitor and prevent improper use of roaming services – have been reduced. As of July 1, 2022, further changes introduced by a new regulation governing intra-EU roaming rules regarding the quality of services offered while roaming have come into effect in the EU. Under this regulation, regulated roaming will be extended without additional charges, subject to fair use of roaming services and the possibility of a derogation to preserve the sustainability of domestic charges, for another 10 years, until 2032.

Conclusion

The answer to the title question – Are small and medium-sized enterprises the strength of the Polish economy? – is unequivocally positive. This is evidenced in the publication not only through the favourable statistical representation of SMEs, which shows an increase in the number of business entities and their influence on the labour market, but also by the growing share of total enterprises in the creation of GDP, primarily due to the increasing contribution of the SME sector.

The development of this sector is also evidenced by the revenue generated from the total sales of the surveyed small and medium-sized entities across various industries, which has increased over the period under review in almost all surveyed industries. An important aspect is to point out the conditions of small and medium-sized enterprises. The systemic changes that took place in Poland in the early 1990s favoured the development of small and medium-sized enterprises. A positive answer to the title question is confirmed not only by the favourable statistical picture of SMEs, indicating an increase in the number of business entities and their significant role in shaping the labour market and reducing unemployment, but also by the growing share of total enterprises in the creation of GDP, mainly driven by the SME sector. The growth of this sector is also reflected in the dynamics of revenues generated by small and medium-sized entities in various industries. However, research shows that the Polish SME sector records lower results than European averages. The reason for this, in addition to barriers in accessing external financing, is that owners/managers do not sufficiently engage with the capital they possess, which stems from their own intangible assets, i.e., intellectual capital and its main component – human capital.

The development trends presented for SMEs, especially those in modern sectors, contribute to structural changes in Poland's general economy. Some “traditional” sectors not only develop more slowly, but also record losses compared to, sectors like financial services. Nevertheless, the Polish SME sector still records lower results than European averages (Ministry of Entrepreneurship and Technology, 2018). This is due to a number of reasons, most notably the difficulties in maintaining liquidity and the limited access SMEs have to external financing sources. The fact that Polish entrepreneurs, especially those running traditional small or medium-sized companies, often face limited access to foreign capital and display a lack of interest in the capital they possess, which originates from their own intangible assets. Frequently, these businesses are launched by individuals who are unprepared, lack a strategic plan, and possess insufficient knowledge of financing sources for development. Entrepreneurs and managers encounter numerous challenges and dilemmas related to running a business. They seek answers to many questions, not only concerning the business conditions that would be conducive to effective management, and where to find sources of competitive advantage and key success factors, but also human resources issues. This includes whether employees, entrepreneurs, and managers are improving their skills and abilities, whether they are using effectively to execute tasks, processes, and strategies aimed at the development of their enterprise, and what development opportunities arise from leveraging knowledge capital and its management, including knowledge sharing and intellectual capital management.

This publication is a starting point for further research in the context of practical formation for small and medium-sized enterprises (SMEs) to use their

potential inherent in intangible resources. The subsequent articles in the research series, namely *The role of intangible resources in shaping the value of knowledge-based enterprises* and *Intellectual capital management in SME enterprises*, will explore this issue in depth. In view of the volatility of the environment and the development of a knowledge-based economy, the ability to manage intangible assets becomes particularly crucial for the growth of both large corporations and SMEs. Effective management of intellectual capital should be considered a key competence in this area. While the tools for managing this 'invisible' potential are discussed in the literature and applied in large companies, they only marginally impact SMEs. Considering the significant contribution of these entities to national income and job creation, it is necessary to adapt and implement the concept intangible asset management to suit the operational conditions of small businesses. Intangible assets, in today's knowledge-based economy, are a hallmark of the globalisation process and should have a wider impact on the development opportunities of companies. It should be noted that in competitive market, the importance of intangible resources (including knowledge, technology, virtual relationships) increases, and business entities should benefit from these on the foundation of their tangible resources.

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Michał Zubek

Michał Zubek is a doctor at the Warsaw School of Economics. He works specifically at the Institute of Human Capital. His main scientific interests include the identification, measurement, and valuation of intellectual capital, as well as management tools in enterprise operations, particularly the use of controlling and financing of business entities.

e-mail: mzubek@sgh.waw.pl

ORCID: 0000-0002-9280-8503