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Factors influencing the development of entrepreneurs' businesses after the age of 50: The case of Poland

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ABSTRACT

Objective: The article aims to identify and assess factors influencing the development of entrepreneurs' businesses after the age of 50, with particular emphasis on firm age, entrepreneurial motivations, and support from the environment.

Research Design & Methods: We gathered data through a survey of over 1 000 Polish micro and small enterprise founders over 50, including those who started their businesses early and have managed them long-term, as well as those who launched their ventures after turning 50 and have operated them for a shorter period. We used logistic regression to analyse the data.

Findings: The results revealed that firm age serves as a moderator in the influence of entrepreneurial motivation factors on further business development, particularly in relation to family support and the desire to remain active. Internal entrepreneurial factors, such as seeking new challenges and remaining active, positively impacted growth intentions. However, dissatisfaction with previous jobs and job loss reduced growth prospects. External factors, such as family and state support, significantly influenced growth tendencies.

Implications & Recommendations: Entrepreneurs over 50 should not face discrimination, and policymakers should ensure their inclusion in grants, mentorship, and training programs available to all entrepreneurs. Moreover, entrepreneurship support organisations should develop programs that involve family members in the business planning process to enhance emotional support and foster shared understanding.

Contribution & Value Added: This study fills a research gap by explicitly linking entrepreneurial motivations with further business development. Moreover, it expands the existing knowledge on mature entrepreneurs in Central and Eastern Europe. The study's originality lies in its integration of multiple dimensions – internal motivations, firm age, and external support – into a comprehensive model that explains business development among entrepreneurs over 50. It contributes to the broader discourse on prolonging entrepreneurial activity in ageing societies.

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INTRODUCTION

The ageing of populations in highly developed countries has been a sustained trend that brings with it a range of negative social and economic consequences, such as the potential failure of social protection systems. Consequently, active ageing and initiatives to mitigate societal ageing's effects have become one of the most significant challenges of the twenty-first century. One aspect of active ageing is maintaining economic activity as long as possible, including individuals' business activities during their mature years. Therefore, the issues surrounding mature individuals who start, manage, and develop business activities represent a critical research area for economic sciences.

People over 50 who run a business represent a substantial and growing demographic group, while their business development plans remain relatively underexplored (Dębkowska *et al.*, 2023; Velilla & Sánchez, 2018). Within this group of mature entrepreneurs, there is considerable diversity in terms of how long they have been running their businesses. Some individuals launched their ventures at a younger age and possess extensive entrepreneurial experience. In contrast, others have begun their entrepreneurial endeavours only after reaching the age of 50. This heterogeneity highlights the need for a deeper understanding of mature entrepreneurs' motivations for starting a business, with the duration of their entrepreneurial activity and the broader impact of these factors on the growth of their ventures (Liu, 2024; Stephan *et al.*, 2015).

Societies with ageing populations increasingly have been observing a phenomenon in which individuals initiate new enterprises during their professional careers' later stages (Bojanić *et al.*, 2024; Kurek & Rachwał, 2011). The literature refers to these individuals as *silver entrepreneurs,* signifying those who start their business ventures at age 50 or older (Kautonen, 2013; Soto-Simeone & Kautonen, 2021). Recent literature highlights the need to consider mature individuals' ability to establish successful enterprises to better understand the silver entrepreneurship phenomenon (del Olmo García *et al.*, 2023; Stephens & Hegarty, 2022). Consequently, the lack of research examining this group's propensity to develop their businesses further and investigating differences in this process compared with other entrepreneurs represents a significant literature gap.

Research conducted on the development of enterprises usually concerns the issue of barriers that entrepreneurs encounter during the process of running a business and ways of preventing them, as well as the needs of entrepreneurs in various areas (Kibler *et al.*, 2012; Maâlaoui *et al.*, 2014; Wach, 2014). However, extant research is limited on whether micro and small entrepreneurs generally tend to expand their activities and what drives their desire for further business development (Caliendo *et al.*, 2023; van Gelderen & Jansen, 2006). In turn, studies conducted in the context of silver entrepreneurs have focused mainly on motivational factors for entering entrepreneurship at a later stage in life, with little extant research examining such conduct and the development of business activity among this group (Backman *et al.*, 2019; Matos *et al.*, 2018). However, some of these studies indicate that an essential determinant that influences subsequent business growth pertains to varying characteristics in the founder, including the founder's age when the company was established and the motivations driving the entrepreneur to initiate business activities (Backman *et al.*, 2019).

The objective of the article is to identify and assess factors influencing the development of entrepreneurs' businesses after the age of 50, with particular emphasis on firm age, entrepreneurial motivations, and support from the environment. Our research concerns broadly defined entrepreneurial motivations and their relationship with the tendency towards further business development, in which we seek to address the following research questions (RQ):

- **RQ1:** Does the firm age influence mature people's tendency to develop business activity further?
- **RQ2:** Which internal entrepreneurial factors arising from emerging opportunities influence mature people's tendency to develop business activity further?
- **RQ3:** Which internal entrepreneurial factors resulting from emerging necessities influence mature people's tendency to develop business activity further?
- **RQ4:** Which external entrepreneurial factors associated with the founder's environment influence mature people's tendency to develop business activity further?

For this purpose, we analysed a sample comprising entrepreneurs over age 50 who launched businesses at different stages of their lives and have been running them for varying lengths of time – specifically, those who started their ventures at a younger age and have operated them for a long time, as well as those who established their businesses only after turning 50, whose firms are relatively young. Our sample comprised over 1 000 founders of micro and small enterprises from Poland. We used logistic regression to ascertain the impact of firm age and entrepreneurial factors on the future development of the company, understood as the planned increase in employment declared by entrepreneurs.

The establishment and growth of micro and small enterprises are indispensable in fostering economic development. Small and micro-enterprises comprise approximately 99% of all businesses in the European Union market, with the corresponding figure in Poland exceeding 99%, as reported by the Polish Agency for Enterprise Development (Skowrońska *et al.*, 2023). These entities are categorised primarily based on staff headcounts (micro-enterprises have fewer than 10 employees, and small enterprises have fewer than 50), as well as their turnover or balance sheets (European Union Commission, 2003). Founders' decisions on the development of their enterprises are pivotal not only for the entities themselves but also for the entire economy, particularly the generation of new job opportunities (Adelino *et al.*, 2017). Therefore, this is a significant research topic, particularly considering post-50 entrepreneurs who initiated their ventures at different stages in life.

This study contributes to the field of entrepreneurship by examining the factors influencing the development of businesses run by entrepreneurs over the age of 50. While prior research has explored mature entrepreneurship, it has often overlooked the direct connection between motivational factors and the growth of businesses led by individuals in this age group. This study fills this gap by explicitly linking entrepreneurial motivations with further business development. Moreover, the research extends the existing knowledge on mature entrepreneurs in Central and Eastern Europe, a region that has been underrepresented in the literature. The study's originality lies in its integration of multiple dimensions, *i.e.*, internal motivations, firm age, and external support into a comprehensive model that explains business development among entrepreneurs over 50. Thus, this research does not merely compile previous findings but offers a fresh perspective on the factors shaping the growth of mature entrepreneurs. It contributes to the broader discourse on prolonging entrepreneurial activity in ageing societies.

The structure of this article is as follows. The second part examines the theoretical background regarding founders and their role in developing their businesses, the dimensions of success for micro and small enterprises, and the three classified groups of entrepreneurial motivations. The third part presents the procedures used for data gathering and analysis, along with the research methodology utilised. Subsequently, the fourth section examines the findings derived from the analyses. The final section summarises the research and discusses conclusions that we can draw from the findings, as well as theoretical and practical implications.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Mature Entrepreneurs in Focus

As population ageing continues to accelerate, researchers have increasingly turned their attention to the phenomenon of mature entrepreneurship, highlighting that we should not regard it as a marginal activity (Coduras *et al.*, 2018). Existing studies primarily compare younger age groups of entrepreneurs to older age groups, seeking to identify differences in business practices, such as tendencies towards innovation (Murmann *et al.*, 2023). However, a significant degree of heterogeneity exists within the group of mature entrepreneurs, especially in terms of the duration of their entrepreneurial activity. While some individuals established their businesses decades ago and have accumulated substantial managerial experience, others embarked on their entrepreneurial journey only after the age of 50 and remain in the early stages of running their ventures.

Few researchers have addressed the issue of individuals starting their own entrepreneurial ventures at a later age (del Olmo García *et al.*, 2023; Kautonen *et al.*, 2008; Stephens & Hegarty, 2022). In previous studies, scholars often referred to this group of entrepreneurs as silver entrepreneurs (Ahmad *et al.*, 2014; Cannon & Kurowska, 2013), though we may also find alternative terms, such as senior entrepreneurs (del Olmo García *et al.*, 2023; Matos *et al.*, 2018) and older entrepreneurs (Conway Lenihan & McGuirk, 2022; Wainwright & Kibler, 2013). Moreover, the literature presents a variety of definitions to describe entrepreneurship among mature individuals, including those who become self-employed or start a new business late in their working careers (Kautonen, 2008), individuals nearing retirement who have launched new businesses after careers as salaried workers (Bornard & Fonrouge, 2012), and entrepreneurs, particularly those who have retired, including those who opted for early retirement to launch entrepreneurship careers (Blackburn *et al.*, 2000). However, researchers similarly

have comprehended the concept of a mature individual entering entrepreneurship in the literature, and differences in definitions arise primarily from specifying the age at which an individual starts their business activity, whether age 45 and up (Ainsworth & Hardy, 2008; Singh & Verma, 2003), above 50 (Isele & Rogoff, 2014; Kautonen, 2013; Soto-Simeone & Kautonen, 2021), or even above 55 (Hantman & Gimmon, 2014; Small, 2012). Based on the literature review, we considered entrepreneurs over the age of 50, including those who start a business at this age (Dębkowska *et al.*, 2023; Ilczuk *et al.*, 2023; Isele & Rogoff, 2014; Kautonen, 2013; Soto-Simeone & Kautonen, 2021).

Numerous studies examined the relationship between the duration of business activity and its subsequent impact on enterprise development (Adelino *et al.*, 2017; Coad *et al.*, 2016; Liu, 2024). Research findings predominantly indicate that as a company remains in the market for a longer period, its founders tend to exhibit a declining willingness to further expand their business (Pervan *et al.*, 2017). However, when comparing mature entrepreneurs based on the length of time they have been running their ventures, particularly in the case of entrepreneurs who establish their businesses later in life and operate for a shorter duration, a significant research gap remains.

Accordingly, we formulated the following hypothesis (concerning RQ1):

H1: Mature individuals who have been in business for longer are less likely to continue to develop their businesses.

The Founder's Influence on Micro and Small Business Growth

Business ownership is crucial, particularly for micro and small enterprises, within which elaborate management structures are lacking, and the owner typically oversees every aspect of the operation directly (Schutjens & Wever, 2000). Prior research focusing on business development primarily has addressed the challenges that micro and small business owners have encountered, listing issues such as competition with larger rivals for market position, maintaining financial stability, human resource management, and effective adaptation to general market changes (Dvorský *et al.*, 2023; Kibler *et al.*, 2012; Wach, 2014). To a very limited extent, these studies have examined individuals' willingness and their tendencies to develop their businesses further, mainly focusing on aspects strictly related to business operations and economic outcomes (de Kok *et al.*, 2010; de Vries *et al.*, 2020). The success of a business is defined primarily through an analysis of the entity's financial performance, including percentage changes in sales, profit, transaction volume, and income from the current period compared with the previous period (Gielnik *et al.*, 2012). However, some scientists notably have emphasized that in the case of micro and small enterprises, and their founders, the entity's success should be assessed through the owner's subjective evaluation of the company and its reference not only to pecuniary dimensions but also to other benefits derived from conducting business that directly impacts their lives (Kautonen *et al.*, 2017; Matos *et al.*, 2018; Soto-Simeone & Kautonen, 2021).

The literature emphasises the entrepreneur's role as the most significant entity within the enterprise itself – the direct decision-maker for the entity's future, the manager overseeing its operations, and the primary individual responsible for implemented ideas' success or failure (Schumpeter, 1934). Previous entrepreneurship studies concerning companies' development typically have considered the founder's fundamental characteristics, particularly demographic factors such as age, gender, education, and marital status (Bosma *et al.*, 2004; Caliendo *et al.*, 2023; de Vries *et al.*, 2020; Kautonen *et al.*, 2013; Lévesque & Minniti, 2011; Wainwright & Kibler, 2013). Researchers also focus on founders' individual characteristics, including overall health status, start-up motivations, and goals for the established venture as success factors in enhancing the company's growth chances further (de Kok *et al.*, 2010; Gielnik *et al.*, 2012; Schutjens & Wever, 2000). Notably, other studies have examined a combination of individual founder characteristics with environmental factors related to the business cycle, choice of industry sector, or region (Amofah *et al.*, 2024; Caliendo *et al.*, 2023; de Vries *et al.*, 2020; Wach, 2014). However, a significant research gap exists concerning founder characteristics' specific impact on the inclination towards developing the company further (Zhou & de Wit, 2009). Therefore,

based on our literature review, we assert that entrepreneurial motivations as individual founder characteristics may exert a significant influence on willingness to develop the business further (Caliendo *et al.*, 2023; de Vries *et al.*, 2020; Kautonen *et al.*, 2013).

Most often, the literature has distinguished between two dimensions of internal motivations driving the entrepreneur to initiate business activities (Harms *et al.*, 2014; van der Zwan *et al.*, 2016). The first group includes positive ('pull') factors related to potential opportunities, such as aspirations for a work-life balance through a reduction in working hours or adoption of a more flexible schedule (Ahmad *et al.*, 2014; Stephens & Hegarty, 2022), pursuit of new challenges in life (Ahmad *et al.*, 2014; Matos *et al.*, 2018), the desire to fulfil dreams (Gimmon *et al.*, 2018; Stephens & Hegarty, 2022), and a intention to maintain vitality, remain active, and interact with the environment (Backman *et al.*, 2019; Bojanić *et al.*, 2024; Soto-Simeone & Kautonen, 2021).

Drawing on the literature review, we put forward the following hypotheses (all in relation to RQ2):

H2: The opportunity for more flexible working hours compared with full-time employment (as a motivating factor for starting a business) positively influences mature people's propensity for further business development.

H3: The desire to seek new life challenges (as a motivating factor for starting a business) positively influences mature people's propensity for further business development.

H4: Dream fulfilment (as a motivating factor for starting a business) positively influences mature people's propensity for further business development.

H5: Willingness to be active and interact with other people (as a motivating factor for starting a business) positively influences mature people's propensity for further business development.

The second group comprises negative ('push') factors associated with encountered necessities, including dissatisfaction with a previous full-time job (Backman *et al.*, 2019; Harms *et al.*, 2014), the issue of age discrimination in the workplace (Harms *et al.*, 2014; Hennekam, 2015; Kautonen, 2013), and the loss of employment and lack of alternative opportunities in the labour market (del Olmo García *et al.*, 2023; Small, 2012).

Based on this framework, we advance the literature by presenting the following hypotheses (in relation to RQ3):

H6: Dissatisfaction with a previous full-time job (as a motivating factor for starting a business) negatively influences mature people's propensity for further business development.

H7: The occurrence of ageism in the workplace (as a motivating factor for starting a business) negatively influences mature people's propensity for further business development.

H8: Loss of employment and lack of alternative opportunities in the labour market (as a motivating factor for starting a business) negatively influences mature people's propensity for further business development.

In addition to internal factors, several external ones originating from an individual's environment also influence the decision to embark on business ventures. Extant research has highlighted the importance of receiving encouragement from family and friends in deciding to establish a business (Gimmon *et al.*, 2018; Kibler *et al.*, 2012), as well as assistance provided by governmental institutions and various stakeholder groups engaged in the enhancement of entrepreneurial activities (Hantman & Gimmon, 2014; Isele & Rogoff, 2014).

Consequently, we hypothesised (in relation to RQ4):

H9: Family support in starting a business positively influences mature people's propensity for further business development.

H10: Friend support in starting a business positively influences mature people's propensity for further business development.

H11: State support in starting a business positively influences mature people's propensity for further business development.

RESEARCH METHODOLOGY

Sample and Data Collection

In this study, data were sourced from a survey conducted by MRC Consulting, which ran from January 5 to February 25, 2022. Before the study, the questionnaire was tested in a pilot study on 20 individuals, and their feedback was incorporated. The methodology for selecting entrepreneurs for the sample was as follows: Businesses were chosen randomly from the REGON registry, a database of economic entities in Poland maintained by the Central Statistical Office. Only active REGON numbers assigned to individuals engaged in business activities were included. The research team initiated contact with each business owner via phone. If the connection was established, a survey was conducted if the owner consented. In cases in which contact could not be made, another entrepreneur was selected randomly. The computer-assisted telephone interviewing method was used to collect data. The initial question was a filter, focusing on the respondents' age, including only those above 50. Through this method, a sample of 1 003 respondents was compiled.

Thus, all of our respondents were entrepreneurs over 50 years of age. Most of them started their business activity at a younger age (that is, before the age of 50), whereas some started their entrepreneurial venture when they were already over 50 years old. Among the entrepreneurs surveyed, 95% were male, ages 51 to 69, with an average age of 56. Most of the research sample comprised married individuals (86%). In terms of education, those with higher education levels comprised the largest segment (48%). Regarding industry, entrepreneurs in wholesale and retail trades were predominant (31%), while representation from other industry sectors varied between 2% and 10%. The average age at which respondents started their business ventures was 42. Approximately 10% of the respondents embarked on their business pursuits after age 50. The average duration of business activity in the sample was approximately 14 years, while for those who started their business after the age of 50, it was around 7 years. Among all surveyed entrepreneurs, the shortest duration of business activity was 1 year, and the longest was 40 years.

Variable Measurement

Table 1 presents a detailed overview of the variables utilised in this study. We adopted the respondents' declarations regarding the increase in employment as a measure of the enterprise's future development. Plans for employment growth are not sensitive questions, so they are suitable for use in survey research, as respondents are more likely to provide honest answers. Many authors have utilised job creation as a metric for measuring enterprise development (Bosma *et al.*, 2004; Caliendo *et al.*, 2023; Gielnik *et al.*, 2012). In a further analysis, we utilised the binary variable *Expansion*, which takes the value of 1 if the respondent planned to hire additional employees in the next 5 years and 0 otherwise.

To assess our research hypotheses' validity, we employed a set of independent variables, each corresponding to a specific hypothesis and inquiry. To examine whether mature individuals who have been in business longer are less likely to continue developing their businesses, we included the independent variable *Firm age* in the study, which represents the duration of business activity in years (Adelino *et al.*, 2017; Murmann *et al.*, 2023). Pervan *et al.* (2017) also considered firm age as an independent variable, highlighting its dual impact on business development. A longer market presence provides accumulated knowledge in key areas – advanced technology, supply chains, customer relationships, and resource access – which supports expansion. However, older firms often show organisational inertia, avoiding risk and resisting structural change, which ultimately hinders development.

The next set of independent variables revolved around the support received from various sources, *i.e.*, family, friends, and governmental assistance, in initiating entrepreneurial ventures, as the participants reported. Gimmon *et al.* (2018) mentioned the importance of the entrepreneurial individual's environment in terms of the support provided by family members, surroundings, and friends in fostering the initiation of entrepreneurial endeavours. Isele and Rogoff (2014) indicated that the United States offers government programs that encourage and support entrepreneurship among groups, such as women, minorities, and immigrants, but that few programs specifically target mature entrepreneurs. However, Hantman

Table 1. Research variables' characteristics

Variable	Definition/survey question	Response categories	Source
Dependent variables			
Expansion	Planning to increase employment in the next 5 years.	1 (if yes); 0 (if no)	Bosma *et al.*, 2004; Caliendo *et al.*, 2023; Gielnik *et al.*, 2012
Independent variables			
Firm age	Duration of company operations	An integer greater than or equal to 0	Adelino *et al.*, 2017; Murmann *et al.*, 2023; Pervan *et al.*, 2017
Family support	I felt encouraged by my family to start my own company.	Five-point Likert scale ranging from 'strongly disagree (1)' to 'strongly agree (5)'	Gimmon *et al.*, 2018; Kautonen, 2013; Kibler *et al.*, 2012
Friend support	I felt encouraged by my friends to start my own company.		Ahmad *et al.*, 2014; Gimmon *et al.*, 2018; Kibler *et al.*, 2012
State support	I got enough support from government institutions to run my own company.		Hantman & Gimmon, 2014; Isele & Rogoff, 2014
Flexibility	I started my own business to have a more flexible work schedule compared to regular employment.		Ahmad *et al.*, 2014; Stephens & Hegarty, 2022
Challenge	I am always seeking new challenges, which is why I chose to start my own business.		Ahmad *et al.*, 2014; Matos *et al.*, 2018
Dream	Launching my own company made my dream a reality.		Gimmon *et al.*, 2018; Stephens & Hegarty, 2022
Staying active	I enjoy being active and social, and having my own business makes that possible.		Backman *et al.*, 2019; Bojanić *et al.*, 2024; Soto-Simeone & Kautonen, 2021
Job dissatisfaction	I was not satisfied with my previous job, so I chose to start my own company.		Backman *et al.*, 2019; Harms *et al.*, 2014
Ageism	I experienced or observed unequal treatment of older workers at my previous job.		Harms *et al.*, 2014; Hennekam, 2015; Kautonen, 2013
Job loss	After being unemployed with no other income sources, I decided to		del Olmo García *et al.*, 2023; Small, 2012

Variable	Definition/survey question	Response categories	Source
	launch my own company.		
Control variables			
Former manager	Have you ever held a full-time managerial position?	1 (if yes); 0 (if no)	Bosma *et al.*, 2004; Cannon & Kurowska, 2013; Schutjens & Wever, 2000
Respondent's age	Age of the respondent	An integer greater than or equal to 0	Ilczuk *et al.*, 2023; Isele & Rogoff, 2014; Kautonen, 2013; Lévesque & Minniti, 2011; Soto-Simeone & Kautonen, 2021
Employment	Current number of employees at the company	An integer greater than or equal to 0	de Kok *et al.*, 2010; Schutjens & Wever, 2000
Gender	Gender of the respondent	1 (if male); 0 (otherwise)	Caliendo *et al.*, 2023; de Vries *et al.*, 2020; Gielnik *et al.*, 2012; Wainwright & Kibler, 2013
Marital status	Marital status of the respondent	*Single* *Married* *Informal relationship* *Divorced* *Widow/widower*	Bosma *et al.*, 2004
Education	Education of the respondent	*Primary* *Vocational* *Secondary* *Higher*	Caliendo *et al.*, 2023; de Vries *et al.*, 2020; Wainwright & Kibler, 2013
Residence	Residential location of the respondent	*Rural area* *Town (fewer than 50 000 inhabitants)* *City (from 50 000 up to 100 000 inhabitants)* *City (over 100 000 up to 250 000 inhabitants)* *City (over 250 000 inhabitants)*	Cannon & Kurowska, 2013; Schutjens & Wever, 2000
Industry	Business industry of the respondent	*Manufacturing activities* *Construction and renovation services* *Wholesale and retail trade* *Transportation services* *Medical services* *Beauty and fitness services* *Hotel, restaurant, and catering services* *Automotive services* *Financial and insurance services, real estate trade* *Professional, scientific, and educational services* *Other services* *Other industry*	Caliendo *et al.*, 2023; de Vries *et al.*, 2020; Stephens & Hegarty, 2022

Source: own study.

and Gimmon (2014) described the results from an experimental project created in cooperation with social workers and college staff, aimed at supporting active ageing through entrepreneurial activities

among adults from one of the senior centres in Israel. We hypothesised that such support from the environment would have a positive correlation with the inclination towards business growth.

The last set of independent variables concerned the positive (pull) and negative (push) factors that impact the decision to engage in business activities. Based on the literature review, we considered the following factors (as opportunities): the aspiration for more flexible working hours compared with full-time employment (Ahmad *et al.*, 2014; Stephens & Hegarty, 2022); the desire to seek new life challenges (Ahmad *et al.*, 2014; Matos *et al.*, 2018); dream fulfilment (Gimmon *et al.*, 2018; Stephens & Hegarty, 2022); and willingness to be active and interact with other people (Backman *et al.*, 2019; Bojanić *et al.*, 2024; Soto-Simeone & Kautonen, 2021). We also considered the second group of factors (as a necessity): dissatisfaction with prior full-time employment (Backman *et al.*, 2019; Harms *et al.*, 2014); experiencing age discrimination in the workplace (Harms *et al.*, 2014; Hennekam, 2015; Kautonen, 2013); and facing job loss, along with limited opportunities in the labour market (del Olmo García *et al.*, 2023; Small, 2012). According to Stephens and Hegarty (2022), Irish public service retirees' decision to start a small enterprise generally is framed by opportunity recognition, encompassing the pursuit of a dream or passion. Simultaneously, del Olmo García *et al.* (2023) assumed in their research that the Spanish entrepreneur is a necessity-based entrepreneur due to long-term unemployment that prompts mature professionals to become entrepreneurs. We anticipated a positive association between pull factors and the tendency to develop a business, and a negative correlation for push factors. We quantified these variables, representing both negative and positive influences, using a five-point Likert scale in the survey questions.

Drawing from the existing literature, we incorporated a range of control variables into our research. Current studies suggest that skills and experience acquired from previous full-time employment can influence business management later in life (Schutjens & Wever, 2000). For instance, Cannon and Kurowska (2013) indicated a strong association between holding managerial positions and participation in the industrial sector, as well as self-employment among women. Furthermore, Bosma *et al.* (2004) state that prior experience in a leadership role increases the company's survival time. In this context, we factored in whether the participants previously had held a managerial role in their full-time careers, as this experience could affect their propensity to employ staff and their capacity for employee management significantly.

Empirical data also indicated that the size and scope of a company's operations can impact its ongoing development (de Kok *et al.*, 2010). Schutjens and Wever (2000) included a number of employees as one of the firm-associated factors in their research on determinants of success among Dutch start-ups, linking it to the company's future achievements. Consequently, we accounted for the current number of employees in the company as a control variable.

Furthermore, our study considered respondents' sociodemographic attributes, including age, gender, marital status, educational background, and place of residence (Caliendo *et al.*, 2023; Cannon & Kurowska, 2013; de Vries *et al.*, 2020; Lévesque & Minniti, 2011; Wainwright & Kibler, 2013). Following Bosma *et al.* (2004), we included respondents' marital status because the emotional support of the business founder's spouse could be important for entrepreneurial performance. We also considered the specific industry sector in which the respondents were operating their businesses (Caliendo *et al.*, 2023; de Vries *et al.*, 2020; Stephens & Hegarty, 2022). For further analysis and modelling, we transformed these categorical variables into quantitative data by assigning a corresponding dummy binary variable to each category. Table 2 provides descriptive statistics for the variables utilised in this study.

The average value of the dependent variable *Expansion* stood at 0.34, signifying that in the analysed sample, around 34% of the respondents indicated plans to expand the team size in their companies within the next 5 years. Notably, the research sample comprised business owners who employed a maximum of 14 employees at the time of the survey, with the average number of staff being close to 4. Furthermore, in Table A1 of Appendix, we present the results from the multicollinearity analysis and pairwise correlation between the dependent variable *Expansion* and the independent variables. Notably, the variance inflation factor (VIF) values for the independent variables indicated that collinearity was not present in this set of variables.

Table 2. Descriptive statistics

Variable	Responses categories	Mean	Std. Dev.	Min	Max
Expansion		0.342	0.474	0	1
Firm age		14.062	7.282	1	40
Family support		3.147	1.009	1	5
Friends support		3.828	1.057	1	5
State support		2.565	0.881	1	5
Flexibility		3.470	0.901	1	5
Challenge		3.501	1.193	1	5
Dream		3.543	1.164	1	5
Staying active		3.254	1.018	1	5
Job dissatisfaction		3.216	0.995	1	5
Ageism		2.592	0.873	1	5
Job loss		2.119	1.114	1	5
Former manager		0.155	0.362	0	1
Respondent's age		56.37	3.901	51	69
Employment		3.724	2.438	0	14
Gender		0.948	0.221	0	1
Marital status	Single	0.004	0.070	0	1
	Married	0.856	0.350	0	1
	Informal relationship	0.046	0.211	0	1
	Divorced	0.078	0.269	0	1
	Widow/widower	0.012	0.113	0	1
Education	Primary	0.000	0.031	0	1
	Vocational	0.152	0.359	0	1
	Secondary	0.369	0.483	0	1
	Higher	0.476	0.499	0	1
Residence	Rural area	0.013	0.117	0	1
	Town (fewer than 50 000 inhabitants)	0.163	0.370	0	1
	City (from 50 000 up to 100 000 inhabitants)	0.285	0.451	0	1
	City (over 100 000 up to 250 000 inhabitants)	0.341	0.474	0	1
	City (over 250 000 inhabitants)	0.195	0.396	0	1
Industry	Manufacturing activities	0.082	0.275	0	1
	Construction and renovation services	0.061	0.240	0	1
	Wholesale and retail trade	0.313	0.463	0	1
	Transportation services	0.097	0.297	0	1
	Medical services	0.099	0.299	0	1
	Beauty and fitness services	0.059	0.237	0	1
	Hotel, restaurant and catering services	0.087	0.283	0	1
	Automotive services	0.081	0.274	0	1
	Financial and insurance services, real estate trade	0.021	0.146	0	1
	Professional, scientific and educational services	0.048	0.215	0	1
	Other services	0.015	0.125	0	1
	Other industry	0.028	0.167	0	1

Source: own study.

Modelling Strategy

We applied logistic regression to identify the determinants associated with the binary variable *Expansion*. Scholars frequently employ this technique in contemporary entrepreneurship studies and in investigations that have examined ageing's impact on entrepreneurial tendencies (Le Loarne-Lemaire & Nguyen, 2019; Rodríguez-López & Souto, 2019; von Bonsdorff *et al.*, 2019). Logistic regression is effec-

tive at examining the connection between various independent variables and the likelihood of a particular outcome occurring. In this research, we analysed the probability of mature entrepreneurs declaring an increase in employment over the next 5 years.

The baseline logistic regression model applied in our study took the following form:

$$\ln \frac{P(Y=1)}{1-P(Y=1)} = \beta_0 + \sum_{k=1}^{n} \beta_k X_k + \sum_{l=1}^{m} \gamma_l C_l \quad (1)$$

in which:

$P\ (Y = 1)$ - denotes the conditional probability that the dependent variable (*Expansion*) takes the value 1;

β_0 - indicates the model's intercept;

X_k - refers to the *k*-th independent variable;

β_k - captures the effect of the *k*-th independent variable on $P\ (Y = 1)$;

C_l - indicates the *l*-th control variable;

γ_l - measures the impact of the *l*-th control variable on $P\ (Y = 1)$.

In our research, we computed the model's parameters using the maximum likelihood estimation method through Stata 13 software. Initially, we calculated the model by incorporating all the variables at our disposal. The likelihood ratio chi-square test demonstrated that a subset of the explanatory variables markedly influenced the likelihood of a reported increase in employment within the company over the next five years.

The analysis of sensitivity and specificity revealed that the model is relatively effective at classifying cases despite the pseudo R^2 not being notably high. Nevertheless, a thorough examination of the parameter values and their standard errors led us to consider removing certain variables that were not statistically significant. We experimented with various model iterations, eliminating variables that exhibited a p-value greater than 0.1 in each step. We detail the outcomes of the preliminary and refined final models in the subsequent section of the article (Table 3).

However, the baseline model indicated that some variables, including the *Firm age*, were statistically insignificant. Since the literature (Anderson & Eshima, 2013; Coad *et al.*, 2016; Naldi & Davidsson, 2014) suggests that this factor may exert either a direct or moderating influence, we decided to extend the model by incorporating the moderating effects of the *Firm age* variable.

The extended logistic regression model applied in our study took the following form:

$$\ln \frac{P(Y=1)}{1-P(Y=1)} = \beta_0 + \sum_{k=1}^{n} \beta_k X_k + \sum_{k=1}^{n} \delta_k (X_k \times X_M) + \sum_{l=1}^{m} \gamma_l C_l \quad (2)$$

in which:

$P\ (Y = 1)$ - denotes the conditional probability that the dependent variable (*Expansion*) takes the value 1;

β_0 - indicates the model's intercept;

X_k - refers to the *k*-th independent variable;

β_k - captures the effect of the *k*-th independent variable on $P\ (Y = 1)$;

X_M - is the moderating variable (*Firm age*);

δ_k - captures the moderation effect between X_k and X_M;

C_l - indicates the *l*-th control variable;

γ_l - measures the impact of the *l*-th control variable on $P\ (Y = 1)$.

Consistent with our previous analysis, we initially estimated comprehensive models using all independent variables, moderating effects, and control variables. Subsequently, we examined the parameter values and standard errors, and in successive iterations, we discarded variables for which the p-value exceeded 0.1. However, we retained the moderator and the factors for which the moderation effects were significant. In the following section, we present both the initially estimated broad model and the final refined model (Table 4).

RESULTS AND DISCUSSION

In this section, we present the results from both the main effects (Table 3) and the extended (Table 4) model estimations. Noteworthy, in the final extended model, the pseudo R^2 was 0.196, compared to 0.188 in the final basic model. This suggests that the extended model has slightly better predictive properties.

The baseline logistic regression analysis of the *Expansion* variable suggests that both support from their environment at the start of their business operations and their internal entrepreneurial motivations influence the probability of mature entrepreneurs declaring the development of their businesses. Among the environmental factors, family support impacted business development strongly and positively. The parameter for the *Family support* variable was statistically significant at the 5% level. Our findings partially aligned with previous results from Bosma *et al.* (2004), who found that emotional support from a spouse is also crucial for business performance because entrepreneurs who receive such support earn approximately 40% more than their peers who experience no such support.

The findings also indicated that government institution support was marginally significant (the parameter for the *State support* variable was statistically significant at the 10% level), which is consistent with previous results. Wach (2014) indicated that local policy favouring entrepreneurship in southern Poland predominantly focuses on potential entrepreneurs and that financial support aimed mainly at forming or newly formed enterprises, omitting established enterprises and micro firms at all stages of their development. Furthermore, Bojanić *et al.* (2024) stated that for European Union members, small-scale support from governmental organisations is identified primarily with financing of silver entrepreneurship, compared with other target groups for inclusive entrepreneurship, particularly in terms of grants for business creation, loan guarantees, and microfinance loans. Our study confirmed that *State support* was rated at a lower level (mean response: 2.56) than *Family support* (3.15) or *Friend support* (3.83).

Among the internal motivational factors related to starting a business, the inclination to take on challenges (with the parameter for the *Challenge* variable being statistically significant at the 1% level) significantly impacted the propensity for further business development. Similarly, the desire to remain active (with the parameter for the *Staying Active* variable significant at the 1% level) exerted a comparable influence. However, other pull factors did not significantly impact the probability of further business development, as the respondents stated. Our findings on pull factors were partially consistent with Caliendo *et al.* (2023), who demonstrated that individuals driven by the opportunity motive (understood as deriving satisfaction from implementing and executing their own ideas) perform better in terms of innovation and business expansion activities. Furthermore, Stephens and Hegarty (2022) found that social need, as a primary reason for retirees beginning their entrepreneurial journeys, significantly impacted outcomes associated with further development of their enterprises, manifested in the delivery of a new product or service.

We found that starting a business due to dissatisfaction with a previous job decreased the likelihood of further development of the enterprise (with the parameter for the *Job dissatisfaction* variable being negative and statistically significant at the 1% level). Likewise, starting a business due to job loss also reduced the probability of ongoing business development (with the parameter for the *Job loss* variable being negative and statistically significant at the 1% level). Our results regarding push factors do not align with those of Caliendo *et al.* (2023), in which the necessity motives (including the unavailability of a regular job) did not exert a significantly negative impact on entrepreneurial performance when the control variables associated with founder characteristics were included in the study. However, de Vries *et al.* (2020) found that the necessity-driven solo self-employed (mainly due to unemployment, entrepreneurship being the only option for suitable paid work, or voluntarily leaving a previous paid job) perform worse than the opportunity-driven solo self-employed.

Notably, the final model also incorporated a selection of control variables, one of which was the *Former manager* variable, indicating that individuals who previously held managerial positions were more likely to express an intention to increase employment at their firms. This aligns with Cannon and Kurowska (2013), in which entrepreneurs from managerial and senior officer backgrounds were the only group not exhibiting fear of failure or hesitation to take risks when considering investments and

growth in a small business. Schutjens and Wever (2000) added that specific entrepreneurship or management experience is a clear precondition for new firm success.

Table 3. The results for the main effects models

Independent/control variable	Dependent variable *Expansion*			
	Initial model		Final model	
	Coefficient	Standard Error	Coefficient	Standard Error
Independent variables				
Firm age	0.001	0.012	-	-
Family support	0.190**	0.082	0.172**	0.079
Friends support	0.079	0.079	-	-
State support	0.177*	0.095	0.189**	0.092
Flexibility	-0.151	0.099	-	-
Challenge	0.367***	0.074	0.348***	0.071
Dream	0.016	0.072	-	-
Staying active	0.237***	0.082	0.221***	0.080
Job dissatisfaction	-0.191**	0.081	-0.189***	0.079
Ageism	0.024	0.098	-	-
Job loss	-0.317***	0.084	-0.330***	0.076
Constant	-0.697	1.499	-2.376***	0.627
Control variables				
Former manager	incorporated		incorporated	
Respondent's age	incorporated		omitted	
Employment	incorporated		incorporated	
Gender	incorporated		omitted	
Marital status	incorporated		omitted	
Education	incorporated		omitted	
Residence	incorporated		incorporated	
Industry	incorporated		incorporated	
Model fit				
Number of observations	964		965	
LR chi2 p-value	246.52		231	
Log likelihood	-504.86		-510.42	
Pseudo R^2	0.196		0.188	
Sensitivity	52.62%		50.58%	
Specificity	83.87%		83.90%	
Correctly classified	72.72%		72.02%	

Note: Table 3 displays the baseline logistic regression outcomes for the dependent variable *Expansion*.
The symbols ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively.
Source: own study.

The current employment level within the enterprise also influenced the propensity to expand employment, possibly because some of the businesses surveyed were sole proprietorships, which inherently did not intend to increase employment scale. Conversely, entrepreneurs who already employed workers possess greater experience in this area, so for them, increasing employment tends to be less problematic. This is similar to Schutjens and Wever (2000), who found that among individuals attempting to establish some form of self-employment and working independently, only 6% had hired new personnel within three years. However, the number of employees at the beginning and the presence of a business partner within the firm also increase the probability of employee growth.

Additional control variables influencing the inclination towards further development of the enterprise by hiring new staff were the place of residence and industry sector. Conversely, respondent's age, gender, marital status, and education level did not exhibit statistical significance at any of the standard significance levels and, therefore, were omitted from the final model. Regarding industry sectors,

Caliendo *et al.* (2023) noted that the tendency to employ workers is greater among businesses originating from the manufacturing sector. When it comes to gender, de Vries *et al.* (2020) noticed a strong negative relation for women solo self-employed, with their business development measured by annual turnover. Similar to our results, Bosma *et al.* (2004) also considered the parameter of marital status, which was found to be insignificant, while emotional support from family proved to be statistically significant.

Table 4. The results for the extended models

Independent/control variable	Dependent variable *Expansion*			
	Initial model		Final model	
	Coefficient	Standard error	Coefficient	Standard error
Independent variables				
Firm age	0.048	0.072	0.053	0.045
Family support	-0.100	0.193	-0.069	0.174
Friends support	-0.063	0.184	-	-
State support	0.072	0.220	-	-
Flexibility	-0.232	0.227	-	-
Challenge	0.705***	0.177	0.415***	0.071
Dream	0.338**	0.166	-	-
Staying active	0.738***	0.196	0.730***	0.179
Job dissatisfaction	-0.089	0.189	-	-
Ageism	-0.198	0.219	-	-
Job loss	-0.534***	0.202	-0.384***	0.078
Constant	-1.780	2.003	-1.533	1.547
Moderation effects of firm age				
Family support x Firm age	0.020*	0.011	0.019*	0.011
Friends support x Firm age	0.011	0.011	-	-
State support x Firm age	0.009	0.014	-	-
Flexibility x Firm age	0.006	0.014	-	-
Challenge x Firm age	-0.022**	0.011	-	-
Dream x Firm age	-0.020**	0.010	-	-
Staying active x Firm age	-0.034***	0.012	-0.035***	0.010
Job dissatisfaction x Firm age	-0.004	0.012	-	-
Ageism x Firm age	0.017	0.013	-	-
Job loss x Firm age	0.014	0.012	-	-
Control variables				
Former manager	incorporated		incorporated	
Respondent's age	incorporated		incorporated	
Employment	incorporated		incorporated	
Gender	incorporated		omitted	
Marital status	incorporated		incorporated	
Education	incorporated		incorporated	
Residence	incorporated		incorporated	
Industry	incorporated		incorporated	
Model fit				
Number of observations	964		964	
LR chi2 p-value	269.06		246.17	
Log likelihood	-493.59		-505.04	
Pseudo R^2	0.214		0.196	
Sensitivity	56.40%		55.23%	
Specificity	84.84%		85.16%	
Correctly classified	74.69%		74.48%	

Note: Table 4 displays logistic regression outcomes for the dependent variable *Expansion*, incorporating moderation effects of the *Firm age* variable. The symbols ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. Source: own study.

The extended logistic regression model yielded results similar to those of the baseline model for the *Challenge*, *Staying active*, and *Job* loss variables. However, in the final model, the *Family support* variable's parameter was not statistically significant unless considered in interaction with the company age. Among the introduced moderation effects between the *Firm age* variable and specific entrepreneurial motivations, two merit special attention.

First, the interaction between the *Family support* and *Firm age* variables was positive and statistically significant at the 10% level. This finding implies that the longer a company operates in the market, the stronger the positive impact of initial family support at the business's inception on subsequent expansion decisions. In other words, more established firms appear to leverage family support more effectively when considering further development. This finding is comparable to previous research. For instance, Gielnik *et al.* (2012) suggested that, in addition to mental health, family support may serve as a personal resource that moderates the relationship between business owners' age, opportunity focus, and enterprise growth.

Secondly, the interaction between the *Staying active* and *Firm age* variables is negative and statistically significant at the 1% level. This suggests that although the *Staying active* variable exerts a strong positive main effect on expansion, its influence gradually diminishes as the company's age increases. We may interpret this as indicating that in firms with a short business lifespan, the desire to remain active serves as a stronger motivator for development, whereas in enterprises with a longer duration of business activity, it plays a relatively smaller role in expansion decisions. This partially aligns with previous literature, which suggest that as firms remain in the market longer, their founders exhibit a reduced tendency to seek additional growth opportunities (Pervan *et al.*, 2017).

Furthermore, the extended model incorporates a broader set of control variables compared to the model with only main effects. Notably, it includes the respondent's age, suggesting that the propensity for enterprise development declines as the entrepreneur ages. Our findings align with several prior studies. For example, de Kok *et al.* (2010) found that entrepreneurs who establish ventures later in life (at an older age) are less likely to engage in full-time work within these businesses, exhibit lower risk tolerance, and tend to underestimate their entrepreneurial abilities. However, Brieger *et al.* (2021) highlighted that the connection between an entrepreneur's age and their propensity to generate social value through their ventures depends on the formal institutional framework, particularly the level of economic, social, and political freedoms within a given country. Moreover, Stephens and Hegarty (2022) observed that mature entrepreneurs, like many entrepreneurs, encounter challenges in expanding their customer base and generating revenue as their businesses grow. On the other hand, Cannon and Kurowska (2013) challenged the negative stereotypes about post-50 entrepreneurs, demonstrating that many possess the necessary assets and attributes for business success.

CONCLUSIONS

We aimed to identify and assess factors influencing the development of entrepreneurs' businesses after the age of 50, with particular emphasis on firm age, entrepreneurial motivations, and support from the environment. Our research concerned broadly defined entrepreneurial motivations and their relationship with the tendency towards further business development, in which we sought to address 4 research questions (Table 5).

As for RQ1, we determined that the duration of a company's activity does not always have a direct effect on further business development, as its main effect is statistically insignificant (H1 was not supported). However, it serves as a moderator, strengthening or weakening the influence of other entrepreneurial motivation factors among mature individuals. Family support gains significance as companies operate in the market longer, suggesting that long-term business management may facilitate more effective utilisation of resources and support from the family environment. The desire to remain active is generally an important motivator of business expansion, but the role of this factor decreases with the time

of operation. It is likely that in enterprises with a longer operational history, other, more critical factors emerge as primary drivers of development, while the motivation to remain active loses its significance. This configuration of results indicates that in the analysis of expansion decisions, it is important not only what motivations accompanied the mature founders at the start, but also how long the firm has been operating, because the age of the firm may change the importance of individual motivations.

Table 5. Verification of hypotheses regarding post-50 entrepreneurs

Hypotheses		Supported/Unsupported
The influence of firm age on the tendency to develop business activity further (RQ1)		
H1:	Mature individuals who have been in business for longer are less likely to continue to develop their businesses.	Unsupported
The influence of internal ('pull') entrepreneurial factors on the tendency to develop business activity further (RQ2)		
H2:	The opportunity for more flexible working hours compared with full-time employment (as a motivating factor for starting a business) positively influences mature people's propensity for further business development.	Unsupported
H3:	The desire to seek new life challenges (as a motivating factor for starting a business) positively influences mature people's propensity for further business development.	Supported
H4:	Dream fulfilment (as a motivating factor for starting a business) positively influences mature people's propensity for further business development.	Unsupported
H5:	Willingness to be active and interact with other people (as a motivating factor for starting a business) positively influences mature people's propensity for further business development.	Supported
The influence of internal ('push') entrepreneurial factors on the tendency to develop business activity further (RQ3)		
H6:	Dissatisfaction with a previous full-time job (as a motivating factor for starting a business) negatively influences mature people's propensity for further business development.	Supported
H7:	The occurrence of ageism in the workplace (as a motivating factor for starting a business) negatively influences mature people's propensity for further business development.	Unsupported
H8:	Loss of employment and lack of alternative opportunities in the labour market (as motivating factors for starting a business) negatively influence mature people's propensity for further business development.	Supported
The influence of external entrepreneurial factors on the tendency to develop business activity further (RQ4)		
H9:	Family support in starting a business positively influences mature people's propensity for further business development.	Supported
H10:	Friend support in starting a business positively influences mature people's propensity for further business development.	Unsupported
H11:	State support in starting a business positively influences mature people's propensity for further business development.	Supported

Source: own study.

In relation to RQ2, two internal entrepreneurial factors arose from emerging opportunities that statistically significantly and positively impacted mature individuals' tendency to develop their business activity further: the desire to seek new life challenges and willingness to be active and interact with other people (H3 and H5 were supported). However, the opportunity for more flexible working hours, compared with full-time employment, negatively impacted the declared employment growth rate (H2 was not supported). Moreover, the other pull factor, dream fulfilment, did not statistically significantly impact the probability of further business development, as indicated by respondents' statements (H4 was not supported).

Concerning RQ3, two internal entrepreneurial factors resulting from emerging necessities decreased the likelihood of further development of enterprises by individuals post-50: dissatisfaction with previous full-time jobs and the loss of employment, combined with a lack of alternative opportunities in the labour market (H6 and H8 were supported). The occurrence of ageism in the

workplace did not have a statistically significant impact on the probability of further business development, as declared by the respondents (H7 was not supported).

As for RQ4, two external entrepreneurial factors associated with the founder's environment statistically significantly and positively impact mature individuals' propensity for further business development: family support and state support (H9 and H11 were supported). However, the friend support factor did not statistically significantly impact the probability of further business development, as the respondents indicated (H10 was not supported).

A practical implication of our study is that individuals conducting businesses after age 50 should not face discrimination from stakeholders, particularly government agencies. Our research indicates that government support can enhance the propensity for business development within this group. Policymakers should include mature entrepreneurs in grants, mentorship, and training programs targeted at all entrepreneurs. Moreover, entrepreneurship support organisations should develop programs that involve family members in the business planning process to enhance emotional support and foster shared understanding.

A potential area for future research is to challenge stereotypes about mature entrepreneurs' business operations in the context of their propensity for business growth, such as through the introduction of innovations or market survival in highly competitive conditions. Another potential research area could focus on a specific group of mature entrepreneurs motivated by positive internal factors to start a business but lack the desire to expand it in the future, particularly in the context of moderating effects related to firm age. The application of qualitative methods, such as in-depth interviews, could provide valuable insights into these founders' attitudes towards defining business success and the benefits derived from conducting business that directly impacts their lives.

Another topic worth exploring is the role of family in starting, running, and developing businesses by mature individuals in a broader context. This includes drawing inspiration from observing other family members who are also entrepreneurs, hiring family members in their own businesses, shaping the ownership structures of family firms, and succession issues in companies led by both mature individuals who have been running their businesses for some time and silver entrepreneurs who started their businesses for the first time later in life.

However, this study has certain limitations, one of which entails gender distribution among participants. As highlighted in the report of the Polish Economic Institute (Dębkowska *et al.*, 2023), the majority of post-50 entrepreneurs in Poland are male. In our study, this gender imbalance is evident in the sample's notable overrepresentation of men. Furthermore, the nature of entrepreneurs as respondents poses another limitation. Entrepreneurs often have tight daily schedules, which correlate with their reluctance to participate in lengthy surveys. Consequently, the questionnaire had to be concise, limiting the number of questions per topic and influencing the choice of research methods applied in this study. Noteworthy, the study sample might have comprised individuals who identify as entrepreneurs, but are actually full-time employees using self-employment merely for tax purposes with their employers. Employment growth is an imperfect measure of enterprise development, as its correlation with sales growth has weakened due to digitalisation, which enables scale-independent resources and diminishes the traditional link between employment and revenue. Alternative indicators, such as revenue growth, could be considered; however, for Polish entrepreneurs, financial data is often a sensitive subject, leading to reluctance in disclosure. For this reason, we used projected employment growth as a measure of the expected development of the company. Future studies should note these limitations.

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Appendix:

Table A1. Multicollinearity diagnostics and pairwise correlation between dependent and independent variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
Expansion (1)	1.000											
Firm age (2)	-0.001	1.000										
Family support (3)	0.019	-0.060	1.000									
Friends support (4)	0.045	0.005	-0.213*	1.000								
State support (5)	0.096*	-0.008	0.034	0.216*	1.000							
Flexibility (6)	-0.058	-0.131*	0.061	0.128*	0.094*	1.000						
Challenge (7)	0.140*	-0.052	-0.036	0.086*	0.118*	0.065*	1.000					
Dream (8)	0.009	-0.035	0.104*	-0.019	0.056	0.113*	-0.051	1.000				
Staying active (9)	0.122*	-0.120*	0.023	0.058	0.040	0.135*	0.059	0.100*	1.000			
Job dissatisfaction (10)	-0.085*	-0.036	-0.001	0.039	0.031	0.074*	0.038	-0.053	0.032	1.000		
Ageism (11)	0.058	0.045	-0.005	-0.023	0.150*	-0.052	0.163*	0.185*	0.033	-0.004	1.000	
Job loss (12)	-0.121*	-0.082*	0.076*	0.012	-0.049	0.260*	0.136*	-0.102*	-0.084*	0.159*	-0.217*	1.000
VIF		1.04	1.08	1.13	1.10	1.16	1.09	1.09	1.06	1.03	1.15	1.22

Note: * indicates statistical significance at the 5% level.

Source: own study.

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Use of Artificial Intelligence

The manuscript is free of AI/GAI usage.

Conflict of Interest

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