

ORIGINAL ARTICLE


Citation: Małkowska, A., & Uhruska, M. (2022). Factors affecting SMEs growth: the case of the real estate valuation service industry. *Oeconomia Copernicana*, 13(1), 79–108. doi: 10.24136/oc.2022.003

Contact to corresponding author: Agnieszka Małkowska, malkowsa@uek.krakow.pl

Article history: Received: 10.03.2021; Accepted: 10.02.2022; Published online: 30.03.2022


Agnieszka Małkowska

Cracow University of Economics, Poland

 orcid.org/0000-0003-4810-0433

Małgorzata Uhruska

Cracow University of Economics, Poland

 orcid.org/0000-0001-6989-6835

Factors affecting SMEs growth: the case of the real estate valuation service industry

JEL Classification: L21; L25, L26; L85

Keywords: *business growth factors; entrepreneurship; professional services; property valuation; small business performance; SME's service businesses*

Abstract

Research background: Based on the literature, several ways of assessing the conduct of business and a number of factors influencing the growth and development of the companies can be identified. However, the diversity of business entities and their business environment raises the importance of considering the unique nature of the industry in the selection of performance measures. Our research focuses on real estate valuation firms that provide information and consulting services to real estate markets.

Purpose of the article: As professional practice shows, there are different business models for property valuation. These businesses differ in their organisational and legal form and the type of valuations performed, the type of client served, or the scope of services provided. The main purpose of the research is to identify factors that significantly affect the development odds of valuation companies in Poland, especially the growth of income.

Methods: The study was based on data collected from the survey of Polish real estate valuers. The analysis was conducted on a sample of 277 professionals who own valuation companies and

Copyright © Instytut Badań Gospodarczych / Institute of Economic Research (Poland)

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

were certified no later than the end of 2014. A quantitative analysis using a logistic regression model was conducted to identify the factors that influence the prospects for valuation business growth.

Findings & value added: The research confirms the relationship between the way of conducting real estate valuation activities and its development chances. The most important factors are a spatial and substantive range of services, cooperation and employment, and clients' profile. Demographic characteristics were also found to be significant. Although the results presented here are based on data from the real estate valuation industry, their relevance is much broader. The findings provide a better understanding of the factors that influence the performance and success of SMEs, particularly in the information and consulting industry.

Introduction

Property valuers are an important professional group supporting the real estate market. By providing information about real estate value, they facilitate the decision-making process in the property market (Bartke & Schwarze, 2021) and support transactions in the private and public sectors. Their primary role is to protect market decision-makers from poor economic choices and secure public interest. Because of the status of the profession, property valuers are subject to legal regulations and formal professional standards (Adair *et al.*, 1996; McParland *et al.*, 2002), whose requirements are designed to guarantee the reliability of valuer work and protect the interests of their clients.

The valuation profession has been considered an attractive career path in Poland for many years. It is one of the so-called liberal professions (also known as a profession of public trust), enjoying prestige and allowing a fair degree of flexibility in the manner of conducting professional activity (Małkowska *et al.*, 2021, p. 497). The advantages of this job, such as the variety of tasks performed, their importance, independence and self-determination, the possibility of combining this work with other professional and nonprofessional commitments, as well as the possibility for obtaining a satisfying level of income, resulting in around 300 individuals being licensed annually, bringing the number of licensed valuers in Poland to 8054 by the end 2021 (Central Registry).

The growing number of people entitled to practice as property valuers has led some to express concerns about excessive competition in the market, price dumping or poor quality of the services provided (Małkowska & Uhruska, 2019). The activity takes various forms ranging from employment by corporations providing various types of services to the real estate market, through partnerships to individual practice that sole traders usually carry out. Not all valuers pursue this professional activity as a primary and full-time job, and some view it as a supplemental source of income and

after-hours work. The range of professional activities and potential areas of valuation specialisation are also diverse. Such heterogeneity within the profession raises questions about the factors that can contribute to success in the market.

Of course, succeeding in business can mean different things to different entrepreneurs. Research shows that in the context of small business, success is a very broad concept (Davidsson *et al.*, 2010; Shepherd *et al.*, 2019; Harel *et al.*, 2021), measured both by the subjective goals of the company founder as well as by traditional financial performance (Carton & Hofer, 2006; Dalborg *et al.*, 2012; Murphy *et al.*, 2020; McKelvie *et al.*, 2021). Due to the vague evaluation of the personal goals of entrepreneurs, the most objective measure of business success is company growth (Carton & Hofer, 2006). In order to perform successfully, firms need to grow at least to some extent. Research shows that there are disparities in approaches to business growth, mainly concerning the direction and size of that growth. Differences in the attitude to business growth result from the characteristics of the entrepreneurs themselves (Dalborg *et al.*, 2012; Fellnhöfer, 2016; Kirkwood, 2016; Piispanen *et al.*, 2018; Mayr *et al.*, 2021; Yoganandan & Kumar, 2021) and the general conditions of business performance, such as state of the market and industry characteristics (Gilbert *et al.*, 2006).

Real estate valuation is certainly a specific type of business. Therefore, entering the real estate market is a challenge for all budding entrepreneurs who, with a valuator certificate in hand and very different professional experiences, are starting their careers and facing the choice of business direction. Identifying business growth factors may be an important issue for this particular professional group.

This research is the first to address the growth factors of companies providing valuations. Our main objective was to identify the factors that significantly affect the growth prospects of companies providing valuation services in Poland, particularly the sources behind their revenue increases.

Implementation of this objective was based on survey data from 277 respondents who were owners or co-owners of valuation businesses. For the analysis, a logistic regression model was used. The survey results show that a firm's growth prospects are affected by, *inter alia*, the spatial coverage of valuations offered, the type of clients served, and the gender and age of the owner-valuer.

In the light of Poland's growing real estate market and the development of the service sector in the economy, as well as the challenges faced by the valuation profession globally, our research seems particularly relevant. Although our study can be directly related to the activities of Polish property valuers, it should not be read solely in local terms. Irrespective of local

circumstances, the valuation profession is universal. Valuers worldwide provide a professional service based on experience and expertise, and their role is to assist private, public and institutional decision-makers by reducing the problem of information asymmetry. It is a public trust profession that creates its particular prestige and responsibility. Doing business in this area requires a unique perspective and recognition of development opportunities.

Despite the considerable body of research on small business growth (Adomako & Mole, 2017), previous studies have neglected this area of professional activity. As Lussier (2005) notes, in the context of success and failure in real estate, research conducted within a single industry or in a selected service sector is more important than cross-country research. Therefore, in our research, we concentrate on industry specifics. We believe that the obtained results will be useful for practitioners and will indicate a new perspective for further research, both in the context of property valuation, broader defined real estate services, and other professional services provided by SMEs.

The paper is divided into six sections. The second section discusses the literature on small business growth. The third section presents real estate valuation as a profession under the Polish institutional framework. The fourth section includes a description of the data sources and scope and the analytical approach. The fifth section provides the research findings and discussion, while the sixth concludes.

Literature review

Small business growth

Small businesses are a key component of a market economy, recognised as a major driver of economic growth, competitiveness and job creation (Urbano *et al.*, 2019; Surya *et al.*, 2021). Schumpeter (1934) saw entrepreneurs as individuals characterised by initiative and creativity who, by taking the risk of introducing innovative solutions in their companies, play a decisive role in economic development based on new technical or organisational solutions in the business. According to Schumpeter's theory of "creative destruction", entities that do not introduce new solutions lose their market share and consequently may be eliminated from the market by companies implementing innovations. In order for companies to survive and succeed in their industry, they must constantly develop.

The issue of small business development has been the subject of various scientific studies over the last decades (Lewis & Churchill, 1983; Storey, 1994; Davidsson & Wiklund, 2000; Wach, 2020). As Adomako and Mole (2017) point out, despite the considerable scholarly effort in the field of business growth, theory development in this area is particularly slow and incomplete, making it difficult to get a clearer picture of the phenomenon of small business growth. The difficulty is attributed to the heterogeneity of the business entities themselves, the study context, and the research's limitations. Depending on the specific areas of research, business growth is perceived differently in the literature, and its determinants and the success factors of firms are identified in different ways.

The concept of growth is understood and defined differently by various researchers and by entrepreneurs themselves. Traditionally, business growth is measured in quantitative terms by revenue growth and employment growth because both have proven to be most reliable in capturing the expansion of firms and are the two most commonly used indicators of success in entrepreneurship research (Carton & Hofer, 2006; Davidsson *et al.*, 2009; Kirkwood, 2009; Moreno-Menéndez & Casillas, 2021; McKelvie *et al.*, 2021), which certainly does not exhaust the practical and theoretical concepts of firm growth. The development of companies is also seen in the context of qualitative growth, achieved by strengthening the market position, changing the company's organisational structure, diversifying services, reaching new groups of customers, improving service quality, and developing competencies (Gupta *et al.*, 2013; Coad & Guenther, 2014; Taouab & Issor, 2019; Guzman & Stern, 2020). The traditional quantitative approach to firm growth has been criticised as a hasty and reductionist view of complex phenomena (McKelvie & Wiklund, 2010; Dalborg *et al.*, 2012). Revenue and employment measures do not explain how growth occurred or what goals individual entrepreneurs set for themselves, and these measures do not reflect the true aspirations of entrepreneurs. Small business owners define growth in individual ways that are not necessarily measurable through quantitative data (Garengo & Bernardi, 2007; Dalborg *et al.*, 2012; Taouab & Issor, 2019).

It is pointed out that the growth of small enterprises, whether perceived in quantitative or qualitative terms, is a function of decisions made by the entrepreneur, which depend on his individual characteristics and aspirations and internal and external business conditions. Based on a prior study of literature, Gilbert *et al.* (2006) reveal several key factors influencing why some ventures experience higher growth rates than their counterparts. The main roles in firm development are entrepreneur characteristics, firm resources and industry context.

The attitude and commitment of entrepreneurs have a definite impact on business performance and success. Among business owners, sex, age, education, and experience are important factors that influence their orientation toward firm growth. Research studies on how men and women run a small business are extensive and have been conducted in many countries and industries (Dalborg *et al.*, 2012; Fellnhofer, 2016; Kirkwood, 2016; Neneh, 2021; Kiefer *et al.*, 2022). Despite many differences in the performance of businesses owned by men and women, some researchers strongly indicate that the gender factor was found to be insignificant and did not affect business operation and growth (Ahl, 2004; Kirkwood, 2016). The most important differences between men's and women's approaches to business appear in the perception and understanding of business success. Women tend to value stability in the company, the sense of independence that comes from being their own boss and time flexibility (Carter *et al.*, 2003; Lee *et al.*, 2009; Dalborg *et al.*, 2012; Fellnhofer, 2016; Ladge *et al.*, 2019), while success is perceived differently by men, who clearly expect growth in financial outcomes. In a quantitative context, men have higher career aspiration and they are more focused on firm growth (Coleman, 2007; Eddleston & Powell, 2008; Fairlie & Robb, 2009; Hartman & Barber, 2020), and their ventures are more financially successful than women's businesses (Carter *et al.*, 2003; Kiefer *et al.*, 2022). As far as the age of the business owners is concerned, firm growth is favoured rather by those of younger age (Reijonen, 2008; Azoulay *et al.*, 2020). Young entrepreneurs, standing at the threshold of their business careers, are usually strongly motivated to increase financial results, more so than their older counterparts (Kautonen, 2008; Shaw & Sørensen, 2021). Another factor contributing to company growth is owner education in the field of industry that the company operates in and their managerial knowledge and skills (Gilbert *et al.*, 2006; Eide *et al.*, 2021; Gimmon *et al.*, 2021).

Two firm resources found to be most clearly related to a venture's growth are financial and human capital (Lee *et al.*, 2001; Haber & Reichel, 2007). The financial capital a firm holds is known to influence firms' sales and employment growth performance (Lee *et al.*, 2001; Hossain, 2020). A higher level of financial capitalisation is important, because it enables entrepreneurs to successfully execute strategic objectives focused on growing (Gilbert *et al.*, 2006), and companies with more start-up capital tend to operate longer (Headd, 2003). The situation is similar to company human capital. Capabilities of employees contribute positively to venture growth by helping the entrepreneurs execute their objectives (Haber & Reichel, 2007; Capelleras *et al.*, 2019; El Shoubaki *et al.*, 2020), and firms with

more employees tend to stay in business longer (Headd, 2003; Cabrer-Borrás *et al.*, 2019).

In order to understand the patterns of firm growth, it is particularly important to understand the characteristics of the industry in which the company operates (Gilbert *et al.*, 2006; Thomas & Douglas 2021). On the one hand, growth opportunities are enhanced by adapting to market needs in a given industry sector according to its life cycle. Firms competing in emerging industries may have more growth opportunities than ventures operating in mature markets. In emerging industries, market niches need to be filled with new products and services. For mature industries, a firm's chances of success are enhanced by its willingness to pursue new business activities and its ability to adapt to alternatives (Gilbert *et al.*, 2006; Coad & Guenther, 2014; Onufrey & Bergek, 2021). Each industry has its own characteristics that affect the determinants of business growth, and which should be taken into account.

The above factors of business growth are particularly important in small businesses, especially micro-businesses, where the owner is the main, often the only, decision-maker in the operation of the business (Lubacha-Sember & Godlewska, 2018). In such ventures, owners will perceive business growth as desirable only if the expected growth outcomes are consistent with their personal and business needs. Thus, the expected outcomes are anchored in their motivation to grow the firm. Furthermore, business owners perceive the possibility of business growth in relation to their self-efficacy, that is, their ability and skills to manage that growth by themselves (Capelleras *et al.*, 2019).

As the above review of the business growth literature shows, this is a very heterogeneous area of research. By narrowing the literature analysis to real estate valuation firms, it was found that such firms are mainly described in terms of the valuation profession itself (Bartke & Schwarze, 2021), valuation methodology (Adair *et al.*, 1996), client relationships (Worzala *et al.*, 1998; Wolverson & Gallimore, 1999; Amidu *et al.*, 2008; Małkowska *et al.*, 2019) or the scope of services provided (Małkowska & Uhruska, 2018). To date, no detailed research has been conducted on the issue of the growth of businesses operating in this particular industry.

Property valuation businesses in Poland and their growth potential

Property valuation in Poland is a relatively young profession, which came into being in 1997 (Real Estate Act, 1997) as a response to political system changes and ongoing real estate market transformation. From the very beginning of its formal existence, the profession is strictly regulated

by law until the present day. Relevant regulations govern the rules of preparation and entry into the profession and the manner of valuation performance. The legal status of the profession makes it a very specific business area in which property valuation entrepreneurs are subject to traditional business rules, typical of other entities while facing legal constraints specific only to this profession.

The most significant legal restriction on doing business in real estate valuation is the limited accessibility to the profession. When characterising a property valuation business in Poland, it should be emphasised that the valuation can be performed only by authorised property valuers holding state professional licenses. Such restriction significantly limits the number of entrepreneurs operating in this industry. State professional licenses are granted to persons with a higher education who have undergone adequate theoretical and practical preparation and passed the state examination (Real Estate Act, 1997). Preparation for entering the profession takes about two years, including one year of postgraduate studies, minimum of six months of practical traineeship and the time necessary to complete the state exam requirements.

The requirement for real estate valuers to hold a professional license has implications for the way the businesses in this area are conducted. This limits the number of valuation service providers and affects the structure and size of the businesses. According to previous research (Małkowska & Uhruska, 2018), there is a large representation of micro-businesses in the valuation industry. The real estate valuation services market has become dominated by small firms run by owners who personally provide valuation services. Practically, they operate as sole proprietorships or small companies. Those who have already obtained a state license expect to benefit financially from the profession. Such valuers run businesses in which they undertake all valuation activities themselves. Their personal involvement in the valuation process makes them fully responsible, legally and professionally, for their actions undertaken with the intent of receiving appropriate payment. The need to have full control over the valuation process and to ensure adequate quality of service is the reason why the vast majority of Polish valuers run their business on their own or form small partnerships.

The limited access to the profession and the licensing criterion also has another aspect. The two-year preparatory period requires candidates to make a time and financial commitment and often to forgo other alternative career options. This initial commitment before entering the profession results in the later determination of valuers to stay in the industry and expand their professional and business opportunities. The primary focus of such

entrepreneurs is to run the business successfully, survive in the market, and continue to grow.

The way the real estate valuation business is conducted and developed varies widely. The legal regulations formalise the valuer's role in various transactions in the real estate market and impose the valuation methodology depending on the types of real estate, types of estimated value, market data availability and the purpose of the valuation (Real Estate Act, 1997). In practice, Polish valuers categorise their services in terms of clients, valuation objects and valuation purposes (Małkowska & Uhruska, 2018). Different specialisation paths of Polish valuer services can be identified based on these categories. These include groups of valuers specialising in residential property valuations carried out for banks or private individuals, valuations for litigation purposes and valuations for the public sector (Małkowska & Uhruska, 2019). The specialisation of real estate valuation services narrows the scope of valuer activity according to their special skills or knowledge, giving them an advantage over other entities in handling specific valuations.

Another way to gain a competitive advantage is to expand real estate valuation services into other complementary business areas. The scope of diversification includes various services that the valuer may perform alongside valuation. The combination of services may vary depending on valuer education profile, previous experience, or business expectations; however, most often conducted in addition to valuation are real estate brokerage, business valuation, and surveying/construction services. According to previous research, only 24% of Polish entrepreneurs limit themselves only to property valuation, not offering other services on the real estate market. The remaining 76% provide extra services in addition to valuation (Małkowska & Uhruska, 2018). Diversification of services can be pursued much more narrowly, i.e., within the scope of valuation itself. Companies can expand the range of valuations performed and the spatial scope of activity. Real estate valuation companies are usually local ones, operating on the so-called local real estate market, which is mainly due to the accessibility of local market data, knowledge of the local market and relationships with local clients. However, some companies have provided services in supra-local and regional markets. As long as the valuers are able to provide high quality of services, their mobility and remote access to market data allow them to operate in parallel markets without having to open new company branches or recruit new employees.

The search for opportunities to improve the services provided is a natural response of valuers to changing market demands and increasing compe-

tition. Companies, in order to survive, have to develop constantly. This applies equally to entrepreneurs in the field of property valuation. This seemingly narrow professional area has great growth potential; however, it is important to find the directions and possibilities of company development. In order to meet this challenge, this paper addresses the growth of the real estate valuation business, which can be inspiring not only for property valuation practitioners but also researchers and authors of scientific publications. Complementing the scientific contribution in this area may facilitate the formulation of development strategies of companies based on expert knowledge by selecting the appropriate range of services, directions of specialisation and forms of business cooperation in order to provide reliable and comprehensive services so appropriate for the professional services sector.

Data and methods

Research data

The data used in the study was collected through a 2018 survey conducted among Polish real estate valuers affiliated with members of professional associations across the country. An invitation to participate in the survey was sent to 3437 valuers, who represented, as of December 2018, 47% of those certified as professional valuers. The final survey was completed by 411 real estate valuers. After removing missing data, 277 questionnaires were admitted for analysis, all completed by individuals with at least four years of professional experience by the date of the survey, who identified themselves as owners or co-owners of a real estate valuation business. Therefore, taking into account that the survey sample included only those experts who became licensed no later than the end of 2014, its proportion relative to the population of real estate valuers was 4.48% for that date.

A reliable assessment of the representativeness of the sample for Polish valuers encounters some limitations:

- the register of professional certificates is not updated retrospectively (e.g., there is no data on deceased persons);
- the number of certified valuers does not reflect the actual number of active valuers (some of them have never practised, others may have left the valuation business);
- although valuers who are members of professional associations are likely to be professionally active, there is no data available on membership

of associations (associations do not publish the number of members due to privacy reasons);

- valuers may belong to several associations at the same time.

Therefore, we extended our assessment of representativeness by analysing the sample structure. Based on published data on the gender composition of the population of certified professionals, we know that as of May 5, 2020, of the 7,591 valuers, 46.12% were female, and 53.88% were male (Dudek, 2020). In a survey sample of 277 valuers, female respondents constituted 49.1% and male respondents 50.9%. In order to compare a proportion across the population, our sample used a two-sample test of a proportion. The null hypothesis was that both groups have the same gender proportion — $H_0: p(\text{samp}) - p(\text{pop}) = 0$. Thus, the alternative hypothesis was that the proportions were not equal — $H_a: p(\text{samp}) - p(\text{pop}) \neq 0$. On the test result ($p=0.329$), there is no evidence to reject the null hypothesis, thus confirming the equality of the gender structure between groups and the representativeness of the research sample in this regard.

The range of information on valuation activity gathered through the survey was very broad. For the purposes of this analysis, however, the focus was on those data that enabled the identification of drivers of success for valuation businesses. Specifically, valuers were asked whether they considered their business had grown in the past three years, what the manifestations of that growth were, and whether the business's revenue had increased in the past three years. Among those surveyed, 42.6% felt their company had grown in the past three years, and 30.7% confirmed that their company's revenue had increased. The growth signs perceived by valuers primarily included an increase in the number of valuations completed, new clients, remuneration for valuation services, company brand recognition, number of employees, staff qualifications, as well as improved facilities and the establishment of new branches.

There was a relative balance of males and females in the surveyed group, which reflected the gender structure of valuers in Poland. Similarly, the four distinguished age groups of valuers were characterised by approximate representation. Concerning the legal form of valuation businesses, the Polish market is dominated by sole proprietorships, which were reflected in the response structure. Other organisational and legal forms such as partnership, general partnership or limited liability companies are in the minority. Real estate valuers mostly operate individually, and few partners with or contract with additional licensed specialists in real estate valuation. Hence, in the structure of the research sample, only 16% of the companies were those where, in addition to the owner-valuer, at least one additional valuer was employed.

Given the specific nature of this industry, the scope of services and potential specialisation or diversification could be considered on several levels: the geographical scope of valuation orders accepted, specialisation within the property valuation itself, and in particular in relation to the clients served and additional services exceeding property valuation. The real estate market is local and suffers from certain information imperfections, and the market processes and parameters indicating its condition are spatially differentiated depending on the market segment. Hence, it is easier for real estate valuers, essentially information experts, to operate in a spatially limited market. This may imply limiting services to local areas (nearest poviats) or region (one voivodship).

Nevertheless, some valuers adopt a strategy of operating on a wide scale, accepting orders without territorial limitations, on supra-regional or even nationwide scale. The survey sample was dominated by entities that limit the territorial scope of services. Locally and regionally operating were 61% of respondents. The remaining nearly 16% were entities operating supra-regionally (within at least two neighbouring voivodeships), and 23% were those who did not limit their scope of work at all. As for the specialisation of valuation services itself, although it is found among valuers, it is largely due to already established portfolios of long-term clients and additional competencies and skills, e.g., construction, surveying, forestry, or judicial expert position. Respondents provided data regarding frequently served clients, who were, by a number of indications: individuals, companies (excluding banks and developers), courts, public governments, banks and financial institutions, bailiffs, and in the last position, developers. Valuation is often accompanied by other services, more or less related to it. According to respondents' answers, 42.6% provided only real estate valuation services. Hence, it was apparent that there exists a large group of those providing ancillary services like real estate brokerage, company valuation, property management, engineering, surveying, and a wide range of others. The analysis included those that are most common. The last business feature surveyed was the capability to provide services in a foreign language. Only 36% of respondents expressed readiness in this regard. The percentage structure of responses is shown in Table 1.

Estimation strategy

The estimation strategy was subordinated to the main research objective, which is to identify the factors that significantly influence the development prospects of real estate valuation companies in Poland, particularly the sources of their revenue growth.

The primary hypothesis states that:

The greater scale of operations and diversification of services provided by real estate valuation companies positively affects the growth opportunities and profitability of the business.

Consistent with the research objective and primary hypothesis, several secondary hypotheses were formulated:

H₁: *Valuation businesses that provide services on a broader scale beyond the local territory are more likely to grow and increase their revenue.*

H₂: *Businesses whose owner-valuer undertakes cooperation with other valuers are more likely to grow and increase their revenue.*

H₃: *Providing additional services alongside real estate valuations increases business and revenue growth opportunities.*

H₄: *Valuation companies that frequently provide services to business clients are more likely to grow and increase their revenue.*

H₅: *Valuation companies that provide services to clients on a long-term basis are more likely to grow and increase their revenue.*

In order to identify the success factors of real estate valuation companies, we used a logistic regression model (also referred to as logit model and logit regression). This form of regression, invented in the 19th century to describe population growth and the course of autocatalytic chemical reactions (Cramer, 2004, p. 614), has long been a standard method of data analysis when the outcome variable is discrete. Logistic models are widely used in research where we deal with qualitative data in multidimensional decision-making problems, wherever the outcome is described by two states — success or failure (and all other possible outcomes in the yes/no dimensions). Hence their persistent popularity in medical research and all kinds of topics in behavioural and social studies. In SME research, logistic models have been used in recent years to analyse the financial and business failures (e.g., Abidin *et al.*, 2020; Zizi *et al.*, 2020; Mayr *et al.*, 2021), business owners' continuance intentions (e.g., Aghaei & Sokhanvar, 2020), firms strategy, performance and competitiveness (e.g. Legaspi, 2020; Lewandowska, 2021).

The logistic regression research approach to studying business success and growth has a long tradition and still remains relevant (Lussier & Pfeifer, 2001; Gelderen *et al.*, 2005; Johnsen & McMahon, 2005; Al-Kwafi *et al.*, 2020; Höllen *et al.*, 2020; Kassa, 2021). Primarily, this is due to the nature of the problem, which is usually conceptualised as a qualitative event. Logistic regression allows estimating the effect of multiple independent variables on the dependent variable expressed as a binary outcome (coded 1 for a desirable event and 0 for an undesirable event). Through the analysis process, one can identify factors that influence the predicted probability of the desired outcome and identify irrelevant ones (Strzelecka *et al.*, 2020).

In designing our study, we defined the problem of business success as a dichotomous concept. In the survey study, both the assessment of firm growth (Y_1) and firm revenue growth (Y_2) were made on the basis of respondents' declarations (see Table 2). This research approach was adopted for several reasons:

- business development is a multidimensional concept that is difficult to examine and compare quantitatively, so the survey question was based on a general qualitative assessment on a Likert scale;
- evaluation of business development is also burdened with a certain degree of subjectivity; therefore, the five-point research scale was reduced to a more unambiguous 0-1 scale;
- while potentially identifiable from actual financial data reported by respondents in the survey, income growth was reduced to a declarative rating on a three-point scale to reduce respondents' reluctance to provide financial data and minimise the risk of untruthful responses.

These yielded two dummy dependent variables that underlie the logistic regression model approach.

The general form of the logit model can be written as follows:

$$\text{logit}(Y) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \varepsilon \quad (1)$$

where:

$$\text{logit}(Y) = \log \left(\frac{P(Y = 1)}{P(Y = 0)} \right)$$

- | | |
|------------------------------------|---------------------------------|
| Y | qualitative predicted variable; |
| β_0 | the intercept; |
| $\beta_1, \beta_2, \dots, \beta_k$ | regression parameters; |
| X_1, X_2, \dots, X_k | predictor variables; |
| ε | the error term. |

Because the β parameters show the effect of the independent variables on the logit, which is awkward to interpret, we will show their exponents — odds ratios (OR) in the outcome tables,

$$OR_i = e^{\beta_i} \quad (2)$$

which present the effect of independent variables on the odds of an interesting outcome occurring.

For our study, we examined the impact of valuation company specifics (X_3, X_4) and the range of the services provided ($X_{5a-d} - X_{17}$) on the odds of business growth (Y_1) and income increase (Y_2). We also controlled for the valuers' individual characteristics — gender (X_1) and age (X_2) of respondents. Both dependent variables and all independent variables are dichotomous. A detailed description of the variables included in the models is provided in Table 2.

Results and discussion

The estimation results of the logit models for the first dependent variable defined as firm growth are presented in Table 3, and for the second dependent variable defined as income growth in Table 4. Both analyses were based on three models, with each subsequent one extended to include an additional set of variables. Initially, we began estimation with two variables characterising valuation companies — a form of ownership (X_3) and the number of valuers employed (X_4), also controlling for the gender of the owner-valuer (X_1) and his or her age (X_{2a-d}). We then extended the basic model to include the spatial coverage of valuations (X_{5a-d}) and the scope of business activity (X_6), which reflected the situation when the company solely provided valuation services. In a final step, we expanded the variables from the mid-model to include those related to potential business diversification ($X_7 - X_9$) and specialisation in serving specific client groups (X_{10-17}).

The multiple logistic regression model showed that the significant ($p < 0.05$) independent predictors of company growth odds in the last three years were as follows: male gender of the owner-valuer, belonging to one of the top two age groups (especially young or middle-aged valuers), collaboration or employment of one or more valuers (in addition to the owner-valuer), performing valuations on a supra-regional basis, frequent work for developers.

In particular, the male gender of the owner-expert raised the odds of business growth by 93% compared to if the owner was female. This is supported by previous research, according to which women entrepreneurs have been often found to be less growth-oriented than men (Coleman, 2007), while men more focus on growth factors (Eddleston & Powell, 2008; Hartman & Barber, 2020). Using financial criteria, women's businesses are often found to be less successful than men's (Fairlie & Robb, 2009; Kiefer *et al.*, 2022), as women perceive business success through the perspective of stability and independence (Carter *et al.*, 2003; Lee *et al.*, 2009; Dalborg *et al.*, 2012; Fellnhöfer, 2016; Ladge *et al.*, 2019).

On the other hand, it is worth noting that although the direction of the effect of gender on development chances in all models was consistent, these results were statistically significant only in model 3. A strong predictor of growth opportunity was the age of the valuer. In particular, the impact of belonging to the youngest age group of valuers (under 40) increased the odds of firm growth by more than ten times in each of the estimated models, which may confirm the greater motivation and determination of younger entrepreneurs mentioned in earlier studies (Reijonen, 2008; Kautonen, 2008; Azoulay *et al.*, 2020; Shaw & Sørensen, 2021). The young age of the entrepreneurs is consistent with the initial phase of the firm's development, oriented towards intensive growth (Lewis & Churchill, 1983). Whereas in the industry-specific case, it can be interpreted based on the moment of entry into the profession and building market position by new valuers. Those who started a business at a young age are generally focused on doing it as their primary job; hence they put effort into acquiring clients and building a brand. Those who chose to become valuers at a later age were more likely to view it as a companion activity to their existing work and may be less interested in growing too much. Conversely, those who had already established a market reputation and a satisfying group of clients (in their young and middle-aged) may be less inclined to scale up in later years.

Having more than one valuer working for the company (including the owner) also increased the chances of growth, more than two to three times depending on the model. The spatial extent of valuations was also an important predictor of growth prospects. On average, there was a four times increase in growth odds for those businesses that valued real estate in a supra-regional area compared to those that operated strictly locally. This interesting observation showed that it was worth balancing the area of activity by choosing the widest possible coverage, but within the limits, which allows the valuer to guarantee the quality of valuation that results from knowledge of the market in which he or she or she operates.

Regarding the scope of activity and companies' specialisation, the increase of development opportunities concerned those companies which often served banks. The results of model 3 indicated, in fact, that frequent services to banks increased business growth odds by more than two times. This confirmed, at least in part, the hypothesis that cooperation with business clients and long-term contracts increased business growth opportunities. In the case of providing services to banks, this fact was justified by the volume of orders and stability of cooperation, although not necessarily by high profitability. Despite the lack of research on the scope of valuation services and its impact on firm growth, Małkowska and Uhruska (2019) noted pathways of specialisation in valuation services, where valuers serving the residential and commercial markets indicated that they conduct a valuation for loan security purposes ordered by banks. Such choice of service specialisation may be dictated by a deliberate strategy of entrepreneurs to increase revenue and retain long-term clients.

The multiple logistic regression model showed that the significant ($p < 0.05$) independent predictors of the company's income growth odds in the last three years were as follows: male gender of the owner-valuer, belonging to one of the first two age groups (young and middle-aged valuers), providing real estate brokerage services, frequent work for developers and for public authorities.

The valuer's gender and age (young and middle-aged) increased the odds of income growth, similar to the previous models on firm growth odds. One might even note that these results were more clear and consistent. In addition, a significant predictor of the chances of revenue growth was the provision of real estate brokerage services in addition to valuation, which raised the odds of revenue growth by nearly four times relative to firms that did not provide those services.

When it comes to firm specialisation, the odds of revenue growth were over three times higher if a company frequently served developers and two times higher if it frequently provided services to the government, relative to those firms that rarely served the aforementioned parties. These results were justified by the fact that real estate developers were one of the economically stronger clients of valuers and often entered into long-term cooperation, becoming a very valuable client on which, the valuer could sometimes build his or her business. Public authorities, on the other hand, although offering less financially advantageous contracts, often covered a large number of valuations carried out over a long period of time. Municipalities, for example, due to the legal requirements, are obliged to value the property they hold and manage as a basic condition of most economic activities.

Summarising the above research findings and referring to the hypotheses stated, some of the key contributions are worth pointing out.

First, the study findings indicate that men-owned businesses were more likely to develop and increase their revenue than those owned by women. A strong predictor of development was also the age, up to 41 years, although people in the middle age group of up to 50 years belonged to the group of business owners with higher growth odds than the older ones.

Second, the mere fact that a valuer diversifies his or her business or limits himself or herself to valuation services did not affect growth opportunities. Thus, hypothesis H3 was not confirmed. Rather, such opportunities lay in the spatial extent of the market served, the certain types of services accompanying real estate valuation (like brokerage), and the clients served. Greater growth potential was associated with going beyond the local valuation market, accepting valuation orders across at least two neighbouring voivodships. This finding partially supports hypothesis H1 regarding business growth but not income growth.

Third, the owner-valuer's cooperation with at least one additional valuer (through employment or some other form of partnership) was more likely to increase the odds of company growth (partially supporting hypothesis H2) but not revenue growth. Also important for growth opportunities and income increase was cooperation with clients from the business sector (with banks in case of company growth and with developers in case of income increase) and providing services on the basis of long-term cooperation. Long-term cooperation most often included such types of clients as banks, developers, public authorities (which was confirmed in the research), and courts and bailiffs. Thus, hypotheses H4 and H5 were confirmed.

Finally, our preliminary analyses did not show that valuer characteristics such as education profile or length of work practice translated into business or revenue growth opportunities. Therefore, these variables were omitted from further estimations and result presentations.

Conclusions

Our study is located in the stream of research on entrepreneurship and success factors of SMEs' service businesses. Although it focuses on the segment of valuation services provided by certified real estate valuers, the findings can easily be extended to other expert professionals operating on the service market as well. The detailed scope of analysis concerns the suc-

cess factors of firms defined in terms of business growth, measured mainly in quantitative terms, and in particular by revenue growth.

The survey results indicate several major factors that increase the opportunities of success for real estate valuation firms — these include demographic factors such as the gender and age of the business owner, the spatial and substantive range of services offered, the staffing capacity, and the customer types served.

The results allowed for the formulation of the following conclusions and recommendations for practitioners:

- Not to limit the business activity only to property valuation. Where possible, expand the scope of activity with additional complementary services. Seek such professional areas which allow combining with valuation, will be compatible with existing knowledge and skills and will not require special re-branding.
- Cooperate with other valuers and real estate professionals and share business offers, complement each other's knowledge and experience. Whatever form the cooperation takes, it increases the economies of scale of services provided.
- Take care of the diversified and balanced structure of the company's clients, arranging the cooperation with business clients and long-term clients, mainly institutional, to ensure a relatively constant amount of valuations and regular income over a long period of time.

The above recommendations are not only addressed to the valuation industry, but can be successfully treated as universal guidelines for businesses offering advisory services whose greatest asset is people and their expert knowledge. The information and technology revolution is changing the economic environment putting pressure on several industries. Expert services operating in the information and consulting field are also affected even in traditional sectors like real estate. As such, these forces create both threats and opportunities. On the one hand, they reduce the information gap in the economy and enable automation of information processing and delivery, which leads to reduced demand for services and experts' knowledge.

On the other hand, they reduce physical barriers to doing business, making it easier for service providers to expand on the market. The consequence of this is increasing competition among firms and marginalisation of entities with a narrow scale of operation. The remedy can be seen in expanding into complementary services and additional markets, cooperation with other experts and building long-term relationships with business and institutional clients.

In formulating the above conclusions and recommendations, we were aware of the limitations of our study. The first was the time constraint of

the study, which did not capture the dynamics of change over time. The second was the omission of business risks to which valuers are exposed. The study omitted external risks, including legal, political, economic and global conditions beyond the entrepreneur's control and individual risks arising from the way the business is conducted and the business practice of valuers. The predominant form of business for valuers is a sole proprietorship which requires no particular formalities, financial outlays or other commitments from the entrepreneur. However, a growing business may carry several legal or financial risks, mainly resulting from contracts, legal actions, cooperation with other parties or capital expenditure on the material growth of the company. As a company grows, the risk of doing business increases, so it is important to address the issue of business risk, its types and determinants in further research. The third was limiting the research to business development in terms of growth and revenue without examining other soft success factors like job satisfaction or business continuity. One cannot also fail to mention the formal limitations of the analytical methods used, in particular the assumption of a linear relationship between dependent and independent variables.

These gaps open up new research fields and indicate the potential benefits of triangulating research and analytical methods. This is particularly relevant given the challenges of the impact of new technologies and the Covid-19 pandemic on the real estate market and its players. Also, an interesting line of study is the impact of gender on doing business in valuation and the analysis of soft success factors in this professional activity.

References

- Abidin, J. Z., Abdullah, N. A. H., & Khaw, K. L. H. (2020). Predicting SMEs failure: Logistic regression vs artificial neural network models. *Capital Markets Review*, 28(2), 29–41.
- Adair, A., Downie, M. L., & McGreal, S. (1996). *European valuation practice. Theory and techniques*. London: Taylor & Francis. doi: 10.4324/9780203475522.
- Adomako, S., & Mole, K. (2017). Small business growth and performance: a review of literature. In R. Blackburn, D. De Clercq & J. Heinonen (Eds.). *The SAGE handbook of small business and entrepreneurship*. London: SAGE, 134–145.
- Aghaei, I., & Sokhanvar, A. (2020). Factors influencing SME owners' continuance intention in Bangladesh: a logistic regression model. *Eurasian Business Review*, 10(3), 391–415. doi: 10.1007/s40821-019-00137-6.
- Ahl, H. (2004). *The scientific reproduction of gender inequality: a discourse analysis of research texts on women's entrepreneurship*. Copenhagen: CBS Press.

- Al-Kwafi, O. S., Tien Khoa, T., Ongsakul, V., & Ahmed, Z. U. (2020). Determinants of female entrepreneurship success across Saudi Arabia. *Journal of Transnational Management*, 25(1), 3–29. doi: 10.1080/15475778.2019.1682769.
- Amidu, A. R., Aluko, B. T., & Hansz, J. A. (2008). Client feedback pressure and the role of estate surveyors and valuers. *Journal of Property Research*, 25, 89–106. doi: 10.1080/09599910802590982.
- Azoulay, P., Jones, B. F., Kim, J. D., & Miranda, J. (2020). Age and high-growth entrepreneurship. *American Economic Review*, 2(1), 65–82. doi: 10.1257/aeri.20180582.
- Bartke, S., & Schwarze, R. (2021). The economic role and emergence of professional valuers in real estate markets. *Land*, 10(7), 683. doi: 10.3390/land10070683.
- Cabrer-Borrás B., Belda P. R., & Carrubi D. B., (2019). Contingency factors and entrepreneurship: influence in business activity. *International Journal of Entrepreneurial Behavior & Research*, 25(8), 1685–1702. doi: 10.1108/IJEBR-07-2018-0477.
- Capelleras, J. L., Contin-Pilart, I., Larraza-Kintana, M., & Martin-Sanchez V. (2019). Entrepreneurs' human capital and growth aspirations: the moderating role of regional entrepreneurial culture. *Small Business Economics*, 52, 3–25 doi: 10.1007/s11187-017-9985-0.
- Carter, N. M., Gartner, W. B., Shaver, K. G., & Gatewood, E. J. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18(1), 13–39. doi: 10.1016/S0883-9026(02)00078-2.
- Carton, R. B., & Hofer, C. W. (2006). *Measuring organizational performance – metrics for entrepreneurship and strategic management research*. Cheltenham: Edward Elgar Publishing.
- Central Registry of Valuers maintained by the Ministry of Economic Development, Labour and Technology. Retrieved from: <https://www.gov.pl/web/rozwoj-praca-technologie/centralny-rejestr-rzeczoznawcow-majatkowych> (15.01.2022).
- Coad, A., & Guenther, Ch. (2014). Processes of firm growth and diversification: theory and evidence. *Small Business Economics*, 43, 857–871. doi: 10.1007/s1187-014-9566-4.
- Coleman, S. (2007). The role of human and financial capital in the profitability and growth of women-owned small firms. *Journal of Small Business Management*, 45(3), 303–319. doi: 10.1111/j.1540-627X.2007.00214.x.
- Cramer, J. S. (2004). The early origins of the logit model. *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*, 35(4), 613–626. doi: 10.1016/j.shpsc.2004.09.003.
- Dalborg, C., Friedrichs I. V., & Wincent, J., (2012), Beyond the numbers: qualitative growth in women's businesses, *International Journal of Gender and Entrepreneurship*, 4(3), 289–315. doi: 10.1108/17566261211264163.
- Davidsson, P., & Wiklund, J. (2000). Conceptual and empirical challenges in the study of firm growth. In D. Sexton & H. Lnaström (Eds.). *Handbook of entrepreneurship*. Oxford: Blackwell Publishers. doi: 10.1002/9781405164214.ch2.

- Davidsson, P., Steffens, P., & Fitzsimmons, J. (2009). Growing profitable or growing from profits: putting the horse in front of the cart? *Journal of Business Venturing*, 24(4), 388–406. doi: 10.1016/j.jbusvent.2008.04.003.
- Davidsson, P., Achtenhagen, L., & Naldi, L. (2010). Small firm growth. *Foundations and Trends in Entrepreneurship*, 6(2), 69–166. doi: 10.1561/0300000029.
- Dudek, M. (2020). Property valuers in Poland – spatial report. Retrived from <https://iccs.pl/blog/2020/06/24/rzeczoznawcy-majatkowi-w-polsce-raport-przez-trzenny-2020-r/> (12.02.2021).
- Eddleston, K. A., & Powell, G. N. (2008). The role of gender identity in explaining sex differences in business owners' career satisfier preferences. *Journal of Business Venturing*, 23(2), 244–256. doi: 10.1016/j.jbusvent.2006.11.002.
- Eide, A. E., Moen, Ø., Madsen, T. K., & Azari, M. J. (2021). Growth aspirations in SMEs: managerial determinants and organizational outcomes. *Journal of Small Business and Enterprise Development*, 28(4), 640–665. doi: 10.1108/JSBED-09-2020-0332.
- El Shoubaki, A., Laguir, I., & den Besten, M. (2020). Human capital and SME growth: the mediating role of reasons to start a business. *Small Business Economics*, 54, 1107–1121. doi: 10.1007/s11187-018-0129-y.
- Fairlie, R. W., & Robb, A. M. (2009). Gender differences in business performance: evidence from the characteristics of business owners survey. *Small Business Economics*, 33(4), 375–395. doi: 10.1007/s11187-009-9207-5.
- Fellnhöfer, K., Puumalainen, K., & Sjögren, H. (2016). Entrepreneurial orientation and performance - are sexes equal? *International Journal of Entrepreneurial Behavior & Research*, 22(3), 346–374. doi: 10.1108/IJEBR-12-2015-0286.
- Garengo, P., & Bernardi, G. (2007). Organizational capability in SMEs performance measurement as a key system in supporting company development. *International Journal of Productivity and Performance Management*, 56(5/6), 518–532. doi: 10.1108/17410400710757178.
- Gelderen, M. V., Thurik, R., & Bosma, N. (2005). Success and risk factors in the pre-startup phase. *Small Business Economics*, 24(4), 365–380. doi: 10.1007/s11187-004-6994-6.
- Gilbert, B. A., McDougall, P. P., & Audretsch D. B., (2006), New venture growth: a review and extension. *Journal of Management*, 32(6), 926–950. doi: 10.1177/0149206306293860.
- Gimmon, E., Farja, Y., & Greenberg, Z. (2021). Vocational education of owners and SME employment growth: evidence from Israel. *International Journal of Training Research*, 19(1), 21–46. doi: 10.1080/14480220.2020.1864440.
- Gupta, P. D., Guha, S., & Krishnaswami, S. S. (2013). Firm growth and its determinants. *Journal of Innovation and Entrepreneurship*, 2, 15. doi: 10.1186/2192-5372-2-15.
- Guzman, J., & Stern S. (2020). The state of American entrepreneurship: new estimates of the quantity and quality of entrepreneurship for 32 US states, 1988–2014. *American Economic Journal: Economic Policy*, 12(4), 212–43. doi: 10.1257/pol.20170498.

- Haber, S., & Reichel, A. (2007). The cumulative nature of the entrepreneurial process: the contribution of human capital, planning and environment resources to small venture performance. *Journal of Business Venturing*, 22(1), 119–145. doi: 10.1016/j.jbusvent.2005.09.005.
- Hartman, R. L., & Barber, E. G. (2020). Women in the workforce: the effect of gender on occupational self-efficacy, work engagement and career aspirations. *Gender in Management*, 35(1), 92–118. doi: 10.1108/GM-04-2019-0062.
- Harel, R., Schwartz, D., & Kaufmann, D. (2021). The relationship between innovation promotion processes and small business success: the role of managers' dominance. *Review of Managerial Science*, 15, 1937–1960. doi: 10.1007/s11846-020-00409-w.
- Headd, B. (2003). Redefining business success: distinguishing between closure and failure. *Small Business Economics*, 21, 51–61. doi: 10.1023/A:1024433630958.
- Höllen, M., Lengfeld, C., & Konrad, E. D. (2020). Business success for creative and cultural entrepreneurs: influences of individual-and firm-related factors on revenue and satisfaction. *International Journal of Arts Management*, 22(2), 52–65.
- Hossain, M. M. (2020). Financial resources, financial literacy and small firm growth: does private organizations support matter? *Journal of Small Business Strategy*, 30(2), 35–58.
- Johnsen, G. J., & McMahon, R. G. (2005). Owner-manager gender, financial performance and business growth amongst SMEs from Australia's business longitudinal survey. *International Small Business Journal*, 23(2), 115–142. doi: 10.1177/0266242605050509.
- Kassa, E. T. (2021). Socioeconomic determinants of micro and small enterprise growth in North Wollo and Waghimira Zone selected towns. *Journal of Innovation and Entrepreneurship*, 10(1), 1–14. doi: 10.1186/s13731-021-00165-5.
- Kautonen, T. (2008). Understanding the older entrepreneur: comparing third age and prime age entrepreneurs in Finland. *International Journal of Business Science & Applied Management*, 3(3), 3–13.
- Kiefer, K., Heileman, M., & Pett, T. L. (2022). Does gender still matter? An examination of small business performance. *Small Business Economics*, 58, 141–167. doi: 10.1007/s11187-020-00403-2.
- Kirkwood J. J. (2009). To grow or not? Growing small service firms. *Journal of Small Business and Enterprise Development*, 16(3), 485–503. doi: 10.1108/14626000910977189.
- Kirkwood, J. J. (2016). How women and men business owners perceive success. *International Journal of Entrepreneurial Behavior & Research*, 22(5), 594–615. doi: 10.1108/IJEBR-01-2016-0024.
- Ladge, J., Eddleston, K. A., & Sugiyama, K. (2019). Am I an entrepreneur? How imposter fears hinder women entrepreneurs' business growth. *Business Horizons*, 62(5), 615–624. doi: 10.1016/j.bushor.2019.05.001.

- Lee, C., Lee, K., & Pennings, J. M. (2001). Internal capabilities, external networks, and performance: a study on technology-based ventures. *Strategic Management Journal*, 22, 615–640. doi: 10.1002/smj.181.
- Lee, S. S., Stearns, T. M., Osteryoung, J. S., & Stephenson, H. B. (2009). A comparison of the critical success factors in women-owned business between the United States and Korea. *International Entrepreneurship and Management Journal*, 5, 259–270. doi: 10.1007/s11365-009-0110-y.
- Legaspi, J. L. R. (2020). What business strategy does and what management accounting is pursuing: a logistic regression analysis. *International Journal of Economics & Business Administration*, 8(1), 124–133.
- Lewandowska, A. (2021). Interactions between investments in innovation and SME competitiveness in the peripheral regions. *Journal of International Studies*, 14(1), 285–307. doi: 10.14254/2071-8330.2021/14-1/20.
- Lewis, V. L., & Churchill, N. C. (1983). The five stages of small business growth. *Harvard Business Review*, May-June.
- Lubacha-Sember, J., & Godlewska, M. (2018). The role of local formal and informal institutions in microfirms' development: evidence from Poland. *Economics and Sociology*, 3, 43–58. doi: 10.14254/2071-789X.2018/11-3/3.
- Lussier, R. (2005). A success versus failure prediction model for the real estate industry. *American Journal of Business*, 20, 46–53. doi: 10.1108/19355181200500005.
- Lussier, R. N., & Pfeifer, S. (2001). A crossnational prediction model for business success. *Journal of Small Business Management*, 39(3), 228–239. doi: 10.1108/MF-01-2017-0018.
- Małkowska, A., Tomal, M., Uhruska, M., Pawlak, J., Maier, G., & Nichiforeanu, A. (2021). The impact of job satisfaction on valuers' attitudes towards professional ethics. *International Journal of Strategic Property Management*, 25(6), 497–513. doi: 10.3846/ijsp.2021.15768.
- Małkowska, A., & Uhruska, M. (2018). Doing business in property valuation - Survey results. *Świat Nieruchomości*, 106, 27–36.
- Małkowska, A., & Uhruska, M. (2019). Towards specialization or extension? Searching for valuation services models using cluster analysis. *Real Estate Management and Valuation*, 27(4), 27–38. doi: 10.2478/remav-2019-0033.
- Małkowska, A., Uhruska, M., & Tomal, M. (2019). Age and experience versus susceptibility to client pressure among property valuation professionals – implications for rethinking institutional framework. *Sustainability*, 11, 6759. doi: 10.3390/su11236759.
- Mayr, S., Mitter, C., Kücher, A., & Duller, C. (2021). Entrepreneur characteristics and differences in reasons for business failure: evidence from bankrupt Austrian SMEs. *Journal of Small Business & Entrepreneurship*, 33(5), 539–558. doi: 10.1080/08276331.2020.1786647.
- McKelvie, A., Brattström, A., & Dennis Jr, W. J. (2021). What do they think and feel about growth? Examining small business managers' attitudes towards growth in the United States. *Journal of Business Venturing Insights*, 15, doi: 10.1016/j.jbvi.2021.e00243.

- McKelvie, A., & Wiklund, J. (2010). Advancing firm growth research: a focus on growth mode instead of growth rate. *Entrepreneurship Theory & Practice*, 34(2), 261–288. doi: 10.1111/j.1540-6520.2010.00375.x.
- McParland, C., Adair, A., & McGreal, S. (2002). Valuation standards: a comparison of four European countries. *Journal of Property Investment and Finance*, 20(2), 127–141. doi: 10.1108/14635780210420025.
- Moreno-Menéndez, A. M., & Casillas, J. C. (2021). How do family businesses grow? Differences in growth patterns between family and non-family firms. *Journal of Family Business Strategy*, 12(3). doi: 10.1016/j.jfbs.2021.100420.
- Murphy, G., Tocher, N., & Burch, T. (2019). Small business owner persistence: do personal characteristics matter? *Journal of Small Business Strategy*, 29(1), 99–114.
- Neneh, B. (2021). Role salience and the growth intention of women entrepreneurs: Does work-life balance make a difference? *Spanish Journal of Psychology*, 24, doi: 10.1017/SJP.2021.9.
- Onufrey, K., & Bergek, A. (2021). Transformation in a mature industry: the role of business and innovation strategies. *Technovation*, 105. doi: 10.1016/j.technovation.2020.102190.
- Piispanen, V., Paloniemi, K., & Simonen, J. (2018). Qualities of the growth-oriented entrepreneur. *International Journal of Entrepreneurship and Small Business*, 34, 112–130. doi: 10.1504/IJESB.2018.091454.
- Real Estate Act 1997 [Ustawa z dnia 21 sierpnia 1997r. o gospodarce nieruchomościami], Dz.U.1997 nr 115, poz. 741.
- Reijonen H. (2008). Understanding the small business owner: what they really aim at and how this relates to firm performance. A case study in North Karelia, Eastern Finland. *Management Research News*, 31(8), 616–629. doi: 10.1108/01409170810892172.
- Schumpeter, J. A. (1934). *The theory of economic development*. London: Oxford University Press.
- Shaw, K., & Sørensen, A. (2021). Coming of age: watching young entrepreneurs become successful. *Labour Economics*. Advance online publication. doi: 10.1016/j.labeco.2021.102033.
- Shepherd, D. A., Wennberg, K., Suddaby, R., & Wiklund, J. (2019). What are we explaining? A review and agenda on initiating, engaging, performing, and contextualizing entrepreneurship. *Journal of Management*, 45(1), 159–196. doi: 10.1177/0149206318799443.
- Storey, D. J. (1994). *Understanding the small business sector*. London: Routledge.
- Strzelecka, A., Kurdyś-Kujawska, A., & Zawadzka, D. (2020). Application of logistic regression models to assess household financial decisions regarding debt. *Procedia computer science*, 176, 3418–3427. doi: 10.1016/j.procs.2020.09.055.
- Surya, B., Menne, F., Sabhan, H., Suriani, S., Abubakar, H., & Idris M. (2021). Economic growth, increasing productivity of SMEs, and open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1). 20. doi: 10.3390/joitmc7010020.

- Taouab, O., & Issor, Z. (2019). Firm performance: definition and measurement Models. *European Scientific Journal*, 15(1), 93–106. doi: 10.19044/ESJ.2019.V15N1P93.
- Thomas, G. H., & Douglas, E. J. (2021). Small firm survival and growth strategies in a disrupted declining industry. *Journal of Small Business Strategy*, 31(5), 22–37. doi: 10.53703/001c.29814.
- Urbano, D., Aparicio, S., & Audretsch, D. (2019). Twenty-five years of research on institutions, entrepreneurship, and economic growth: what has been learned? *Small Business Economics*, 53, 21–49. doi: 10.1007/s11187-018-0038-0.
- Wach, K. (2020). A typology of small business growth modelling: a critical literature review. *Entrepreneurial Business and Economics Review*, 8(1), 159–184. doi: 10.15678/EBER.2020.080109.
- Wolverton, M., & Gallimore, P. (1999). Client feedback and the role of the appraiser. *Journal of Real Estate Research*, 18, 415–431. doi: 10.1080/10835547.1999.12091001.
- Worzala, E. M., Lenk, M. M., & Kinnard, W. N. (1998). How client pressure affects the appraisal of residential property. *Apprais. Journal*, 66, 416–427.
- Yoganandan, G., & Dinesh Kumar, M. (2021). Qualities of successful entrepreneurs – a review of relevant literature. *Materials Today: Proceedings*. Advance online publication. doi: 10.1016/j.matpr.2021.03.022.
- Zizi, Y., Oudgou, M., & El Moudden, A. (2020). Determinants and predictors of smes' financial failure: a logistic regression approach. *Risks*, 8(4), 107. doi: 10.3390/risks8040107.

Acknowledgments

This project has been financed by the Ministry of Science and Higher Education within the “Regional Initiative of Excellence”; Programme for 2019-2022. Project no.: 021/RID/2018/19.Total financing: 11 897 131,40 PLN.

Annex

Table 1. Descriptive statistics for the survey sample

Variables		Frequency (%)
Gender		
Male		50.90
Female		49.10
Age		
Below 41		26.35
41-50		24.55
51-60		24.91
Above 60		24.19
Ownership		
Sole proprietorship		89.89
Partnerships		10.11
Employment		
One		83.75
More than one		16.25
Valuation spatial coverage		
Local		35.74
Regional		25.27
Supra-regional		15.52
Country		23.47
Business scope		
Only real estate valuations		42.60
Additional services		57.40
Additional service types		
Real estate brokerage		15.88
Companies valuation		27.44
Surveying/construction		14.80
Frequently clients served		
Individuals		46.93
Companies		40.43
Banks and financial institutions		25.63
Developers		14.44
Courts		35.38
Bailiffs		22.38
Public governments		34.30
Services in the foreign language		
Foreign language service availability		36.10

Table 2. Variables description

Variables	Description
Y ₁ Business growth	Respondent's answers to the question: in your opinion, has your business grown in the last 3 years? Possible answers: strongly yes, rather yes, hard to say, strongly no, rather no. The dummy variable takes the value 1 for strongly yes, rather yes, 0 otherwise.
Y ₂ Income increase	Respondent's answers to the question: in the last 3 years of your business, has your revenue from services offered increased, stayed the same,

Table 2. Continued

Variables		Description
		decreased? The dummy variable takes the value 1 for income growth, 0 otherwise.
X ₁	Gender	Gender of the respondent. The dummy variable takes the value 1 for male, 0 for female.
X _{2a}	Age _(below41)	Set of dummy variables for respondents' age. The dummy variable takes the value 1 if respondent is under age 41, 0 otherwise.
X _{2b}	Age ₍₄₁₋₅₀₎	
X _{2c}	Age ₍₅₁₋₆₀₎	The dummy variable takes the value 1 if respondent is between 41 and 50 years old, 0 otherwise.
X _{2d}	Age _(above60)	The dummy variable takes the value 1 if respondent is between 51 and 60 years old, 0 otherwise. The dummy variable takes the value 1 if respondent is above age 60, 0 otherwise.
X ₃	Ownership	Legal form of the respondent's company. The dummy variable takes the value 1 for sole proprietorship, 0 for partnership.
X ₄	Employment	Number of valuers employed by the company, including owner. Possible answers: only one valuer, more than one valuer. The dummy variable takes the value 1 for more than one valuers employed, 0 for one valuers.
X _{5a}	Local	Set of binary variables for the spatial coverage of valuations. The dummy variable takes the value 1 if the valuer operates locally (within the nearest poviats), 0 otherwise.
X _{5b}	Regional	The dummy variable takes the value 1 if the valuer operates regionally (within one voivodship), 0 otherwise.
X _{5c}	Supra-regional	The dummy variable takes the value 1 if the valuer operates across regions (within several voivodships), 0 otherwise.
X _{5d}	Country	The dummy variable takes the value of 1 if the valuer operates nationwide, 0 otherwise.
X ₆	Business scope	The dummy variable takes the value of 1 if the valuer's company provides only real estate valuations, 0 otherwise.
X ₇	Brokerage	The dummy variable takes the value 1 if the valuer's company also provides real estate brokerage services, 0 otherwise.
X ₈	Company valuation	The dummy variable takes the value 1 if the valuer's company also provides enterprise valuations, 0 otherwise.
X ₉	Surveying/construction	The dummy variable takes the value 1 if the valuer's company also provides surveying and construction services, 0 otherwise.
X ₁₀	Individuals	The dummy variable takes the value 1 if the valuer's company frequently serves individuals, 0 otherwise.
X ₁₁	Companies	The dummy variable takes the value 1 if the valuer's company frequently serves enterprises (excluding banks and developers), 0 otherwise.
X ₁₂	Banks	The dummy variable takes the value 1 if the valuer's company frequently serves banks and other financial entities, 0 otherwise.
X ₁₃	Developers	The dummy variable takes the value 1 if the valuer's company frequently serves developers, 0 otherwise.
X ₁₄	Courts	The dummy variable takes the value 1 if the valuer's company frequently serves courts, 0 otherwise.
X ₁₅	Bailiffs	The dummy variable takes the value 1 if the valuer's company frequently serves bailiffs, 0 otherwise.
X ₁₆	Public governments	The dummy variable takes the value 1 if the valuer's company frequently serves public governments (at all levels), 0 otherwise.
X ₁₇	Foreign language	The dummy variable takes the value 1 if the valuer's company provides services in a foreign language

Table 3. Logit models estimation for business growth as dependent variable

Business growth	Logit1			Logit2			Logit3		
	OR	z	P> z	OR	z	P> z	OR	z	P> z
Gender (male)	1.62	1.73		1.69	1.82		1.93	2.15	*
Age _(below41)	11.9	5.83	***	12.8	5.88	***	10.3	4.99	***
Age ₍₄₁₋₅₀₎	2.40	2.16	*	7	2.30	*	4	1.79	
Age ₍₅₁₋₆₀₎	1.89	1.59		2.58	1.95		2.21	1.88	
Age _(above60)	Ref.	-		2.26	-		2.36	-	
Ownership	1.21	0.37		Ref.			Ref.		
Employment	3.33	2.91	**	1.17	0.30		1.78	0.96	
Local				3.48	2.89	**	2.84	2.16	*
Regional				Ref.	-		Ref.	-	
Supra-regional				1.12	0.31		1.17	0.38	
Country				3.98	3.08	**	4.14	2.91	**
Business scope				1.70	1.31		1.63	1.07	
Brokerage				1.59	1.46		2.39	1.84	
Company valuation							2.31	1.85	
Surveying/construction							1.32	0.64	
Individuals							0.65	-0.81	
Companies							1.35	0.92	
Banks							0.81	-0.56	
Developers							2.33	2.40	*
Courts							1.44	0.77	
Bailiffs							1.36	0.85	
Public governments							1.42	0.87	
Foreign language							1.63	1.52	
Constant	0.14	-3.27	***	0.07	-3.84	***	0.02	-4.45	***
N		277			277			277	
Pseudo R2		0.1551			0.1865			0.2368	

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4. Logit models estimation for income growth as dependent variable

Income growth	Logit3			Logit4			Logit5		
	OR	z	P> z	OR	Z	P> z	OR	z	P> z
Gender (male)	1.91	2.25	*	1.78	1.97	*	2.31	2.58	**
Age _(below41)	7.46	4.70	***	7.93	4.75	***	8.47	4.43	***
Age ₍₄₁₋₅₀₎	3.17	2.57	**	3.16	2.57	**	2.63	2.00	*
Age ₍₅₁₋₆₀₎	1.71	1.18		1.74	1.20		1.63	0.97	
Age _(above60)	Ref.	-		Ref.	-		Ref.	-	
Ownership	0.67	-		0.75	-		0.91	-0.16	
Employment		0.81			0.56				
	1.13	0.31		1.10	0.23		0.68	-0.83	

Table 4. Continued

Income growth	Logit3			Logit4			Logit5		
	OR	z	P> z	OR	Z	P> z	OR	z	P> z
Local				Ref.	-		Ref.	-	
Regional				1.01	0.02		0.86	-0.35	
Supra-regional				1.83	1.41		1.43	0.74	
Country				1.27	0.58		0.87	-0.28	
Business scope				0.82	-0.60		1.80	1.24	
Brokerage							3.95	3.04	**
Company valuation							1.79	1.34	
Surveying/construction							0.70	-0.63	
Individuals							1.52	1.24	
Companies							1.06	0.16	
Banks							1.13	0.33	
Developers							3.37	2.52	*
Courts							1.84	1.62	
Bailiffs							0.92	-0.21	
Public governments							2.04	2.11	*
Foreign language							181	1.68	
Constant	0.16	-3.08	**	0.13	-3.04	**	0.02	-4.27	***
N		277			277			275	
Pseudo R2		0.1019			0.1112			0.1993	

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$