ECONOMICS
& Sociology

Mikołajczak, P., & Skikiewicz, R. (2026). Organizational drivers of the degree of commercialization of social enterprises: Evidence from Polish social enterprises. *Economics and Sociology*, *19*(2), 208-223. doi:10.14254/2071-789X.2026/19-2/10

ORGANIZATIONAL DRIVERS OF THE DEGREE OF COMMERCIALIZATION OF SOCIAL ENTERPRISES: EVIDENCE FROM POLISH SOCIAL ENTERPRISES

Paweł Mikołajczak
Department of Money and Banking,
Poznań University of Economics and Business,
Poznań, Poland
E-mail:
pawel.mikolajczak@ue.poznan.pl
ORCID 0000-0002-7662-2565

Robert Skikiewicz
Department of Market Research and Services,
Poznań University of Economics and Business,
Poznań, Poland
E-mail:
robert.skikiewicz@ue.poznan.pl
ORCID 0000-0003-3099-7350

ABSTRACT. One of the main assumptions of nonprofit commercialization is that nonprofits are increasingly adopting business strategies. study investigates the organizational factors determining the degree of commercialization of social enterprises, drawing on institutional and contingency theories. Empirical data were obtained from a representative survey of 585 social enterprises in Poland. A descriptive analysis was conducted, and the relationships were assessed. Social enterprises in Poland display substantial differences in their degree of commercialization. Organizational characteristics influencing the degree of commercialization include legal form, total revenue, year of establishment, and the extent of online activities. By discussing the organizational drivers of commercialization in social enterprises, this study contributes to the scholarly debate and makes its findings transferable to the social enterprise sector in other CEE countries. Exploring the organizational characteristics that shape the degree of commercialization in social enterprises provides a better understanding of the factors that drive them towards becoming more business-like.

Received: August, 2025
1st Revision: February, 2026
Accepted: June, 2026

DOI: 10.14254/2071-789X.2026/19-2/10

JEL Classification: L31

Keywords: degree of commercialization, social enterprises, Central and Eastern European Countries, determinants, NGO, institutional theory

Introduction

Growing social and economic problems indicate the need to pay more attention to developing social enterprises (SEs), which play a key role in the development of all economies (Mikołajczak, 2019). One direction of their historical evolution is the commercialization of nonprofit organizations. This process is explained by various scientific theories, among which the theory of historical institutionalism (Vacekova, 2019) and the theory of resource dependency (Khieng & Dahles, 2015) come to the fore.

Globally, NGOs struggle to cope with financial uncertainty and a deficit of human and technical resources. These organizations often use commercial activities to increase competitiveness and fulfil their social mission. However, in Central and Eastern European countries, taking on commercial activities is more than that, as it often determines the organization's survival. The similar historical roots of the (post-)transitional countries of CEE and, at the same time, their operating conditions provide an opportunity for research into identifying the common determinants of commercialization in these countries. Unfortunately, despite numerous studies on the commercialization of NGOs in CEE countries, few attempts have been made in this regard. Meanwhile, commercialization is considered by many researchers to be an essential strategy for dealing with the uncertainty of NPOs. For NGOs affected by declining public spending on which they are heavily dependent, legal barriers, bureaucracy, or increasing uncertainty of support from individual and corporate donors, commercialization of activities is a great opportunity, although, as the experience of Anglo-Saxon nonprofits shows, it can also be a threat.

One of the main assumptions in the field of nonprofit commercialization is that nonprofit organizations are increasingly adopting business strategies and thus raising funds from the sale of products and services. Much work in the field assumes that this funding source is a necessary and sufficient condition for a nonprofit to commercialize and become a social enterprise (King, 2017). Scholars have made many efforts to find out what the effects of nonprofit organizations becoming enterprises are (Mikołajczak, 2019; Maier et al., 2016). However, little work has been done to find the determinants of the degree of commercialization. This article aims to fill this gap and empirically test the determinants of the degree of commercialization of social enterprises using the example of Polish NGOs. In the article, we mainly ask the following questions:

RQ1 What is the degree of commercialization of social enterprises?
RQ2 Which characteristics of social enterprises affect the degree of commercialization?

Contributions to the literature regarding whether and to what factors determine the degree of social enterprise commercialization are essential for several reasons. As the importance of social enterprises increases, it is critical gain a better understanding of the factors affecting their commercialization. Further, if research can show the differences in the level of commercialization of social enterprises, it may be possible to make inferences about the redefinition of SE's commercialization. Exploring the determinants of the degree of commercialization also helps us better understand the differences in factors affecting the process of becoming business-like SEs. Due to the historical roots of the CEE countries, the study's results will be transferable to other CEE countries. Finally, the paper contributes to the fields of finance and accounting in that it furthers the understanding of nonprofit financial decision-making by translating the shares of commercial revenues into commercialization decisions of individual nonprofit managers.
Although our study concerns a representative sample of Polish social enterprises, our literature review and analysis cover the organizational drivers of commercialization of NPOs from Central and Eastern Europe and contribute to the present state of knowledge.

Poland is an important research context for this subject, as it is a typical example of a CEE country after transformation. Poland is in Central and Eastern Europe and has a similar historical identity. Moreover, the countries are post-communist states which determines NGOs' economic and social functioning. The post-1989 transformation has also shaped a similar institutional framework for their activities. Poland joined the EU in 2004, significantly changing the realities of NGOs' operations, including access to public funds from the EU. The financial situation of NGOs in CEE is strongly dependent on grants. NGOs are characterized by a weaker financial condition compared to Anglo-Saxon and developed Western European countries. The character of SEs' financing in CEE countries, which is dominated by public support, has contributed to their more entrepreneurial approach, particularly in the field of the production of social services for groups with special needs (Vacekova, 2016). Despite the numerous forms of financial support from public money, including particularly EU structural funds, most organizations still have small budgets and a limited impact (Laurisz, 2020). The most problematic issues faced include the significant share of public funds in the revenues of SEs, institutional constraints related to bureaucracy, and excessively complicated formalities related to the use of public money (Mikołajczak, 2022). Therefore, the commercialization of social enterprises is crucial to achieving independence from public support, higher social impact, and better performance. Furthermore, examining the determinants of the level of commercialization provides important insights for SEs managers. In this article, we extend the theoretical perspective on the debate over nonprofit commercialization by supplementing the resource dependency thesis with insights drawn from institutional theory (Vacekova et al.) and contingency theory. Contingency theory posits that organizational effectiveness results from the state of "fit between organizational characteristics and environmental contexts" (Donaldson, 2001).

1. Literature review

1.1. NGOs in Central and Eastern European countries

Despite their location in the same geopolitical region, the countries of Central and Eastern Europe differ historically and culturally on many levels. At the same time, comparative studies of the various sectors of the region create the temptation to generalize statements about their characteristics. Their analysis should, therefore, be characterized by an exceptionally high degree of caution. Nevertheless, it is possible to identify several common features in the development of the NGO sectors in CEE. Most of these are at least typical of post-communist Central and Eastern Europe as a whole (WG8).

All the countries of Central and Eastern Europe were deprived of political existence in the 19th century when nation-states were formed, and largely in the 20th century, when they were subjected to Soviet domination after the Second War. Unlike the West, they also experienced both totalitarianism - Nazi and Bolshevik. After regime change, Central and Eastern European countries overwhelmingly opted for a liberal model of NGO-state relations. The institutional conditions in which NGOs operate share many common features, resulting in similar challenges, roles, and even organizational characteristics of the NGO sector in the region. In contrast to capitalist highly developed capitalist democratic countries, the still considerable passivity of civil society, the limited entrepreneurship of post-communist citizens, and the slowly developing culture of philanthropy have been important in the evolution of NGOs in the CEE countries (Lagerspetz & Skovajsa, 2006; Howard, 2003).

NGOs in CEE countries mainly include foundations, associations, and social cooperatives (Vacekova et al., 2016; Pelucha, 2017). Moreover, the social activities of NGOs in CEE countries address problems that the state was originally expected to solve - primarily problems of poverty, unemployment and exclusion. NGOs are complementary to the state's role, meeting the needs of groups or individuals that cannot be met by the state and, at the same time, act as a substitute for the state by taking over functions that the state would have otherwise or previously provided. Due to its short development history, the NGO sector in CEE countries also looks for models from other countries. Commercialization of the sector is one of them.

1.2. Commercialization of Social Enterprises in CEE Countries

1.2.1. Institutional context

The commercialization of NPOs has lived up to a vibrant literature and continues to be the subject of considerable interest among researchers in various contexts. So far, authors have made numerous attempts to explain the causes of the commercialization of NPOs. Resource dependency theory and historical institutionalism theory are the leading frameworks for explaining these causes (Hunk & Suykens, 2023). In general, there is a consensus among researchers that support from traditional, philanthropic, and governmental sources is declining, while competition for available funds is increasing, leaving community organizations under pressure to increase their commercial performance (Alter, 2006; Suykens et al., 2021; Mikolajczak, 2022b).

A significant role is attributed to institutional factors of commercialization (Suykens et al., 2019; Vacekova, 2020). For example, Suykens et al. (2021) examined the impact of institutional pressures and organizational conditions on nonprofit organizations. The author highlights that while resource dependency indeed explains the presence and extent of nonprofit commercialization, it turns out that institutional pressures and organizational factors also have a role to play. Institutional roots are particularly strongly emphasized in the studies of Central and Eastern European authors. For example, Czech nonprofit managers' commercialization decisions are strongly influenced by the current institutional and regulatory environment, which explicitly promotes self-financing nonprofit initiatives (Vacekova et al., 2016). More than 75 percent of Czech and 87 percent of Slovak NPOs have used some form of self-financing, including commercialization (Schober et al., 2010; Císař & Navrátil, 2014; Vaceková & Prouzová, 2014). Vacekova et al. (2016) point out that given that financial independence is part of the identity of NGOs, commercial activities help NPOs to emancipate themselves in their missionary activities from the influence of the state, which used to be paternalistic towards them. The authors highlight the institutional nature of the commercialization phenomenon in the Czech Republic.

Furthermore, the researchers argue that if nonprofit commercialization is understood as an institutional phenomenon, its moral significance is best reflected by institutional ethics rather than the individual ethics of nonprofit managers that seem to dominate the Anglo-Saxon literature. Thus, in the Czech context and other CEE countries, commercialization does not need to be balanced or replaced against the pursuit of the mission. On the contrary, it is a tool for nonprofit organizations to gain autonomy from the public sector and thus become an entity entitled to define its mission on its own in the first place. A similar approach can be found in studies by other CEE researchers. For example, Pape et al. (2020) suggest that the European financial crisis and resulting austerity policies in CEE have driven managerialism in the sector. Altman and Stefan (2016), on the other hand, point out that in Romania, commercial behavior is evident among artistic nonprofit organizations because of the communist past and the collapse of the cultural infrastructure. Nimu (2018) writes that women's rights and LGBTQ NGOs in Central and Eastern European (CEE) countries like Romania and Poland commercialize primarily due to the need to diversify funding sources. Although this phenomenon is less frequent in Romania than in Poland, the author emphasizes that Romanian organizations want to reduce resource dependency and revenue volatility in this way. Raising funds from commercial sources, in the case of Romanian NPOs, is also a result of their desire for sustainability. Romanian organizations have a low annual budget, unstable funding sources, a significant dependence on public funds, and most of the employed staff earn below the national average salary. Therefore, organizations diversify their funding sources through commercially generated revenues (Ceptureanu, 2017; Nimu, 2015).

The situation is similar for Polish organizations, as confirmed by Mikolajczak's research. The author identifies resource deficit and institutional barriers as a reason for the commercialization of Polish NGOs (Mikolajczak, 2022a). The researcher emphasizes the need to diversify sources of funding to improve the financial standing of NGOs (Mikolajczak, 2018) and the need to alleviate institutional barriers to their activities, such as bureaucracy or complicated procedures and uncertainty of employment in the organization (Mikolajczak, 2021; Laurisz, 2020).

Tomaževič and Aristovnik (2018) show that in Slovenia, traditional nonprofit organizations, such as charities, associations, foundations, and voluntary and community organizations, are embarking on a process of marketization and commercialization, transforming themselves into social enterprises. The main reasons they are trying to adopt entrepreneurial characteristics focus on the public sector's limitations, the growing social needs expectations, and the emergence of new enterprise models that combine corporate and social value creation. The commercialization of sports NGOs in Slovenia is reported by Bednarik et al. (2010).

Koberidze (2019) emphasizes that Bulgaria, like other Central and Eastern European countries, has focused its policy on creating independent legal entities providing public services. Therefore, the nonprofit sector has become increasingly commercialized. This is mainly due to the growing links connecting philanthropy with business.
Considering the commercialization of Lithuanian SEs, Greblikaite (2016) emphasizes that the business empowerment of SEs in Lithuania to compete in the global market is crucial for social enterprises. Moreover, Kėrytė (2015) points out that Lithuanian NGOs are encouraged to become more commercialized and professionalized. This is a source of tension for them due to the constant uncertainty and complexity of 'survival'. The author explains that to avoid a permanent crisis resulting from the increasing cooperation of the state with the market and civil society actors, more public services are being transferred to the private and third sectors. Raišienė and Urmanavičienė (2017), studying Lithuanian, Latvian and Estonian nonprofits, pointed out that to reconcile the social and business goals of organizations, it is necessary to invest in the development of the company's managerial competence and human resources. Managers should strongly emphasize the nonprofit's purpose and strategy, which must be implemented throughout the organization to ensure effective stakeholder communication.

Also, in post-Soviet Estonia, the nonprofit sector is becoming increasingly commercialized (Koberidze, 2019). More than 66% of its revenue comes from business, and almost a third of these companies have no financial support or donations (Gurvits et al. 2015). Gurvits et al. 2015 found that in Estonia, people are willing to support social enterprises by purchasing their goods or services.

Most of the research to date is concerned with the effects of organizational commercialization, which has been extensively discussed (Lee et al., 2022; Suykens & Verschuere, 2021). However, there are many voices in favor of and broad criticism of NGO commercialization. Proponents of commercialization see it as an opportunity to make organizations independent of public support (Lu et al., 2023), an opportunity to fund the development of the organization's mission (Carroll and Stater), organizational self-sufficiency and efficiency (Toepler, 2004; Hung & Berrett, 2022; Maier et al., 2016), the use of more paid work and unchanged amounts of voluntary work (Geoghegan & Powell (2006), or creating innovative capacity and compete with private commercial providers to deliver services with a social mission (Roy et al., 2021). Critics point to the erosive effect of commercialization on social mission (Foster & Bradach, 2005; Eikenberry & Cluever, 2004) and the crowding out effect of private support (Kerlin & Polak, 2011; Hung & Suykens, 2023). or volunteering (Enjolras, 2002; Mikolajczak & Bajak, 2020).

1.2.2. Contingency approach

Suykens et al. integrate organizational factors into the debate about the causes of commercialization on the grounds of contingency theory as an extension of resource dependency theory. It assumes that organizational effectiveness results from the state of fit between organizational characteristics and the environmental context. Bradshaw, 2009, p. 62 states that "The advantage of a contingency approach is the understanding that what works in one setting, or at one point in time, may not work in another and that efficiency is related to the ongoing alignment of various contingencies." As we point out, the historical roots of the CEE countries provide a key subsoil for NPO commercialization in these countries. The need to constantly adapt to the dynamically changing institutional conditions of NPOs in CEE countries has influenced the organizational characteristics and strategies of their operations (Vacekova et al. 2020). Therefore, it is important to identify typical organizational characteristics of Polish organizations, which will serve as a common starting point for further research into the drivers of NPO commercialization in other CEE countries.

A review of the literature on organizational factors shaping nonprofit strategies based on contingency theory makes it possible to distinguish the characteristics considered in the research. Cornforth (2003), for example, distinguishes between internal and external contextual factors that shape/influence how nonprofit boards operate. External includes the legal and institutional environment of operations and stakeholders, and the funding environment. Internal contextual factors include the age, size, stage of development and complexity of the organization.

Suykens et al (2019, p. 6) expand organizational determinants of commercialization to include organizational forms, professional capacity, type of tasks, Guo (2006) points to the size of the organization as measured by the number of employees; which stimulates commercialization of NGOs. On the other hand, Ostrower & (Stone 2001) include field of activity; oragnization's age and ideology, and Brown & Iverson (2004) add strategy and structure. Bradshow (2009) included age, size, structure and strategy of the organization a, among the external and environmental dimensions, the degree of stability and complexity. In our model, we include an organization's level of online activity as a technological factor (ignored in earlier studies based on contingency theory, but crucial for profiling organizational characteristics of SEs today (Fen et al. 2014; Alsaza 2022).

2. Methodological approach

2.1. Data

The issues addressed in the paper were verified based on empirical data from a survey carried out by the Statistical Office in Kraków on a nationwide representative research sample of 585 social enterprises between June and August 2023. The sampling frame included 3825 social enterprises registered in the REGON register (National Economy Entities) on 31 December 2022, which had declared economic activity in 2021. The study sample was stratified and proportional. The strata consisted of two groups of entities: (1) associations and foundations, and (2) social cooperatives. The sample size was determined so that the relative standard error of the estimated parameters did not exceed 5.0%. The survey was carried out using the CATI and CAWI techniques. In the first stage of the study, invitations were sent electronically to respondents along with an interactive offline form, which enabled them to submit data independently. In cases where the surveyed entities did not respond, the individuals involved in the study contacted them by phone and collected data via telephone interviews. The respondents were key managers of social enterprises.

2.2. Research model

Based on the literature review, it was assumed that the degree of commercialization of social enterprises could be influenced by their size-related characteristics (number of contracted employees, total revenue of the organization), the legal form of the organization, and variables related to the specifics of the business (the main area of economic activity carried out by the organization, the market in which the organization predominantly does business, and extent of the organization's online activities). This set was supplemented by two further characteristics - the location of the organization's registered office and the year of commencement of operations.

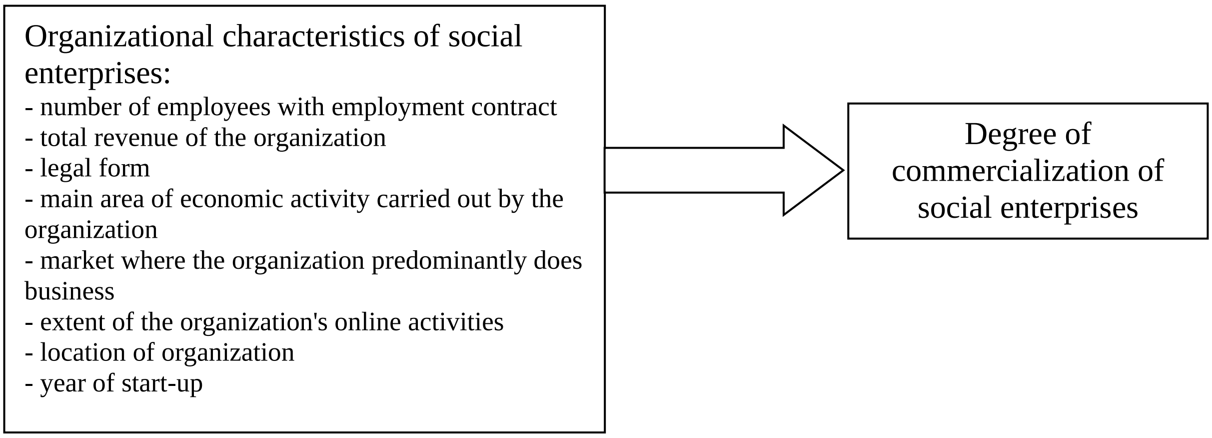

Figure 1. Research Model
Source: *based on survey data*

2.3. Dependent variable - degree of commercialization of social enterprises

The degree of commercialization of social enterprises was expressed by the share of income from economic activities in total income. This variable is the dependent variable in the analyses presented later in the paper and was measured at the ordinal level. Other researchers have also proposed that the level of commercialization can be measured by the share of revenue from the sale of goods/services. as shown in studies of Czech NGOs (Vaceková & Prouzová, 2014) or Norwegian nonprofits in the sports sector (Enjolras, 2002) or American nonprofits (Young & Salamon, 2002).

2.4. Independent variables - organizational characteristics of ses commercialization

The analyses attempted to assess the relationship between the degree of commercialization of social enterprises and their selected characteristics. Based on a literature review eight organizational characteristics influencing SEs' commercialization were considered and are listed in Table 1. These characteristics were measured at the nominal, ordinal, or quotient ratio level.

Table 1. Level of measurement of independent variables

Variables	Level of measurement
Legal form	nominal
Location of organization	nominal
Main area of economic activity carried out by the organization	nominal
A market where the organization predominantly does business	nominal
Number of employees with employment contract	ordinal
Total revenue of the organization	ordinal
Extent of the organization's online activities	ordinal
Year of start-up	quotient

Source: *based on survey data*

2.5. Research methods

The variables' measurement level influenced the methods used under analyzing the relationship. A chi-square independence test was used to initially assess the relationship between variables measured at the nominal level and the variable determining the level of commercialization of social enterprises. In turn, the Spearman’s rank correlation coefficient was calculated to assess the relationship between the variables measured at the ordinal or quotient level and the variable determining the degree of commercialization.

In the next step, the parameters of the regression model were estimated. Because the dependent variable was measured at the ordinal level, an ordinal regression model was adopted as appropriate. Calculations were performed using SPSS package.

The McFadden, Cox-Snell, and Nagelkerke pseudo-R2 coefficients were used to assess the fit of the ordinal regression model to the empirical data. In addition, the results of the likelihood ratio test and parallel line test were considered when assessing the model. The first of these tests was used to verify that the estimated model better explains the dependent variable than a model containing only a constant (Williams, 2010). Another statistical test aimed to verify the assumption of equal distribution of the predictor effect across categories of the dependent variable (Erkan & Yildiz, 2014).

3. Conducting research and results

3.1. Assessment of the level of commercialization of social enterprises

Among social enterprises, almost one in four (23.1%) are characterized by a low share of income from economicactivities in total income (Table 2). These organizations raise funds for their activities mainly from other sources. They show a low level of commercialization.

It is also worth mentioning that in 44.3% of social enterprises, income from economic activities accounts for no more than 50% of their total income. The remaining 55.7% of social enterprises finance their activities, with more than 50% of their income from economic activities.

Almost one in five social enterprises (18.8%) achieves full commercialization, as indicated by the share of income from economic activities in total income of 100%.

Table 2. Distributions of responses to the questions

Questions	Answer options for a question	Percentage of responses
Share of income from economic activities in total income	0-10%	23.1
	11%-24%	9.0
	25%-50%	12.2
	51%-74%	12.4
	75%-99%	24.6
	100%	18.8
Legal form	foundation	29.1
	association	31.5
	social cooperative	39.5
Location of organization	town	80.3
	village	19.7
Main area of economic activity carried out by the organization	production	4.6
	commerce	3.8
	services	91.6
A market where the organization predominantly does business	local	54.9
	regional	17.1
	national	24.6
	international	3.4
Number of employees with employment contract	0	28.2
	1-5	36.8
	6-9	14.0
	10-19	11.8
	20-49	5.5
	50-249	3.2
	250 and more	0.5
Total revenue of the organization	to 10 000 PLN	5.5
	more than10 000 PLN to 100 000 PLN	18.2
	more 100 000 PLN to 1 million PLN	45.1
	more than 1 million PLN	31.2
Extent of the organization's online activities	1- not at all	39.0
	2 - to a small extent	16.8
	3- partially	26.8
	4- to a considerable extent	13.8
	5 - fully	3.6
Year of start-up*	until 1999	21.0
	2000-2009	15.4
	2010-2019	56.6
	2020 or later	7.0

* The question was included as an open question in the survey questionnaire. To present the results, Table 2 aggregates them into four ranges.
Source: *based on survey data*

Social cooperatives constituted the largest proportion of the organizations studied (39.5%), followed by associations (31.5%) and foundations (29.1%).
Most of the organizations were in urban areas (80.3%), with a significantly smaller proportion operating in rural areas (19.7%).

The main area of activity for the organizations surveyed was services (91.6%), with manufacturing (4.6%) and commerce (3.8%) occurring significantly less frequently.

Over half of the surveyed organizations operated predominantly within the local market (54.9%), while 24.6% functioned at a national level, 17.1% at a regional level, and only 3.4% had an international scope of activity.

The largest proportion of organizations employed between 1 and 5 workers (36.8%) or had no employees at all (28.2%), while the percentage of those employing 50 or more staff was negligible (3.7% combined).

The highest proportion of organizations reported annual revenues in the PLN 100,000 to PLN 1 million bracket (45.1%). A notable 31.2% of organizations generated revenues greater than PLN 1 million, while only a small minority (5.5%) had revenues below PLN 10,000.

The data reveals a significant digital divide among the organizations, with nearly 40% having no online activities. Among those with a digital presence, usage varied: 26.8% operated partially online, 16.8% to a small extent, and 13.8% to a considerable extent, while a very small minority (3.6%) were found to be fully online.

More than half of the surveyed organizations (56.6%) were founded in the period 2010–2019. A further 21.0% had been operating since 1999 or before, 15.4% were established between 2000 and 2009, and a smaller proportion of 7.0% began their activities in 2020 or later.

3.2. Assessing the relationship between selected organizational characteristics on social enterprises commercialization and their degree of commercialization

Based on the chi-square independence test, it can be concluded that there is a relationship between the legal form of activity and the share of income from economic activities in total income. The legal form of activity is the only one of the four characteristics on social enterprises commercialization, measured at a nominal level, that shows a relationship with the level of commercialization. The other characteristics, such as the location of the organization, the main area of economic activity carried out by the organization, and the market in which the organization mainly carries out its economic activity, do not show a relationship with the share of the organization's economic activity income in total income.

Table 3. Results of the Chi-Square Independence Test for the Degree of Commercialization of Social Enterprises and selected nominal variables

Variable	Chi-square	p-value
Legal form	127.762	1.34E-22
Location of organization	3.994	0.550
Main area of economic activity carried out by the organization	8.411	0.589
A market where the organization predominantly does business	21.478	0.122

Source: *based on survey data*

Spearman rank correlation analysis identified three variables that showed a statistically significant relationship with the level of commercialization of social enterprises. Two independent variables had a negative relationship with the variable determining the level of commercialization of social enterprises. As the organization's total revenue increases, the share of the revenue from commercial activities decreases. A similar pattern was observed with increases in the extent of online activity by social enterprises.

The results of the correlation analysis also allow us to conclude that the later the year of start-up, the higher the share of income from economic activities in total income.

The only variable that does not show a statistically significant correlation with the variable determining the level of commercialization is the number of employees with employment contract.

Table 4. Results of spearman rank correlation analysis for the degree of commercialization and selected variables

Variable	Spearman rank correlation coefficient	t-test	p-value
Total revenue of the organization	-0.177	-4.326	1.80E-05
Year of start-up	0.225	5.547	4.42E-08
Number of employees with employment contract	0.009	0.211	0.833
Extent of the organization's online activities	-0.143	-3.477	0.001

Source: *based on survey data*

Based on the preliminary results of the assessment of the relationship between the eight organizational characteristics of social enterprises and their degree of commercialization (Table 3 and 4), four variables were selected for inclusion in the estimation of the parameters of the ordinal regression model for the variable: the share of income from economic activities in total income. In doing so, the aim was to obtain a model with statistically significant independent variables, evaluated positively based on the results of statistical tests. As a result, a model with two independent variables was obtained, among which were the year of start-up and the legal form of the organization (Table 5).

Table 5. Estimation results of the ordinal regression model for the degree of commercialization

Variables			Parameter	Odds ratio	Standard error	Wald	p-value
Threshold value	Share of income from economic activities in total income	0-10%	-41.019	1.53E-18	17.124	5.738	0.017
		11%-24%	-40.504	2.57E-18	17.121	5.597	0.018
		25%-50%	-39.885	4.77E-18	17.118	5.429	0.020
		51%-74%	-39.281	8.72E-18	17.116	5.267	0.022
		75%-99%	-37.859	3.61E-17	17.113	4.894	0.027
Location	Year of start-up		-0.019	0.981	0.008	5.054	0.025
	Legal form	foundation	-1.945	0.143	0.203	92.050	8.45E-22
		association	-2.219	0.109	0.247	80.769	2.54E-19
		social cooperative	0*	-	-	-	-
Pseudo R-square		**Cox and Snell**	**Nagelkerke**	**McFadden**			
		0.211	0.218	0.069			
Likelihood ratio test		**Chi-square**	**p-value**	**Parallel lines test**		**Chi-square**	**p-value**
		137.828	1.11E-29			6.516	0.888

* The parameter has been assigned a zero value as it is redundant.
Source: *Based on survey data*

The ordinal regression model yielded a Nagelkerke's pseudo-R^2 of 0.218, indicating improved model fit relative to the null model. Moreover, the likelihood ratio test result for the ordinal regression model indicates that the model significantly improves the prediction of the dependent variable compared to the model containing only a constant. In addition, the parallel lines test indicates that the assumption of an equal distribution of the predictor effect within the categories of the dependent variable can be considered positively verified, supporting the appropriateness of the ordinal regression model.

Based on the estimated model (Table 5), it can be concluded that a later start-up year reduces the chances of a higher share of income from economic activities in total income. An increase of one year in an organization's founding date is associated with a 1.9% decrease in the odds of achieving a higher commercialization level, ceteris paribus.

Furthermore, operating as a foundation or association also reduces the chances of achieving a higher degree of commercialization. Relative to the reference category of social cooperatives, being a foundation is associated with an 85.7% decrease in the odds of achieving a higher commercialization level, ceteris paribus. Compared to social cooperatives, being an association is associated with approximately 89.1% lower odds of achieving a higher commercialization level, ceteris paribus.

Conclusion

Social enterprises are collectives with significant differences in the degree of commercialization. On the one hand, almost one in four social enterprises is characterized by a low level of commercialization, as they earn at most 10% of its income from economic activities. On the other hand, almost one in five social enterprises show full commercialization and earn 100% of their income from economic activities.

The analyses carried out allow conclusions to be drawn regarding the relationship between selected organizational characteristics of social enterprises and their level of commercialization. The relationship between the legal form of the organization and the share of income from economic activities in total income was confirmed. Other researchers from CEE - Czech Republic and Slovakia - also point out the crucial importance of the legal form for the commercialization of the nonprofit sector (Vaceková, Valentinov & Nemec, 2016).
Furthermore, the analyses showed that only one variable related to the size of the social enterprise (total revenue of the organization) showed a statistically significant relationship with the variable determining the level of commercialization. No relationship was confirmed between the number of contracted employees and the share of income from economic activities in total income. This statement is in line with the findings of Suykens, De Rynck, & Verschuere (2019) discovery.

Among the eight organizational characteristics of SEs, two further variables were identified that can be considered determinants of the degree of commercialization. These include the year of start-up and a variable related to the specificity of the social enterprise - the extent to which the organization conducts online activities. However, the association of two other variables related to the specificity of the activity, such as the main area of economic activity carried out by the organization and the market in which the organization predominantly does business - was not confirmed (Suykens, De Rynck & Verschuere, 2019).

Our analysis is subject to certain limitations. First, the usual caveats regarding cross-sectional data apply. We cannot track changes over time and thus cannot document the evolution of the determinants of commercialization of Polish social enterprises. The level of commercialization of SE in Poland, as in CEE countries, has evolved. It would be very valuable if future research re-examines our research questions, considering exogenous shocks, which, when analyzed through the lens of historical institutionalist theory, would provide valuable information. Furthermore, the cross-sectional nature of the analysis also suggests that our results are best understood as correlational rather than causal. Future research based on longitudinal data will be better able to delve into causality. However, because our study is representative, it allowed us to accurately assess the representativeness of our sample and generalize our findings. This represents a major strength of our study

In addition, in measuring the determinants of commercialization of Polish social enterprises we are aware that the contexts of historically close CEE countries to Poland may differ and thus introduce bias into our analysis. Finally, the variables included in the analysis are not exhaustive. Future research may explore many other variables (determinants), such as organizational culture or entrepreneurial orientation (Lu et. al., 2023).

Acknowledgement

The publication of this article was supported by funds granted by the Minister of Science of the Republic of Poland under the "Regional Initiative for Excellence" Programme for the implementation of the project "The Poznań University of Economics and Business for Economy 5.0: Regional Initiative – Global Effects (RIGE)".

References

Altman, D., & Ştefan, F. (2016). A new approach to arts management in the context of the Romanian contemporary art scene. *Transylvanian Review*, *25*(2), 129–143.

Alzaza N.S. (2022). Assessment of the Contingency Theory on Performance Mobile Learning in the Palestinian Higher Education Institutions during Coronavirus Pandemic: Moodle Case Study. *International Journal of Novel Research in Engineering and Science*, *9*(1), 14–23. https://doi.org/10.5281/zenodo.6810038

Balgah, R. A., Kimengsi, J. N., & Kester, N. (n.d.). Nonprofit commercialization: What shapes the perceptions of top managers? *Public Administration and Development.*

Bradshaw, P. (2009). A contingency approach to nonprofit governance. *Nonprofit management and leadership*, *20*(1), 61-81.

Brown, W. A., & Iverson, J. O. (2004). Exploring strategy and board structure in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, *33*(3), 377-400.

Carroll, D. A., & Stater, K. J. (2009). Revenue diversification in nonprofit organizations: Does it lead to financial stability? *Journal of Public Administration Research and Theory*, *19*(4), 947–966. https://doi.org/10.1093/jopart/mun025

Cornforth, Ch. and Simpson, C. (2003). The changing face of charity governance: the impact of organizational size.In: Cornforth, C.J. ed. *The Governance of Public and Non-profit Organizations: what do boards do?* Routledge Studies in the Management of Voluntary and Non-Profit Organizations. London: Routledge, pp. 187–206

Ceptureanu, S. I., Ceptureanu, E. G., Orzan, M. C., & Marin, I. (2017). Toward a Romanian NPOs sustainability model: Determinants of sustainability. *Sustainability*, *9*(6), 966.

Císař, O., & Navrátil, J. (2014). Promoting competition or cooperation? The impact of EU funding on Czech advocacy organizations. *Democratization, 21.* (Forthcoming).

Eikenberry, A. M., & Kluver, J. D. (2004). The marketization of the nonprofit sector: Civil society at risk? *Public Administration Review*, *64*(2).

Enjolras, B. (2002). Does the commercialization of voluntary organizations "crowd out" voluntary work? *Annals of Public and Cooperative Economics*, *73*(3), 375–398.

Erkan, A., & Yildiz, Z. (2014). Parallel lines assumption in ordinal logistic regression and analysis approaches. *International Interdisciplinary Journal of Scientific Research*, *1*(3), 8–23.

Fen Crystal Yap, S., & Kwai Choi Lee, C. (2014). Leveraging the power of online social networks: a contingency approach. *Marketing Intelligence & Planning*, *32*(3), 345-374.

Foster, W., & Bradach, J. (2005). Should nonprofits seek profits? *Harvard Business Review.*

Geoghegan, M., & Powell, F. (2006). Community development, partnership governance and dilemmas of professionalization: Profiling and assessing the case of Ireland. *British Journal of Social Work*, *36*(5), 845–861.

Greblikaite, J. (2016). Development of social entrepreneurship in Lithuanian enterprises. In *Entrepreneurship, Business and Economics – Vol. 1: Proceedings of the 15th Eurasia Business and Economics Society Conference* (pp. 43–55). Springer International Publishing.

Guo, B. (2006). Charity for profit? Exploring factors associated with the commercialization of human service nonprofits. *Nonprofit and voluntary sector quarterly, 35*(1), 123-138.

Gurvits, N., Nikitina-Kalamae, M., & Sidorova, I. (2015). Social enterprise in Estonia: Present situation and the perspectives of future development, survey of Estonian opinion. *Procedia-Social and Behavioral Sciences, 213*, 497–502.

Hung, C., & Berrett, J. (2023). The effects of commercialization on nonprofit efficiency and the moderating roles of government funding and organizational size. *Nonprofit Management and Leadership, 33*(4), 735–753.

Hung, C., & Suykens, B. (2023). Donors' giving decisions toward nonprofit commercialization: Do commercial form and intensity matter? *Nonprofit Management and Leadership, 34*(2), 293–315.

Kėrytė, Ž. (2015). Lithuanian NGOs that provide psychosocial services: The compatibility of social mission and entrepreneurship (Doctoral dissertation). Vytauto Didžiojo Universitetas.

Khieng, S., & Dahles, H. (2015). Resource dependence and effects of funding diversification strategies among NGOs in Cambodia. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations, 26*, 1412–1437.

King, D. (2017). Becoming business-like: Governing the nonprofit professional. *Nonprofit and Voluntary Sector Quarterly, 46*(2). https://doi.org/10.1177/0899764016663321

Koberidze, T. (2019). International practices of non-state funding mechanisms for civil society organizations. *Center for Strategic Research and Development of Georgia.*

Lagerspetz, M., & Skovajsa, M. (2006). Non-profit foundations in four countries of Central and Eastern Europe. *Polish Sociological Review, 154*(2), 187–208.

Laurisz, N. (2020). W kierunku komercjalizacji działalności społecznej – różnicowanie sposobu prowadzenia działalności przez podmioty ekonomii społecznej w efekcie ich ekonomizacji. *Przedsiębiorczość – Edukacja, 16*(2), 189–201. https://doi.org/10.24917/20833296.162.15

Lee, C., Lu, J., & Shon, J. (2022). Managing the market-mission tension: When does commercial revenue crowd out charitable contributions? *Public Performance & Management Review, 45*(3), 532–556.

Lu, J., Guan, S., & Dong, Q. (2023). Commercializing nonprofit organizations? Evidence from the Chinese nonprofit sector. *Public Administration, 101*(3), 1072–1087.

Maier, F., Meyer, M., & Steinbereithner, M. (2016). Nonprofit organizations becoming business-like: A systematic review. *Nonprofit and Voluntary Sector Quarterly, 45*(1), 64–86. https://doi.org/10.1177/0899764014561796

Mikołajczak, P. (2018). The impact of the diversification of revenues on NGOs' commercialization: Evidence from Poland. *Equilibrium, 13*(4), 761–779. https://doi.org/10.24136/eq.2018.037

Mikołajczak, P. (2019). Becoming business-like: The determinants of NGOs' marketization turning into social enterprises in Poland. *Oeconomia Copernicana, 10*(3), 537–559.

Mikołajczak, P. (2022a). Determinants of precarious employment in social enterprises in Central and Eastern Europe. *Journal of Business Research, 146*, 398–408. https://doi.org/10.1016/j.jbusres.2022.03.085

Mikołajczak, P. (2022b). How do barriers to the activities of social enterprises affect their financial situation? Evidence based on data from Poland and resource mobilization theory. *Journal of Entrepreneurship in Emerging Economies, 14*(1), 93–110. https://doi.org/10.1108/JEEE-07-2020-0217

Mikołajczak, P. (2021). What affects employment by NGOs? Counteraction to precarious employment in the Polish non-profit sector in the perspective of COVID-19 pandemic crises. *Oeconomia Copernicana, 12*(3), 761–788. https://doi.org/10.24136/oc.2021.025

Mikołajczak, P., & Bajak, P. (2021). Does NGOs' commercialization affect volunteer work? The crowding out or crowding in effect. *Public Organization Review, 21*(1), 103–118.

Nimu, A. (2015). A theoretical approach to the effects of external funding on women and gender-based NGOs in Romania and Poland. *Europolity - Continuity and Change in European Governance, 9*(1), 161–188.

Ostrower, F., & Stone, M. M. (2006). Governance: Research trends, gaps, and prospects. *The nonprofit sector: A research handbook, 2*, 612-628.

Pape, U., Brandsen, T., Pahl, J. B., Pieliński, B., Baturina, D., Brookes, N., ... & Zimmer, A. (2020). Changing policy environments in Europe and the resilience of the third sector. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations, 31,* 238–249.

Pelucha, M., Kourilova, J., & Kveton, V. (2017). Barriers of social entrepreneurship development – A case study of the Czech Republic. *Journal of Social Entrepreneurship, 8*(2), 129–148. https://doi.org/10.1080/19420676.2017.1313303

Raišienė, A. G., & Urmanavičienė, A. (2017). Mission drift in a hybrid organization: How can social business combine its dual goals? *Ekonomski Viesnik, 2*(30).

Roy, M. J., Eikenberry, A. M., & Teasdale, S. (2021). The marketization of the third sector? Trends, impacts and implications. In *Research handbook on nonprofit governance* (pp. 371–390). Edward Elgar Publishing.

Schober, C., et al. (2010). Die unterschiedlichen Finanzierungsquellen von NPIs: Ausgewählte deskriptive Ergebnisse zur NPI-Finanzierungsbefragung. *WU Competence Research Report.*

Suykens, B., & Verschuere, B. (2021). Nonprofit commercialization. In *International encyclopedia of civil society.* Springer.

Suykens, B., De Rynck, F., & Verschuere, B. (2019). Examining the influence of organizational characteristics on nonprofit commercialization. *Nonprofit Management & Leadership, 30*(2), 339–351.

Suykens, B., George, B., De Rynck, F., & Verschuere, B. (2021). Determinants of non-profit commercialism: Resource deficits, institutional pressures or organizational contingencies? *Public Management Review, 23*(10), 1456–1478.

Toepler, S. (2004). Conceptualizing nonprofit commercialism: A case study. *Public Administration and Management: An Interactive Journal, 9*(4), 1–19.

Tomaževič, N., & Aristovnik, A. (2018). Social entrepreneurship: Case of Slovenia. Ljubljana: Zavod14.

Vaceková, G. (2016). The nonprofit sector in economic theory: Beyond mainstream explanations. *Habilitation Thesis.* Masaryk University, Brno.

Vaceková, G., & Prouzová, Z. (2014). Nonprofit commercial revenues: Evidence from the Czech Republic (No. 16). Masaryk University, Brno.

Vaceková, G., Svidroňová, M. M., Plaček, M., & Nemec, J. (2020). Business practices in nonprofit funding. In *Financing nonprofit organizations* (pp. 161–172). Routledge.

Vaceková, G., Valentinov, V., & Nemec, J. (2016). Rethinking non-profit commercialization: The case of the Czech Republic. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations.* https://doi.org/10.1007/s11266-0169772-6

Williams, R. (2010). Fitting heterogeneous choice models with oglm. *The Stata Journal, 10*(4), 540–567.

Young, D. R., & Salamon, L. M. (2002). Commercialization, social ventures, and for-profit competition. In *The state of nonprofit America.* Brookings Institution/Aspen Institute.