

Article

Multidimensional Model of High-Growth Companies: Do COVID-19 and the Ukraine–Russia Crisis Lead to Differences?

Blaž Frešer

Faculty of Economics and Business, University of Maribor, 2000 Maribor, Slovenia; blaz.freser1@um.si

Abstract: Economies and the companies operating within them are currently facing numerous challenges and threats that are caused by the COVID-19 outbreak and recovery and are prolonged by the Ukraine–Russia crisis. Both have drastically changed the way companies operate. High-growth companies (HGCs) can be an important group because of their characteristics and can provide guidelines for efficiently addressing these challenges and creating new opportunities. Our research contributes to this field, as the objective of the article is to find out whether the global challenges (i.e., the COVID-19 and Ukraine–Russia crisis) lead to a difference in the strength of the influence between the analyzed determinants—the growth factors of HGCs. For this purpose, a structural model equation (SEM) was applied and a multigroup analysis between the two data sets (before and during the global challenges) was performed on the pooled sample of $n = 242$ HGCs from the Republic of Slovenia. The results showed some statistically significant differences that can be explained by the time perspective and possibly by the influence of global challenges. Thus, this paper makes an important contribution to science, as a reassessment of the theories and implicit assumptions in current research is needed due to global challenges. It is also useful for policy makers who want to consider the impact of recent global challenges in their policy recommendations and for HGCs seeking sustainable high growth.

Keywords: high-growth company; global challenges; COVID-19



Citation: Frešer, B. Multidimensional Model of High-Growth Companies: Do COVID-19 and the Ukraine–Russia Crisis Lead to Differences? *Sustainability* **2022**, *14*, 15278. <https://doi.org/10.3390/su142215278>

Academic Editors: Francesco Caputo and Zlatko Nedelko

Received: 5 September 2022

Accepted: 12 November 2022

Published: 17 November 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

HGC research is a heterogeneous and diverse research area to which researchers and government policy makers pay special attention, which some authors, e.g., Fasil et al. [1], believe should be emphasized even more under difficult conditions. HGCs can provide means to restore economic normalcy and prosperous future development. It is also important to keep in mind that, based on the Penrose [2] theory of the growth of the firm, a company's growth is not inherent [3]. Companies seeking growth and new jobs and/or economic development must manage a number of factors that affect their performance, and they must create opportunities for adequate motivation, growth (with an entrepreneurial orientation) and the successful organization of production resources, including human capital, financial resources, and social capital [4]. High growth may have a negative impact on the financial performance of HGCs [2]. Therefore, HGCs need to organize their strategic decisions regarding the determinants of growth and operate within the structural characteristics of the external environment [5] in a manner that enables their sustainability—that is, in a manner in which HGCs achieve sustainable high growth in which their financial performance and survival are not threatened.

On this basis, the research model of Frešer et al. [6] was defined. The model links the growth determinants of HGCs, i.e., entrepreneurial orientation, human capital, organizational network capability (as an important part of structural social capital) [7] with actions that HGCs implement to overcome financial constraints or to obtain adequate financial resources to support their growth, and consequently the availability of financial resources.

The research model analyzes financial performance because Penrose [2] already pointed out that excessive growth can compromise the financial performance of the company.

Currently, economies around the world are facing many global changes and challenges that can drastically change the operational processes of companies. As Almeida et al. [8] point out, the COVID-19 outbreak has had many drastic and dramatic effects on the global economy, the way companies operate, and the way people live, with massive long-term lockdowns and restrictions. This has forced companies to reorganize the way they work and try to use the massive challenges in their favor. This means that they must try to take advantage of opportunities to digitize their business operations, adapt to a new reality, and achieve sustainability and ecosystem growth [9] in this new reality, thus maintaining their high growth potential. This is even more important as the COVID-19 recovery has been set back by the additional threat of the Ukraine–Russia crisis, which has many drastic global implications. It is pointed out that Europe would be the most affected, due to its ties with both countries, with developed countries more subjected to feel conflict impacts [10].

As demonstrated during the first wave of COVID-19, economies largely (estimated at 25–30%) operated below capacity, leading to a projected decline in GDP and an increase in the unemployment rate. Although COVID-19 had an uneven impact across the economy, the following six sectors were most affected [1]: travel agencies, accommodation, food and beverage services, employment activities, advertising and market research, and transportation and warehousing. At the European Union level, the most vulnerable sectors represent 22% of HGCs (i.e., 37,000 companies) and 28% of the people employed by HGEs (i.e., 3.7 million workers), meaning that a large proportion of HGCs and their workers faced an immediate threat. When companies face an economic downturn, the downsizing of employees and growth plans are to be expected. It was pointed out that global challenges can have many influences on capital markets, the availability of funding, and top management expectations. The COVID-19 disease has been shown to have a negative impact on stock market returns, as the increase in positive cases was associated with a decrease in market returns [11], which is also true for the Ukraine–Russia crisis. On the other hand, global challenges significantly increase the risk of potential insolvency [12]. Increased risks from declining market returns and rising interest rates with high inflation will increase the expected rate of return, which companies need to achieve to meet changing investor expectations and cover additional risks that investors must bear. For this reason, HGCs may reallocate their investments to more stable (low growth, but at the same time less risky) opportunities, which will affect their future growth. However, as Connell et al. [13] have shown, of Fortune Magazine’s 100 fastest-growing companies in 2018 (before the challenges), 32 companies were still listed as HGCs and were still growing in the first wave of COVID-19, meaning that with the right strategy, resource planning, and continued investment in future growth, companies can still achieve and sustain high growth. Due to the uncertainty and higher risks in some sectors affecting a large proportion of HGCs, and on the other hand, the opportunities to address the challenges and maintain high growth, a key research gap has been identified as we believe it is important for researchers to consider the potential impacts of these global changes and challenges on their research, thus enabling contributions that could be useful for policy makers and from which companies can benefit.

Thus, our research aims to compare the multidimensional model of high-growth companies between two data sets—i.e., data collected before the highlighted challenges and during the challenges. The multidimensional model of HGCs’ performance developed by Frešer et al. [6] was empirically tested on the sample of HGCs in 2018 (before the challenges). To answer the main research question, “Do global challenges lead to a difference in HGCs’ perceptions of growth factors between the two data sets?”, a second data set was collected based on the same questionnaire and HGC population. Data were collected via an online survey, between May and June 2022 (in times of challenges). An empirical analysis of both data sets (2018 and 2022) was conducted using SEM, based on exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), where multigroup analysis was performed. The results showed that there were some statistically significant differences in the strength of

the influence between the two data sets. The multigroup analysis of the second-order level SEM model (based on constructs) shows that there are statistically significant differences in the strength of the influence between the determinants implementing measures to overcome financial constraints and financial performance, with the strength of the influence between the determinants being statistically higher in the 2022 data set. In addition, multigroup analysis of the first-order level SEM model (based on factors) shows that the strength of the influence differs statistically significantly between the two data sets (2018 and 2022) in several cases. This article thus makes two main contributions. First, it provides insights into how current challenges affect the strength of the influence between HGC growth determinants, and second, how they affect companies' performance. Thus, it makes an important contribution to science as the research model developed by Frešer et al. [6] is empirically tested and verified in times of global challenges. The multigroup analysis and implications of the results also make important contributions to theory about the impact of COVID-19 and other recent global challenges on HGCs, which are extremely important for economic development and progress. Providing these inputs is critical for relevant policymakers seeking to develop policies to ensure recovery and resilience. The paper also has practical importance to HGCs seeking to achieve and sustain growth and development in challenging times by focusing on the growth determinants highlighted in the research to maintain better financial performance, which has been shown to be a key aspect of sustainable company development and growth.

2. Conceptual Framework and Hypotheses Development

2.1. Research Framework

HGC research can be traced back to the 1950s when Edit Penrose [2] published her theory on the growth of the firm. Research on HGCs is now diverse and focuses on interpreting the meaning of entrepreneurship, the characteristics of companies, and its importance for job creation, economic development, and growth [14]. Shane [15] highlights the importance of HGCs compared with small, static companies because it is not expected that many small, static companies without growth potential would contribute to economic development, national innovation levels, and employment rates. Although HGCs represent only a small proportion of all companies—according to Birch, who initiated the discussion on the importance of HGCs, the share of HGCs can be as low as 4% [16]—these companies are responsible for a large share of all jobs in economies, as the share of workers employed by HGCs can range from 50% to 75%, according to some studies [17–20]. HGCs thus represent an important target group for researchers and policymakers, and are important for economies seeking economic development and growth. This is only possible if HGCs can provide adequate financial performance. As pointed out by Penrose [2], the financial performance of HGCs can be challenged by excessive growth, and it is also closely related to the ability to sustain jobs [21]. Therefore, HGCs that want to be successful in their growth need to manage several factors that play an important role in shaping their financial and growth outlook.

Based on these findings, a multidimensional model of HGC performance was constructed by Frešer et al. [6]. The model combines multidimensional variables, i.e., growth factors (entrepreneurial orientation, human capital, organizational network capability) with measures that HGCs can implement to overcome financial constraints. With the dimensions of entrepreneurial orientation, human capital, networking capability, and measures that are implemented to overcome financial constraints, the important determinants that have often been analyzed as growth factors in previous theory are taken into account and linked to the important aspect of the availability of financial resources.

The availability of financial resources is one of the most important determinants in the process of the growth and development of companies [22], as insufficient financial resources or financial resources from nonoptimal providers can lead to companies being unable to operate properly and taking advantage of identified opportunities, thus reducing the growth and development opportunities of companies [23–25].

The model is concluded with the important aspect of HGC financial performance, since financial performance is a fundamental objective of a commercially oriented company. High growth [2] combined with demographic factors of HGCs—which have been shown to be younger [26], more innovative [15], and more prone to risk [21]—may negatively affect HGCs' financial performance. Therefore, HGCs need to build their growth on a foundation that does not compromise their financial success and sustainability.

2.2. Implications of COVID-19 and Ukraine–Russia Crisis

The global economy and national governments are currently facing many global challenges and threats that few could have imagined could exist—e.g., the COVID-19 lockdown and the recovery of society and the economy after the COVID-19 crisis, further exacerbated by the Ukraine–Russia crisis, which has had a drastic impact on the economy, energy sources or their prices, and other supply chains related to trade and demand [27–30]. For example, COVID-19 has had many dramatic impacts on the global economy, business activities, and people [8], which has forced companies to face many additional risks and challenges in different sectors of their activities. Several countries have implemented massive lockdowns and distancing measures, shutting down some businesses and limiting opportunities for mobility [31].

In addition, there are new challenges arising from the crisis between Russia and Ukraine that affect many levels of the global economy. Both countries are major suppliers of commodities such as titanium, palladium, wheat, and corn—i.e., raw materials used in many industries, with Europe being the most affected due to the trade relations with both countries and the dependence on Russian energy supplies [27]. As has been highlighted, the economic damage of the conflict will contribute to a significant slowdown in global growth, with higher inflation and an increase in interest rates to be expected [32].

Thus, economies are heading toward crisis, and HGCs' perceptions of growth factors that affect the availability of finance and financial performance are expected to change.

When challenges and large shocks occur, resilience is needed [31]. Economies, individuals, companies, and society must survive and be able to thrive in a difficult environment. Thus, it is highlighted that challenges arising from COVID-19 and other threats can also be opportunities for companies to become better by taking advantage of the possibilities or opportunities arising from digitalization and digital transformation, which result from a fusion of advanced technologies and the integration of physical and digital systems [8], where entrepreneurial orientation, intangible capital, and adequate financial resources can play a crucial role as they can provide the foundations for the solutions. As Liu et al. [31] point out, strategic agility, i.e., the ability to flexibly adapt to global changes, is crucial for companies and organizations to successfully address socioeconomic challenges. They can stimulate the power of entrepreneurship to achieve sustainability and ecosystem development [9], i.e., change or adaptation to a new reality. Thus, the challenges at hand may have a negative impact on how the growth factors analyzed in the conceptual model affect the availability of financial resources and financial performance, or they may have a positive impact on the sample of HGCs. The importance of the growth factors analyzed (particularly entrepreneurial orientation and intangible capital) in creating solutions and turning challenges into opportunities is highlighted.

Therefore, it is important to emphasize the importance of HGCs even more than under normal conditions, as they can provide means to restore economic normalcy and help reverse the negative effects of challenges (i.e., including COVID-19) [1].

2.3. Hypothesis Development

Based on the theory presented above, we believe that the challenges currently facing economies and companies could affect their perceptions of the environment, performance, development process, and thus the determinants of growth presented in the multidimensional model of HGC performance by Frešer et al. [6]. Consequently, the strength of the influence could also change between the analyzed determinants within the model. Since the

importance of HGCs in challenging times is highlighted [1,31,33], it is important to better understand whether statistically significant differences in the strength of the influence exist between different determinants (variables) in the model developed by Frešer et al. [6] after recent challenges (i.e., COVID-19 and the Ukraine–Russia crisis) have occurred. The difference could be related to the time perspective in a challenging national and global environment and related to the negative impact of challenges on the analyzed determinants and pathways (lost opportunities, constraints faced by HGCs), or to the positive impact on the analyzed determinants and pathways (exploitation of challenges and their transformation into opportunities for HGCs).

The main research hypothesis was developed, as follows:

H1. *There are statistically significant differences in the strength of the influence between the analyzed determinants (variables) in the pooled model comparing the 2018 data (before the challenges) with the 2022 data (after the challenges).*

Subsequently, the subhypotheses were also developed according to the research model shown in Figure 1.

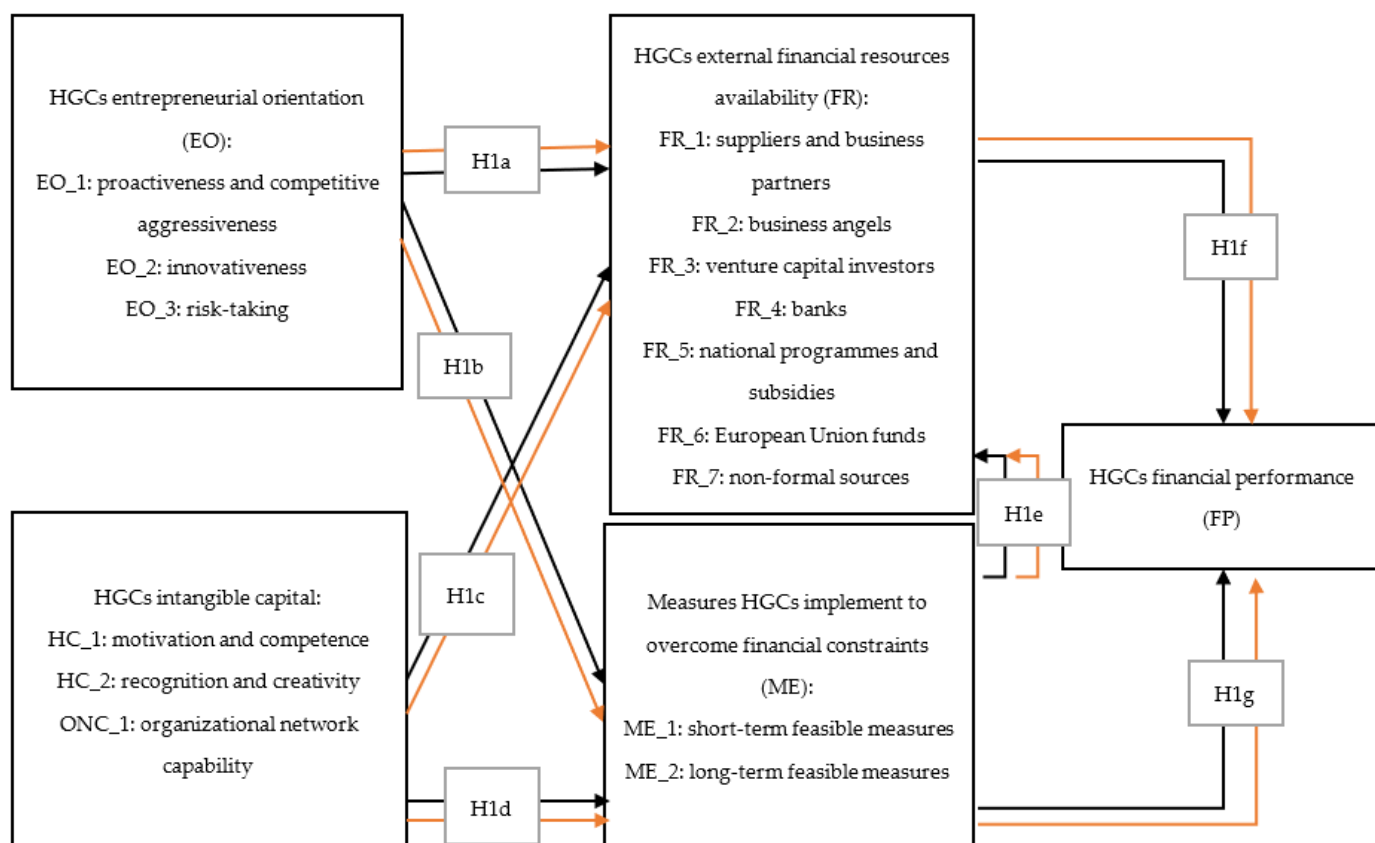


Figure 1. Multidimensional model of HGCs performance—pooled sample to compare the two data sets (black arrows—path (regression) coefficient direction for the 2018 data set, orange arrows—path (regression) coefficient direction for the 2022 data set).

2.3.1. Entrepreneurial Orientation and Financial Resources Availability

Entrepreneurial orientation has become one of the most important aspects of entrepreneurship research [34], where companies may show different levels of commitment and investment in entrepreneurial orientation [35]. Thus, entrepreneurial orientation is one of the most important determinants of the company's ability to act entrepreneurially [36] and can be linked to the availability of financial resources through its dimensions

of innovativeness, proactiveness, risk taking, and competitive aggressiveness [34,37–42]. Innovativeness as a determinant of entrepreneurial orientation can thus, for example, drastically increase the company's need for financial resources and lead to greater difficulties in obtaining funding [40]. On the other hand, innovativeness may improve access to some external finance, especially funds from venture capitalists [39] and business angels [43], as innovativeness increases the possibility of higher future growth and profits [44]. The same could be true for other determinants of entrepreneurial orientation—i.e., risk taking or proactiveness and competitive aggressiveness, as these types of investors favor “pioneers” over “followers” [42], as “pioneers” create the potential for future growth and the possibility to achieve superior profits.

Entrepreneurial orientation may have a differential impact on how companies are impacted by the crisis and global challenges caused by the COVID-19 and Ukraine–Russia crisis, as some evidence suggests that the operations of companies that exhibit higher levels of entrepreneurial orientation (especially innovativeness and proactiveness) are less affected [33,45]. On the other hand, excessive risk taking may also indirectly prevent access to certain financial resources, especially resources from banks—during the past financial crisis, banks were no longer interested in lending to risky individuals and companies [38], and may have led to a greater impact on the company's financial performance in times of crisis [45].

H1a. *The strength of the influence between HGC's entrepreneurial orientation and the availability of external financial resources is statistically significantly different in the two data sets.*

2.3.2. Entrepreneurial Orientation and Measures to Overcome Financial Constraints

The determinants of entrepreneurial orientation were found to be related to the implementation of measures that HGCs can take to overcome financial constraints. The ability to innovate (i.e., innovativeness) can reduce costs in the long run [46,47], as companies are more willing to participate in joint projects, using their entrepreneurial orientation, i.e., their ability and agility to adapt quickly to different situations. The chosen strategic response to a given situation also depends on the entrepreneurial orientation. In the decision and response phase of a given situation, managers make decisions based on managerial and organizational expectations [48], which are reinforced by the company's level of entrepreneurial orientation and lead to various actions to overcome financial constraints. Entrepreneurial orientation leads companies to acquire and incorporate all types of market information into their operations [49] and thus represents the stance that can significantly influence the decisions made in connection with the implementation of measures to overcome financial constraints.

Differences are to be expected in challenging times, as it has already been pointed out that entrepreneurial orientation can have in some cases different effects on how companies are affected by global challenges [33,45].

H1b. *The strength of the influence between HGC's entrepreneurial orientation and measures implemented to overcome financial constraints is statistically significantly different in the two data sets.*

2.3.3. Intangible Capital, Financial Resources Availability, and Measures to Overcome Financial Constraints

In analyzing the intangible capital of HGCs, our research is limited to human capital and network capability (as part of company social capital). Human capital is defined as the knowledge, skills, competencies, and attributes embodied in individuals that enable the creation of personal, social, and economic wealth [50]. Network capability is the ability of a company to leverage its existing linkages (both strong and weak) and establish new linkages (both strong and weak) with external entities to achieve resource (re)configuration and strategic competitive advantage [51].

As the previous theory suggests, intangible capital (i.e., human capital and social capital—particularly network and organizational network capability) also plays an important role in the selection and formulation of access to various financial resources [40,52,53]. With respect to social capital (especially network capability), previous research has shown that long-term network contacts can reduce the cost of external financial resources [54] and influence venture capitalists' attitudes toward HGCs' perceived prospects for success [55] and can also help in raising crowd funding [53]. In addition, human capital has also been found to be related to the ability to obtain financial resources [52,56–58].

The two dimensions of intangible capital studied, i.e., network capability and human capital, can be associated with the measures HGCs take to overcome financial constraints. They can influence the quality and format of information to which HGCs have access [59], shape network connections by organizing and seeking alliances or business partners for joint projects [60], or help in outsourcing decisions [61,62].

In a time of economic challenges, research shows that the proper training, education, and development of human capital is a necessity [63]. The same can be also said for organizational network capability. According to Giones et al. [64], operating within a cross-border and larger entrepreneurial ecosystem can help entrepreneurs and companies mitigate the impacts of challenges, by providing access to network resources. Therefore, it is important to consider whether global challenges may have altered the relationships between intangible capital dimensions and the availability of financial resources or the measures HGCs take to overcome financial constraints.

H1c. *The strength of the influence between an HGC's intangible capital and the availability of external financial resources is statistically significantly different in the two data sets.*

H1d. *The strength of the influence between an HGC's intangible capital and measures to overcome financial constraints is statistically significantly different in the two data sets.*

2.3.4. Measures to Overcome Financial Constraints and Financial Resources Availability

As HGCs require more financial resources to support their growth efforts, they may face more funding constraints [65,66]. To avoid these constraints, HGCs can take various measures (actions) to overcome financial constraints and obtain adequate funding. Previous research has shown the importance of long-term collaboration with resource providers—i.e., banks, for example—as this can significantly reduce financing costs [54] and provide better access to financial resources. The longer the collaboration between the company and the provider of financial resources, the lower is the information asymmetry between them [67], and the greater the mutual trust is. Trust is also considered and perceived as a measure of the stability, reliability, and reputation of the company in the future [68,69].

H1e. *The strength of the influence between HGC's measures to overcome financial constraints and external financial resources availability is statistically significantly different in the two data sets.*

2.3.5. Financial Resources Availability and Financial Performance

Financial performance is the fundamental goal of a commercially oriented company, which is especially important for HGCs. The financial performance of the company can be defined as the profitability of a company that enables the company to survive, succeed, and develop [70], thus achieving the desired level of sustainability at a given time and in the future. Numerous studies have shown that there is an important relationship between access to financial resources and financial performance [71–73]. In addition, previous research suggests that companies can use their financial resources efficiently to achieve the benefit of identifying new opportunities, leading to superior financial performance and sustainability.

In a time of global challenges, the financial performance of companies may be at risk [74]. In addition, the availability of financial resources could also be drastically reduced;

for example, during the last financial crisis, banks were no longer interested in lending to risky individuals and companies [38]. These changing conditions could affect the relationship between the availability of financial resources and financial performance.

H1f. *The strength of the influence between an HGC's external financial resources availability and financial performance is statistically significantly different in the two data sets.*

2.3.6. Measures to Overcome Financial Constraints and Financial Performance

Taking steps to overcome financial constraints can have an impact on a company's financial performance. As previous research has shown, it is possible to establish relationships between certain measures of overcoming financial constraints and financial performance, but the results can be quite ambiguous. For example, in some cases, a positive relationship was found between the measure of outsourcing [75–77], while in other cases a relationship was found [78]. Su and Tang [46] stated that a cost-reduction strategy as a possible measure can be a complementary strategy to product innovation in terms of the financial performance of the company. Conversely, Egbunike and Adeniyi [79] showed that cost reduction (in the form of the reduction in employees and wages) was negatively related to the financial performance of the company.

The importance of measures (actions) taken by HGCs to overcome financial constraints may be greater in challenging (difficult) times, as measures implemented in times of crisis will undoubtedly play a more important role.

H1g. *The strength of the influence between the HGC's implemented measures to overcome financial constraints and financial performance is statistically significantly different in the two data sets.*

3. Methods

3.1. Sample and Procedure

The multidimensional model of HGC performance developed by Frešer et al. [6] was empirically tested on the sample of companies that were recorded as an HGC at least once between 2011 and 2016, according to the methodology of the Agency of the Republic of Slovenia for Public Court Records and Related Services (SI: AJPES, Ljubljana, Slovenia). We have data from the research by Frešer et al. [6], so it was possible to compare the original model data set (year 2018) with newly collected data after the challenges (year 2022). In the research (year 2018), the data were collected in May 2018. A random survey was conducted among the population of 8194 HGCs for which telephone numbers were available. The final sample size for which the research was conducted was $n = 125$ HGCs (CATI $n = 89$, CAWI $n = 39$).

To determine whether statistically significant differences exist in the strength of the influence between different determinants (variables) in the model following recent challenges, we collected a second data set in 2022. Accordingly, the second data collection was conducted from the same population as in 2018—companies that were recognized at least once between the years 2011 and 2016 as an HGC based on an AJPES methodology. Data collection was conducted in May and June 2022 using the online survey—accordingly, 4049 mail addresses of relevant HGCs were identified. The final sample size for the second data collection was $n = 117$ HGCs, considering all assumptions from the original research by Frešer et al. [6]: (i) the questionnaire was completed by competent individuals, i.e., individuals with experience at the top management level of HGCs. We assume that these individuals are responsible individuals in HGCs (top managers), as they have the most knowledge about what is going on in the HGCs where they are employed, and (ii) we asked these individuals to answer the questions related to the perspective of the whole company as one organization. In both data sets (2018 and 2022), the HGCs that did not attempt to obtain at least one external financial resource (out of seven external financial resources analyzed) were excluded because the assumption was made that these HGCs are not the most relevant for making predictions about the availability of financial resources.

Thus, the final sample size for the pooled sample was 242 respondents, which is considered sufficient for conducting a multigroup SEM analysis. According to theory recommendations, the sample size should be larger than $n = 200$ [80].

The characteristics of the 2018 sample show that of the 125 respondents (competent persons—top management), 59 (47.2%) were male, while 66 (52.8%) were female. In comparison, in the 2022 sample, 74 (63.2%) of the respondents were male and 43 (36.8%) were female. In terms of HGC ownership, the sample characteristics show that based on the 2018 sample, 64 (51.2%) of the respondents included in the survey were also (co-)owners of the HGC for which they provided the data. For the 2022 sample, an analysis of the data showed that 89 (76.1%) of the respondents in the survey were also (co-)owners of the HGC.

When analyzing the characteristics of the pooled sample ($n = 242$), 133 of the respondents who participated in the survey (representing 55.0%) were male. In total, 153 (representing 63.2% of respondents) were (co-)owners of the HGC for which they provided data.

3.2. Instrument and Measures

The measurement instrument for this research consisted of five parts related to the constructs formed in the research model. The basis for measuring entrepreneurial orientation is Hughes and Morgan's scale [37], which is also recommended by Covin and Wales [34] as one of the better scales. Human capital was measured using an empirically verified measurement scale by Vidotto Farsson et al. [81], and the scale for measuring organizational network capability was developed by Mu and Di Benedetto [51]. The scale for perceived accessibility to financial resources was adopted from Brown [82], while the measurement of financial performance variables was based on indicators recommended in the literature [83]. Thus, the measurement instrument contained 57 items measured using the seven-point Likert scale (1—I strongly disagree; 7—I strongly agree). In addition, respondents were asked about some demographic variables (e.g., the gender of the respondent, owner of the company, export orientation of the company). The questionnaire statements related to the measurement of the constructs are provided in the Appendix A.

Subsequently, the following indicators were formed as latent variables at the first-order level (i.e., as factors) for the multigroup analysis, following the previous theory and methodological criteria (n = number of indicators (items) included, α = Cronbach's alpha, CR = composite reliability):

1. "EO" was defined as EO_1: proactivity and competitive aggressiveness ($n = 5$, $\alpha = 0.839$, CR = 0.886), EO_2: innovation ($n = 3$, $\alpha = 0.777$, CR = 0.871), EO_3: risk taking ($n = 3$, $\alpha = 0.675$, CR = 0.823);
2. "IC" was defined as human capital: HC_1: motivation and competence ($n = 4$, $\alpha = 0.837$, CR = 0.892), HC_2: recognition and creativity ($n = 4$, $\alpha = 0.796$, CR = 0.868) and organizational network capability: ONC ($n = 9$, $\alpha = 0.951$, CR = 0.958);
3. "ME" was defined as ME_1: short-term feasible measures ($n = 4$, $\alpha = 0.718$, CR = 0.826) and ME_2: long-term feasible measures ($n = 3$, $\alpha = 0.624$, CR = 0.800);
4. "FP" was defined as one factor FP: financial performance ($n = 4$, $\alpha = 0.925$, CR = 0.944);
5. Seven different external financial resources were analyzed: FR_1: suppliers and other business partners; FR_2: business angels; FR_3: venture capital investors; FR_4: banks; FR_5: national programs and subsidies; FR_6: European Union funds; FR_7: nonformal sources of financing, financial resources from friends and family. They were included in the model as their own separate (latent) variables (for each α and CR = 1).

This is followed by a formulation of latent variables at a second-order level (latent variables as constructs), again taking into account all methodological criteria (α = Cronbach's alpha, CR = composite reliability):

1. Entrepreneurial orientation "EO" ($\alpha = 0.751$, CR = 0.858)
2. Intangible capital "IC" ($\alpha = 0.724$, CR = 0.846)
3. Financial resources availability "FR" ($\alpha = 0.759$, CR = 0.834)
4. Measures implemented to overcome financial constraints "ME" ($\alpha = 0.698$, CR = 0.869)

5. Financial performance “FP” ($\alpha = 0.925$, CR = 0.944)

For more information on the fulfilment of the methodological criteria for the latent variables formed, see the description of results at SEM (i.e., Section 4).

3.3. Methodology

An empirical analysis of both data sets (2018 and 2022) was performed using structural equation modelling (SEM) based on exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). An EFA was performed for the 2018 data set using IBM SPSS statistics 24 software, while we adopted the same factor layout for the 2022 data set to allow better comparability between samples. The CFA and SEM were performed using the WarpPLS 8.0. For the EFA, all necessary methodological criteria were considered, as suggested by Field [84] and Janssens et al. [85]. The EFA was followed by the CFA to test and verify the extent to which the variables assumed to measure a particular factor in the EFA actually measure that factor (latent variable in SEM) [85]. In the CFA, factor loadings greater than 0.5 were considered for both data sets. In addition, the statistical significance of the factor loading was considered ($p < 0.05$) [86]. The total average variance extracted (AVE) should be greater than 50% [87], while the variance inflation factor (VIF) threshold should be 3.3 [88] or more relaxed at a level around 10 [86,89]. In addition, the effect size indicator should be at least 0.02 [88,90].

The next step was SEM. For each data set (i.e., the 2018 and 2022 data), we built the SEM model, which refers to factors (first-order level model) and to constructs (second-order level model), as shown by Kock [88].

The quality, reliability, and validity of the SEM models (for both data sets) as a whole were determined using an analysis of ten summary criteria [88]: (1) average path coefficient (APC); (2) average R-squared (ARS); (3) average adjusted R-squared (AARS), which should be statistically significant ($p < 0.05$) and as high as possible; (4) average block VIF (AVIF); (5) average Full Collinearity VIF (AFVIF), which determines the level of the predictive and explanatory quality of the model; (6) Goodness of Fit (GoF) to show the explanatory power of the model; (7) Simpson’s Paradox Ratio (SPR) related to the problem of causality; (8) R-squared contribution ration (RSCR) to analyze whether there are negative contributions of determination coefficients; (9) Statistical Suppression Ratio (SSR) to check whether the model is free from statistical suppression; and (10) Nonlinear Bivariate Causality Direction Ratio (NLBCDR) to analyze whether there is an opposite relationship to the assumptions made.

In addition, Cronbach’s alpha and the composite reliability indicator are expected to be greater than or equal to 0.7 (considering that the lower indicator is not less than 0.6), AVE greater than 0.5, and VIF less than or equal to 3.3 for the latent variables—that is, factors or constructs [88]. Next, we also created a new SEM model for multigroup analysis.

4. Results

The results of the SEM models for both data sets, i.e., 2018 and 2022, are presented. In the first step, we defined first-order level SEM models based on factors (i.e., latent variables), and in the second step, we defined second-order level SEM models based on latent variables as constructs. The results presented show that both models (first- and second-order level) for both data sets, when analyzed separately, meet the criteria in terms of reliability and variability. Next, we performed the multigroup analysis to find out if there are differences between the path (regression) coefficients of the two data sets exist.

4.1. First-Order Level SEM Model

Prior to CFA and SEM modelling, an EFA was performed for the 2018 data set as described in the research by Frešer et al. [6], taking into account all relevant methodological recommendations. For the 2022 data set, the same EFA factor arrangement as for 2018 was assumed for better comparability.

A CFA was performed in the first step of the SEM analysis. In the 2018 data set of Frešer et al. [6], based on the suggestions of Kock [86], an additional observed variable related to the organizational network capability (q3) was eliminated because the indicator weight of this variable was not statistically significant ($p = 0.106$). Factor loadings for all included variables were greater than 0.5 [88] and ranged from 0.685 to 0.913. The total average variance extracted (AVE) was also reasonable and ranged from 58.1% to 72.3% for the different latent variables (factors). Although a satisfactory level of extracted variance is considered to be 60%, a value of 50% of the extracted variance is often used as a measure of adequacy with SEM [87]. The vast majority of the loadings for the observed variables were also statistically significant at the $p < 0.05$ level, or at least significant at the $p < 0.10$ level. The VIF indicators for the observed variables in the 2018 model were also met, with most variables meeting the criteria of $VIF \leq 3.3$ and some meeting less stringent criteria of VIF less than or equal to 10 [86,89]. The effect sizes for all observed variables in this data set were also large enough that no additional variable elimination was required.

In the 2022 data set, the CFA was constructed based on the same predicted factors—based on the EFA factor form used in the original research by Frešer et al. [6]—as this allows for better comparability between data sets. All factor loadings for all observed variables were greater than 0.5 [88] and ranged from 0.622 to 0.946. The total average variance extracted (AVE) ranged from 53.3% to 84.2% for most factors. Only for the factor ME_1: short-term feasible measures did the AVE not reach the level of Huang et al. [87] and stopped at 46.1%. According to some researchers [87,91], we can conditionally accept a value of AVE higher than 0.4 if the composite reliability indicator is high enough. The composite validity and Cronbach's alpha for this factor were at a sufficient level, so no adjustment was needed. All loadings for the observed variables were also statistically significant ($p < 0.05$) or at least significant at the 10% level. Most of the observed variables in the 2022 data set also met the criteria for the VIF indicator. Two variables of perceived availability of financial resources had VIF indicators slightly higher than 10 [86,89], but since all other indicators were in line, these two variables can be conditionally accepted. The effect sizes for all observed variables in this data set were also large enough (>0.02) that no additional variable elimination was required.

The models for both data sets also met the criteria for reliability and validity of the indicators (formed factors at the first-order level—latent variables). Measurement reliability was achieved by Cronbach's alpha and composite reliability, which must be greater than or equal to 0.7, but there is also a slightly less stringent rule that at least one indicator must be greater than or equal to 0.7 (subject to the condition that the lower indicator is not less than 0.6). For the 2018 data set, Cronbach's alpha for the preformed factors (latent variables) ranged from 0.637 to 0.963 and the composite reliability ranged from 0.806 to 0.963, meeting the criteria. For the 2022 data set, Cronbach's alpha ranged from 0.557 to 0.953, and the composite reliability ranged from 0.772 to 0.964, also meeting the minimum expectations. The form factors met the VIF indicator's specification of 3.3 or less (both data sets met this specification).

We also verified that the models met discriminant and convergent validity, where discriminant validity was met by satisfying the condition $AVE > MSV$ and $AVE > ASV$ [89], where MSV is the square of the largest correlation coefficient between the latent variables and ASV is the average value of the square of the correlation coefficients between the variables, and convergent validity was met with the condition $AVE > 0.5$ [88] and composite validity $> AVE$ (for latent variables containing more than one observed variable) [92]. Both models also meet the ten criteria for overall model quality. The NLBCDR index for the 2018 data set was slightly below the threshold of 0.7 and was conditionally acceptable. A slightly lower value of the above indicator was expected, since in the previous theory there was also the possibility to study, for example, the influence of financial resources on the entrepreneurial orientation, i.e., a reverse causal study [93]. Nevertheless, the results showed the general suitability of the designed models.

4.2. Second-Order Level SEM Model

To validate the construct-based model, a second-order model was created in SEM based on the instructions of Kock [88]. Factors related to a first-order level were first stored as indicator variables in the SEM data base and then combined into a latent variable representing second-order constructs. Thus, for both data sets, the second-order models included five constructs: entrepreneurial orientation (EO), intangible capital of HGC (IC), perceived availability to different external forms of financing (FR), measures for overcoming financial constraints (ME), and financial performance of HGCs (FP).

In the second-order SEM model based on the study by Frešer et al.'s [6] research (2018 data set), one additional indicator—namely the factor financial resources from suppliers and other business partners (FR_1)—had to be eliminated because the indicator loading was below 0.5 and was also not statistically significant. After this correction, all indicator loadings were higher than 0.5. With regard to the quality and validity of the individual second-order latent variables (constructs), the model for the 2018 data set met all necessary requirements. The indicator of AVE was higher than 0.5 for most of the constructs (from 0.597 to 0.775), and only for one construct the value was 0.466—according to researchers [87,91], we can overlook this and accept the value of AVE higher than 0.4 if the composite reliability indicator is high enough. The composite reliability for all factors met the criteria (from 0.811 to 0.929), as did Cronbach's alpha (from 0.647 to 0.903) and VIF (from 1.120 to 1.631 for various constructs). Thus, the models met the criteria for discriminant and convergent validity. They also met ten criteria against which the model as a whole was tested.

For the second-order model based on the 2022 data set, an additional factor (variable) again had to be excluded for the analysis—in this case, it was the indicator (i.e., factor) financial resources from family and friends (FR_7). The model based on the 2022 data set also met all of the predicted criterion values, with a composite reliability of 0.834 to 0.964 for various latent variables, Cronbach's alpha of 0.640 to 0.953, AVE of 0.461 to 0.842, and a VIF statistic of 1.317 to 2.012. The model met the criteria for discriminant and convergent validity and was also suitable for the evaluation of the model as a whole against ten criteria.

4.3. Multigroup Analysis

Given that economies and HGCs are currently facing major challenges (notably COVID-19 and the Ukraine–Russia crisis), this could have a direct impact on how HGCs perceive growth factors, which could affect the availability of financing and consequently their financial performance. Our work can contribute by analyzing and highlighting statistically significant differences in the strength of the influence of key growth factors when comparing the two data sets (before and during the period of challenges). This is also important for policy recommendations, as policy makers should not only focus on the immediate survival of companies, but also develop longer-term strategies to strengthen HGE ecosystems in European economies [1]. This is only possible if researchers try to consider difficult environments in their research, and therefore check if the implicit assumptions in the current research remain valid. The analyzed determinants of growth such as entrepreneurial orientation, the availability of finance, and financial performance are one of the crucial and most important aspects for entrepreneurship theory and therefore need to be further analyzed in challenging times.

To determine if there were statistically significant differences in the strength of the influence between the determinants (variables—i.e., factors or constructs) analyzed when comparing the two data sets (i.e., 2018 and 2022), we needed to perform a multigroup analysis within the WarpPLS tool. As highlighted, a multigroup analysis within SEM allows us to examine specific model fit for different groups with a comparison of regression (path) coefficients between groups [94]. One of the goals of multigroup analysis is to compare pairs of paths (regression) coefficients for identical models based on different samples [86]. In this method, different samples may represent the collection of data in different countries or in different years or similar. For the multigroup analysis, the pooled

sample was created for both years, with label “1” set for 2018 and label “2” for 2022. Then, the new first- and second-order models were formed for the pooled sample. The first-order (factor) model meets the criteria of reliability and validity. Indicator loadings for all latent variables ranged from 0.681 to 0.925 (all statistically significant), and all indicator weights were also statistically significant and met the less stringent criteria (<10) in terms of the VIF for each variable and the criteria in terms of effect size (>0.02). For the formed factor on the first level, the composite reliability (lowest value at level 0.823 for factor EO_3), Cronbach’s alpha (lowest value at level 0.624 for factor ME_2), AVE (lowest value at level 0.572 for factor ME_2), and Full Collinearity VIF (highest value at level 2.630 for FV_3) also meet the required values.

In the analysis of the model based on the second order (constructs), the latent variable (factor) FV_1 (resources from suppliers and other business partners) had to be excluded because the loading of the indicator was less than 0.5. Compared with a separate SEM model based on the 2022 data set, FV_7 had a loading of more than 0.5 and therefore did not need to be eliminated. After eliminating FV_1, all included latent variables met the criteria for loadings and weights (statistically significant and adequate VIF). All the second-level constructs formed met the criteria for composite reliability (lowest level 0.834 for the construct FR), Cronbach’s alpha (lowest level 0.698 for the construct ME), AVE (lowest level 0.463 for the construct FR—acceptable as recommended by researchers [87,91] because the composite reliability for this construct is set at 0.834), and Full Collinearity VIF (highest level 1.816 for the construct EO).

Both models of pooled sample also met ten criteria against which the models were tested overall (see Table 1).

Table 1. Reliability and validity of a pooled sample model.

Criterion	Abbreviation	Condition/ Recommended Value	First-Order Level (Latent Variables as Factors)	Second-Order Level (latent Variables as Constructs)
Average Path Coefficient	APC	$p < 0.05$	APC = 0.096; $p = 0.033$	APC = 0.214; $p = 0.001$
Average R-Squared	ARS	$p < 0.05$	ARS = 0.153; $p = 0.004$	ARS = 0.164; $p = 0.002$
Average Adjusted R-Squared	AARS	$p < 0.05$	AARS = 0.125; $p = 0.012$	AARS = 0.155; $p = 0.003$
Average Block VIF	AVIF	AVIF ≤ 5.0 or, more recommended, AVIF ≤ 3.3	AVIF = 1.410	AVIF = 1.255
Average Full Collinearity VIF	AFVIF	AFVIF ≤ 5.0 or, more recommended, AFVIF ≤ 3.3	AFVIF = 1.918	AFVIF = 1.407
Tenenhaus Goodness of Fit	GoF	GoF ≥ 0.1 (low) GoF ≥ 0.25 (medium) GoF ≥ 0.36 (high)	GoF = 0.350	GoF = 0.330
Simpson’s Paradox Ratio	SPR	SPR ≥ 0.7 (acceptable) SPR = 1 (ideal)	SPR = 0.844	SPR = 1.000
R-Squared Contribution Ratio	RSCR	RSCR ≥ 0.9 (acceptable) RSCR = 1 (ideal)	RSCR = 0.945	RSCR = 1.000
Statistical Suppression Ratio	SSR	SSR ≥ 0.7	SR = 0.987	SSR = 1.000
Causality Direction Ratio	NLBCDR	NLBCDR ≥ 0.7	NLBCDR = 0.734	NLBCDR = 0.857

Note: The first- and second-order SEM model (pooled sample) meets the predicted criteria conditions. Source: our own data.

To perform the multigroup analysis, we followed the instructions of Kock [88] and used one of the classical methods widely used for multigroup analysis, i.e., we chose the Satterthwaite method because it shows complete differences in the analyzed path (regression) coefficients. The method is used when unequal variances are assumed, and it is therefore widely used [95]. Within the test, researchers can choose between a one-tailed p -value (based on WarpPLS, which should be used most often) and a two-tailed p -value. Kock [96] recommends using a one-tailed p -value when the coefficient is expected to have a sign (positive or negative) that should be reflected in the hypothesis. That is, if the one-tailed p -value is adopted, the multigroup analysis would show whether the path (regression) coefficient in the first group (in our case, in 2018) is statistically different from the path (regression) coefficient in the second group (in our case, in 2022). If (as in our case) no assumptions are made about the sign of statistically significant differences in the strength of the influence between the analyzed determinants (variables) between the two data sets, a two-tailed test is recommended.

The results of multigroup analysis based on the second-order SEM model (Table 2) show that there are statistically significant differences in the strength of the influence between the constructs $ME \rightarrow FP$ when the 2018 data set (before the challenges) is compared with the 2022 data set (after the challenges). It can be seen that the strength of the influence between constructs was statistically higher for the 2022 data set than for the 2018 data set, only when $p < 10\%$ was considered. As shown in Table 3, the statistical difference (at the level of $p < 10\%$) arose mainly from the factor ME_2 , where the strength of the influence between the factors ME_2 and FP was statistically significantly lower (p -value of 0.063) in the first data set (data for the year 2018).

Based on the results presented in Table 2, hypothesis H1g can be accepted, while the other subhypotheses related to the constructs (second-order level) can be rejected.

Nevertheless, the results in Table 3 show that there are some statistically significant differences in the strength of the influence between the analyzed variables of two data sets when these variables are in the form of factors (first-order model).

Table 2. Multigroup analysis based on second-order SEM model—pooled sample.

		FP	EO	IC	FR	ME
FP	path coefficient 2018				0.147	0.167
	path coefficient 2022				0.202	0.367
	total path coefficient difference (value difference between two data sets)				0.054	0.200
	t ratio				0.439	1.660
	p value (two-tailed)				0.660	0.097 *
FR	path coefficient 2018		0.272	0.020		0.275
	path coefficient 2022		0.241	0.062		0.312
	total path coefficient difference (value difference between two data sets)		0.031	0.042		0.037
	t ratio		0.259	0.327		0.311
	p value (two-tailed)		0.796	0.743		0.756
ME	path coefficient 2018		0.314	−0.099		
	path coefficient 2022		0.491	0.058		
	total path coefficient difference (value difference between two data sets)		0.177	0.157		
	t ratio		1.523	1.242		
	p value (two-tailed)		0.128	0.214		
	Full. Coll. VIF 2018	1.147	1.649	1.389	1.119	1.183
	Full. Coll. VIF 2022	1.518	2.009	1.593	1.236	1.561

Note: * statistically significant at $p < 0.10$. Source: our own data.

Table 3. Multigroup analysis based on first-order SEM model—pooled sample.

		EO_3	EO_2	EO_1	HC_1	HC_2	ONC_1	FR_1	FR_2	FR_3	FR_4	FR_5	FR_6	FR_7	ME_1	ME_2	FP_1
FR_1	path coefficient 2018	0.228	0.096	0.124	−0.090	−0.153	0.215								0.051	0.183	
	path coefficient 2022	−0.178	0.043	0.034	−0.001	−0.060	0.124								0.128	0.116	
	total path coeff. differ.	0.406	0.053	0.090	0.090	0.092	0.091								0.077	0.067	
	t ratio	3.314	0.419	0.714	0.706	0.737	0.734								0.615	0.543	
	p value (two-tailed)	<0.001 ***	0.675	0.475	0.480	0.461	0.463								0.539	0.587	
FR_2	path coefficient 2018	0.152	0.122	0.171	0.024	−0.015	0.120								0.120	−0.017	
	path coefficient 2022	0.061	0.157	0.086	0.015	−0.025	0.014								0.238	0.014	
	total path coeff. differ.	0.091	0.034	0.085	0.009	0.010	0.106								0.118	0.031	
	t ratio	0.724	0.274	0.682	0.069	0.080	0.839								0.957	0.243	
	p value (two-tailed)	0.469	0.784	0.495	0.945	0.936	0.402								0.338	0.808	
FR_3	path coefficient 2018	0.143	0.149	0.172	0.068	−0.103	0.142								0.235	−0.005	
	path coefficient 2022	0.008	−0.010	0.030	0.145	0.069	0.078								0.341	0.016	
	total path coeff. differ.	0.135	0.159	0.142	0.076	0.172	0.064								0.106	0.021	
	t ratio	1.072	1.255	1.128	0.610	1.363	0.510								0.884	0.164	
	p value (two-tailed)	0.284	0.209	0.259	0.542	0.173	0.610								0.377	0.869	
FR_4	path coefficient 2018	0.355	0.126	0.111	0.128	−0.089	−0.004								−0.012	0.063	
	path coefficient 2022	0.148	0.117	0.181	0.078	0.102	0.078								−0.037	0.164	
	total path coeff. differ.	0.208	0.010	0.070	0.050	0.190	0.083								0.025	0.101	
	t ratio	1.714	0.078	0.563	0.400	1.515	0.649								0.198	0.808	
	p value (two-tailed)	0.087 *	0.938	0.574	0.689	0.130	0.516								0.843	0.419	
FR_5	path coefficient 2018	0.178	0.050	0.190	0.150	−0.011	0.049								0.148	−0.120	
	path coefficient 2022	0.084	−0.100	0.006	0.118	−0.080	0.117								0.188	0.324	
	total path coeff. differ.	0.094	0.149	0.184	0.032	0.069	0.068								0.040	0.444	
	t ratio	0.757	1.182	1.463	0.256	0.546	0.539								0.321	3.650	
	p value (two-tailed)	0.449	0.237	0.143	0.798	0.585	0.590								0.748	<0.001 ***	
FR_6	path coefficient 2018	0.262	0.019	−0.001	0.093	0.079	0.212								0.186	0.081	
	path coefficient 2022	−0.043	0.126	0.012	−0.163	0.063	−0.006								0.159	0.218	
	total path coeff. differ.	0.306	0.107	0.013	0.255	0.015	0.218								0.027	0.138	
	t ratio	2.462	0.844	0.100	2.050	0.121	1.739								0.217	1.112	
	p value (two-tailed)	0.014 **	0.399	0.920	0.040 **	0.903	0.082 *								0.828	0.266	
FR_7	path coefficient 2018	0.188	0.126	−0.106	−0.133	−0.085	0.135								0.228	−0.001	
	path coefficient 2022	0.121	−0.106	0.011	0.068	0.094	0.139								0.052	0.100	
	total path coeff. differ.	0.067	0.232	0.117	0.201	0.179	0.005								0.177	0.101	
	t ratio	0.543	1.857	0.925	1.601	1.424	0.037								1.418	0.794	
	p value (two-tailed)	0.587	0.063 *	0.355	0.109	0.154	0.971								0.156	0.427	
ME_1	path coefficient 2018	0.189	0.100	0.146	−0.229	−0.018	0.185										
	path coefficient 2022	0.233	0.058	0.189	0.016	0.136	0.276										
	total path coeff. differ.	0.044	0.042	0.044	0.244	0.154	0.091										
	t ratio	0.357	0.332	0.354	1.955	1.221	0.753										
	p value (two-tailed)	0.721	0.740	0.724	0.051 *	0.222	0.451										
ME_2	path coefficient 2018	0.210	0.126	0.151	−0.152	0.094	0.020										
	path coefficient 2022	0.040	0.170	0.084	0.187	−0.122	0.453										
	total path coeff. differ.	0.170	0.044	0.067	0.339	0.216	0.434										
	t ratio	1.360	0.355	0.537	2.753	1.728	3.572										
	p value (two-tailed)	0.174	0.723	0.591	0.006 ***	0.084 *	<0.001 ***										
FP_1	path coefficient 2018							0.262	−0.057	0.150	0.107	−0.077	−0.101	−0.136	0.097	0.125	
	path coefficient 2022							0.073	0.133	0.055	0.259	0.071	0.089	−0.047	0.013	0.350	
	total path coeff. differ.							0.188	0.190	0.095	0.152	0.148	0.191	0.089	0.084	0.225	
	t ratio							1.522	1.515	0.757	1.239	1.171	1.516	0.706	0.661	1.859	
	p value (two-tailed)							0.128	0.130	0.449	0.215	0.242	0.129	0.480	0.509	0.063 *	
Full. Coll. VIF 2018		1.774	1.698	1.782	1.967	2.386	1.438	1.508	1.926	2.185	1.617	2.551	2.418	1.289	1.965	1.709	1.374
Full. Coll. VIF 2022		1.527	2.808	2.732	2.613	2.935	2.395	1.429	3.511	4.022	1.493	2.938	2.720	1.535	1.728	1.912	1.984

Note: *** statistically significant at $p < 0.01$, ** statistically significant at $p < 0.05$, * statistically significant at $p < 0.10$. Source: our own data.

The analysis of the differences between the groups of the first-order SEM model (Table 3) shows that there are statistically significant differences in the strength of the influence between the factor EO_3 (risk taking) and some factors of financial resources availability (i.e., FV_1, FV_6 at the level of $p < 0.05$, and FV_4 at the level of $p < 0.10$) when the 2018 data set (before the challenges) is compared with the 2022 data set (after the challenges). The strength of the influence between the factor EO_3 and the highlighted factors of financial resources availability was mostly less pronounced in the second group (data set 2022). This means that the path (regression) coefficients for the factor EO_3 in relation to the variables FR_1, FR_4, and FR_6 were statistically significantly higher in the first group (2018) than in the second group (2022).

In addition, there were statistically significant differences (at the $p < 0.10$ level) in the strength of the influence between the factor EO_2 (innovativeness) and FR_7 when comparing the two data sets where the regression (path) coefficient between two variables had a positive sign in the first group (2018) and a negative sign in the second group (2022).

There were no statistically significant differences in the strength of the influence between the two data sets when analyzing the factor EO_1 (proactivity and competitive aggressiveness) with the factors of financial resources availability (FR_1 to FR_7).

When analyzing the first factor of human capital (HC_1), the results showed that there were statistically significant differences in the strength of the influence between factors HC_1 → FR_6 and HC_1 → ME_2 (at $p < 0.05$ level) and between factors HC_1 → ME_1

(at $p < 0.10$ level) when comparing the two data sets. Regarding the influence between the factors HC_1 $\rightarrow$ FR_6, the results showed that in 2018 there was a positive influence between the two variables, while in 2022 there was a negative influence between the variables. Between HC_1 $\rightarrow$ ME_1, the strength of the influence between the two variables was statistically significantly more pronounced in the first group (2018), where a negative influence between the two variables was observed. When analyzing the relationship between HC_1 $\rightarrow$ ME_2, the results showed that the path (regression) coefficient was negative in the first data set (2018), while the regression (path) coefficient between two variables was positive in the second group (2022).

When considering the second factor, human capital (HC_2), the results showed that when comparing the two data sets, there were statistically significant differences in the strength of the influence between HC_2 $\rightarrow$ ME_2 (at the $p < 0.10$ level).

When analyzing the organizational network capability (ONC_1), two statistically significant differences can be identified: there were statistically significant differences in the strength of the influence recorded between factors ONC_1 $\rightarrow$ FR_6 (at the $p < 0.10$ level) and factors ONC_1 $\rightarrow$ ME_2 (at the $p < 0.05$ level) when comparing the two data sets. The strength of the influence between the factor ONC_1 and FR_6 was statistically significantly higher in the first group, while the strength of the influence between the factor ONC_1 and ME_2 was statistically lower for the first group (the year 2018).

The analysis of multigroup differences between the availability of financial resources (FR_1 to FR_7) and financial performance (factor FP_1) showed that there were no statistically significant differences in the strength of the influence between the two variables when comparing the two data sets.

Considering the factors of measures that companies can implement to overcome financial constraints (ME_1 and ME_2), the result showed that when comparing the two data sets, there were significant differences in the strength of the influence between the factors ME_2 $\rightarrow$ FR_5 (at the level $p < 0.05$) and ME_2 $\rightarrow$ FP_1 (at the level $p < 0.10$). The regression (path) coefficient between ME_2 and FR_5 for the first group (the year 2018) is negative, and the regression (path) coefficient between two variables in the second group (the year 2022) is positive. The strength of the influence between the factor ME_2 and the FP_1 is statistically significantly more pronounced in the second group (2022).

5. Discussion

Our paper attempts to contribute to a better understanding of whether there are statistically significant differences in the strength of the influence between different determinants (variables) in the model developed by Frešer et al. [6] after highlighted challenges (e.g., COVID-19 and the Ukraine–Russia crisis) have occurred. The results showed that there were some statistically significant differences in the strength of the influence between some analyzed determinants when comparing the two data sets, which is an important contribution to science and policy makers, as the differences might be related to the time perspective in a challenging national and global environment. As noted above, the implementation of various policy measures has helped mitigate the risks for companies arising from recent challenges, but “going forward, the policy response should not only focus on the immediate survival of viable firms, but also on deploying longer-term measures geared to strengthen the HGE ecosystems in the European economies” [1] (p. 7). This is only possible if researchers try to take challenging environments into account in their research. Our work can contribute to this by analyzing and highlighting statistically significant differences in the strength of the influence of key growth determinants when comparing the two data sets (before and during periods of challenges). The analyzed growth determinants such as entrepreneurial orientation, the availability of financial resources, and financial performance are one of the crucial and most important aspects in entrepreneurship research and are in the focus of policy makers, especially in challenging times.

Economies are currently facing many global challenges and threats resulting from the COVID-19 outbreak and the long recovery period, exacerbated by the Ukraine–Russia crisis.

During this period, society and the economy are under tremendous pressure as COVID-19 has led to massive lockdowns, mobility restrictions, and industrial shutdowns [31]. In addition, the Ukraine–Russia crisis is having a significant impact on the global supply chains of key raw materials used in many industries and developed economies [10].

Economies and companies are therefore forced to face many additional risks and threats that they must manage if they are to survive and thrive in this environment. Our paper focuses on HGCs, which are different from nongrowing (static) companies—the main differences could be in the financial resources required, the intensity of the entrepreneurial orientation, or their intangible capital [6]. Being inherently younger [26], more innovative [15], and more risk prone [21], HGCs can be characterized as companies with a higher strategic agility, i.e., with the ability to adapt more quickly to global changes and thus be more successful. Considering that challenges and threats arising from COVID-19 and the Ukraine–Russia crisis may also represent opportunities for companies to exploit and succeed [8,31], HGCs with their characteristics could be the driving force in overcoming recent challenges. In this regard, our paper can help HGCs identify which determinants are crucial for funding availability and financial performance in difficult times.

As economies move toward crisis [32], changes can be expected in the HGCs' perceptions of various growth determinants and, consequently, in the availability of financial resources and financial performance. The aforementioned changes may have significant implications for the financial and growth-related sustainability of HGCs, as they may jeopardize their strategic decisions regarding growth determinants and affect operations within the structural characteristics of the external environment. With the impact on global markets, availability of funds, market returns, inflation, and interest rates, management's expectations and the company's expected rate of return could also change, which could affect their future decisions. Consequently, researchers need to assess how global challenges might affect their research. As the importance of HGCs in challenging times is highlighted [1,33], our article compares a primary developed multidimensional model of HGC performance on the 2018 data set [6] with the newly collected 2022 data set to better understand whether statistically significant differences exist in the strength of the influence between different determinants (variables) after recent challenges have occurred.

The results of the second-order construct-based SEM model (Table 2) showed that when comparing the 2018 data set (before the challenges) with the 2022 data set (after the challenges), there were statistically significant differences in the strength of the influence between the constructs $ME \rightarrow FP$ when a p -value of 10% was considered. The results showed that the measures implemented by HGCs to overcome financial constraints or to obtain adequate financial resources play a greater positive role in a time of challenges. This was to be expected since financial constraints can limit a company's ability to engage in innovative activities [97] and thus indirectly affect their financial performance. If it is assumed that a crisis is imminent or has already begun, there is a possibility that companies will be more affected by financial constraints [98] and will have more difficulty obtaining financial resources. In addition, HGCs can reallocate their investments to more stable (low growth, but at the same time less risky) opportunities, which will affect their future growth and prospects. Previous research has shown that implemented measures can be positively related to financial performance [46,75–77]—in the crisis situation, the importance of the relationship between implemented measures and financial performance may increase compared with 2018 (postcrisis growth).

In analyzing the first-order SEM model (Table 3), some important insights also emerged. Financial resources are one of the most important determinants for companies to operate properly, exploit opportunities, achieve growth, and thus thrive [23–25]. The results showed that risk taking (factor EO_3) and innovativeness (factor EO_2) could have had a greater negative impact on the availability of financial resources, compared with the 2018 data set, as there were some statistically significant differences in the strength of the influence found between the highlighted variables when comparing the two data sets. It can be seen that the path (regression) coefficients for some financial resources (i.e., FR_4:

banks, FR_6: EU funds, and FR_7: nonformal sources) associated with the factors of EO were positive for the first group (year 2018), while they had a negative sign in the second group (year 2022). Thus, the results support the finding that excessive risk taking can also indirectly prevent access to certain financial resources, especially in times of crisis—during the financial crisis, banks were no longer interested in lending to risky individuals and companies [38]. It may also influence the decision to focus on more stable (less risky) opportunities in the future that may not require large amounts of funding, thus influencing the perception of funding availability. Similarly, innovative companies are more likely to face the consequences of financial constraints [40,99], especially in times of crisis.

The results also showed that there were statistically significant differences in the strength of the influence when comparing the two data sets between the variables HC_1 → FR_6 and ONC_1 → FR_6 (a higher positive regression coefficient for the first group, the year 2018, and a negative regression coefficient in the second group, the year 2022); this supports the findings that the economic damage of the Ukraine–Russia crisis will contribute to a significant slowdown in global growth [32], which according to the results is already the case, as companies may face higher financial constraints in times of crisis and economic downturn [98], which partly explains the lower path (regression) coefficients in the data set for the year 2022.

On the other hand, there are some positive shifts in the relationship between the factors of human capital, organizational networking capability, and implemented measures to overcome financial constraints, as the path (regression) coefficients for HC_1 → ME_1, HC_1 → ME_2, and ONC_1 → ME_2 are statistically significantly lower for the 2018 data set. Thus, the results support the findings that operating within a cross-border and larger entrepreneurial ecosystem, especially in times of crisis, can help entrepreneurs and companies mitigate the impacts of challenges [64] and thus provide better opportunities to implement measures to overcome financial constraints. This is extremely important, as the results also showed that the strength of the influence between the factor ME_2 and the FP_1 was statistically significantly more pronounced in the second group (2022), implying that the importance of ME_2 for financial performance in difficult times was increased.

Based on the results, hypothesis H1g could be accepted, while the other subhypotheses were rejected. It is important to emphasize that the hypotheses refer to the second-order model (variables in the form of constructs). For the first-order model, when comparing the two data sets, the results showed some statistically significant differences in the strength of the influence between some analyzed variables in the form of factors. Based on the results, we can better understand the statistically significant differences in the strength of the influence between different analyzed determinants when comparing both data sets. These differences could be due to the spread of COVID-19 and the Ukraine–Russia crisis, two major global challenges that took place after the year 2018, when the first data set was collected.

5.1. Theoretical Implications

Based on an extensive theoretical literature review, a multidimensional model of the performance of HGCs was developed by Frešer et al. [6]. As economies and HGCs are currently facing major challenges (in particular, COVID-19 and the Ukraine–Russia crisis), this could have direct implications for how HGCs perceive growth determinates, which could affect the availability of financial resources and consequently their financial performance. Our paper therefore seeks to re-examine the impact that these global challenges could have on the conceptual model developed, which is achieved through a detailed comparison of the conceptual model based on the two data sets—i.e., in 2018 (before the challenges) and in 2022 (during the challenges period). Thus, it makes an important contribution to science, as suggested by Ratten [100], because new theories and tests may emerge due to the global challenges, and the implicit assumptions in current research need to be verified.

First, our research attempts to fill this gap by focusing on the comparison of the research model within the two time perspectives.

Second, this research confirms that in some cases there are statistically significant differences in the strength of the influence of some determinants when the two data sets are compared, which could be broadly explained by the time perspective of the impact of global challenges in business processes.

Third, at the same time, the research confirms the reliability and validity of the research model under new conditions (i.e., in times of global challenges), making the research model a valuable theoretical concept.

5.2. Practical Implications

At a time of numerous global challenges and threats arising from COVID-19 and the Ukraine–Russia crisis, leading to a significant economic downturn [32], the importance of entrepreneurial policy at both the international and national levels is highlighted, as government and entrepreneurship policies can have a significant and decisive impact on the performance of national economies. The full impact of COVID-19 and the Ukrainian–Russian crisis is yet to be seen, but as current forecasts indicate, policy interventions will continue to be needed as policymakers will have to learn to improvise to cover all new behaviors and adapt to the new global reality [100], which is full of challenges. Policymakers can therefore act on various factors (including the growth factors considered in our research) to create resilient entrepreneurs and companies who would thrive in challenging times [101]. To gain insights into the impact of global challenges on HGCs in Slovenia, our paper allowed us to evaluate the differences in the model developed by Frešer et al. [6] before and after global challenges, and is thus of great value for practical implications.

The results support the findings that the economic damage from current challenges will contribute to a significant slowdown in global growth [32]—this slowdown is already visible in the results, as it is shown that risk taking (EO_3) and innovativeness (EO_2) already have a less significant positive association with the accessibility of some financial resources, or are even negatively associated with their availability compared with the 2018 data set, which supports the findings of Cowling et al. [38], showing that during the crisis, for example, banks were no longer interested in lending to high-risk individuals and companies.

The findings represent an important contribution for HGCs seeking to achieve and sustain growth and development by focusing on the growth determinants highlighted in the research. This will also provide better access to financial resources, which the research shows contribute significantly to financial performance and the ability to identify new opportunities [102,103].

5.3. Limitations

Our research examined specific contexts. It focused on the developed research model and its comparison based on the two data sets, i.e., in 2018 (before the highlighted challenges) and in 2022 (in the period of recent challenges). This research attempts to find answers to the question of whether global challenges (i.e., the COVID-19 and Ukraine–Russia crisis) lead to a difference in the strength of the influence between the analyzed determinants—the growth factors of HGCs. Although both data sets are representative samples, the limitation of the research process is the assumption that HGCs are equally affected by the recent challenges, not considering the possible effects of company demographic characteristics, industry, and location. Thus, the objective of the article is not to analyze differences between specific industries, etc., but to compare two representative samples from the same population of HGCs to determine whether differences can be expected between 2018 and 2022.

It is important to emphasize that differences in the strength of the influence between determinants could also stem from other environmental factors to which HGCs are exposed in Slovenia. The differences may also reflect managements' changing expectations and decision to shift their efforts to more stable (low growth, but at the same time less risky) opportunities, due to recent challenges affecting capital market returns, the availability of

funds, inflation, and interest rates, areas that may affect companies' return expectations and thus change their perception.

Because the questionnaire was anonymous, it is not possible to determine whether the two samples with the statistical units included are independent or dependent. Even though both samples are representative samples of HGCs in Slovenia and thus can provide important insights, this is another limitation of the study that needs to be pointed out.

Another limitation arises from the respondents of the questionnaire—as mentioned above, the questionnaire was filled out by competent persons (experience at the top management level), and these persons answered the questions related to the perspective of the whole company as one organization, as well as from the selection of the sample—HGCs in the Republic of Slovenia.

5.4. Future Research and Open Topics

Several future directions of research are possible, and some open questions still await their answers.

Since HGC research is a very heterogeneous research area, an open issue that needs further research is the analysis of the research model and the differences in the strength of the influence across different data sets, including other samples of HGCs from other economies and countries. Therefore, to confirm the research model and pattern, the research could also be conducted in different countries or different samples of HGCs, because despite numerous findings on the importance of HGCs, there is no universally accepted definition of them [66], which could lead to differences in the definition of HGC samples.

Another open issue lies in analyzing other growth determinants, as our research only covers some of the most important ones within the specific content of the research model.

Another open issue is the dimension of entrepreneurial orientation that was not considered in our research, i.e., the dimension of autonomy [104]. Autonomy is important for the development of companies especially from the perspective of organization of resources [105], but the excessive pursuit of autonomy may reduce access to financial resources.

6. Conclusions

Currently, economies around the world are facing many global changes and challenges, especially COVID-19 and the Ukraine–Russia crisis, which can drastically change the operational processes of companies. Our research aims to compare the multidimensional model of HGCs' performance developed by Frešer et al. [6] between two points in time—i.e., before the latest global challenges and during highlighted challenges. The multigroup analysis of the second-order SEM model showed that there were statistically significant differences in the strength of the influence between the determinants ME and FP. In addition, the analysis showed that there were more statistically significant differences when the first-order SEM model was analyzed. This paper allows for some important contributions that can be seen in theoretical and practical implications. It aims to provide insights into how current challenges affect the strength of the influence between HGCs and growth inhibiting factors, thus reducing the open research gap.

Although the full implications of recent global challenges are not yet known, the results provide some important insights and lessons that could also be useful for policymakers trying to understand what impact global challenges (including COVID-19 and the Ukraine–Russia crisis) could have on economic growth and employment, a critically important group of HGCs. Providing this input is critical for relevant policymakers seeking to develop policies to ensure recovery and resilience, and for HGCs seeking to sustain high growth and development by focusing on the determinants of growth highlighted in the research.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Entrepreneurial orientation (“EO”) was measured on the basis of the seven-point Likert scale (1—I disagree completely; 7—I agree completely). The questionnaire consisted of the following statements (EO_q1–12): Q1: the term “risk taker” is considered a positive attribute for people in our business; Q2: people in our business are encouraged to take calculated risks with new ideas; Q3: our business emphasizes both exploration and experimentation for opportunities; Q4: we actively introduce improvements and innovations in our business; Q5: our business is creative in its methods of operation; Q6: our business seeks out new ways to do things; Q7: we always try to take the initiative in every situation (e.g., against competitors, in projects when working with others); Q8: we excel at identifying opportunities; Q9: we initiate actions to which other organizations respond; Q10: our business is intensely competitive; Q11: in general, our business takes a bold or aggressive approach when competing; Q12: we try to undo and outmaneuver the competition as best as we can.

Human capital (“HC”) of employees in the company was measured on the basis of the seven-point Likert scale (1—I disagree completely; 7—I agree completely). The questionnaire consisted of the following statements (HC_q1–13): Q1: our employees constantly do their best; Q2: our employees have leadership skills; Q3: our organization’s employees evaluate their actions; Q4: employees generally perform tasks with a lot of energy; Q5: employees learn from each other; Q6: our employees’ competence is at a suitable level; Q7: when an employee leaves the company, we have a training program for a successor; Q8: the organization supports employees in upgrading their skills and qualifications where necessary; Q9: our company employees are considered intelligent (gifted); Q10: our employees are widely considered the best in the whole banking sector; Q11: our organization consistently generates new ideas; Q12: our employees are satisfied with the organization; Q13: the organization is assured that it is getting the most from its employees.

Organizational networking capacity (“ONC”) was measured on the basis of the seven-point Likert scale (1—I disagree completely; 7—I agree completely). The questionnaire consisted of the following statements (ONC_Q1–11): Q1: we search locally to find proper network partners; Q2: we search globally to identify appropriate network partners; Q3: we search widely to look for the right partners; Q4: if something seems to be going wrong in relationships with partners, we try hard to figure out why; Q5: if the relationship with a partner is successful, we try to understand what makes it work well; Q6: we constantly assess and analyze our relationships with partners so that we know what adjustments to make; Q7: dynamically integrating networking activities into the business operational process is part of our firm’s strategy; Q8: we can find partners to count on in time when the need arises; Q9: we can be quite accessible to our partners in a timely fashion; Q10: we can get the needed assistance from our partners in an accurate and timely manner; Q11: our partners can refer us to a third party who could help if the partners cannot provide direct help.

Accessibility to financial resources (“FR”) was measured on the basis of the seven-point Likert scale, where the respondents would express their agreement (1—I disagree completely; 7—I agree completely) with the statement “We believe that we can successfully obtain financial resources from the financial sources below” (FR_1–7): FR_1: suppliers and other business partners (e.g., deferral of payment); FR_2: business angels, i.e., private investors; FR_3: venture capital investors; FR_4: bank; FR_5: national programs and subsidies, such as grants and subsidized interest rates; FR_6: European Union funds; FR_7: nonformal sources of financing, including the financial resources of friends and family.

Measures to overcome financing constraints (“ME”) implemented by the HGCs was also measured on the basis of the seven-point Likert scale, where the respondents would

express their agreement (1—I disagree completely; 7—I agree completely) with the statement “We have carried out the following measures with the aim of overcoming financial constraints in our enterprise or to ensure optimal access to financial resources” (ME 1–9): ME_1: outsourcing of production and search for business partners to conclude a wide variety of alliances; ME_2: reinforcement of the sales department (new employment) or hiring a marketing agency/distributor; ME_3: hiring an expert adviser to assist in the acquisition of various financial resources, in the preparation of projects and the like; ME_4: registering a new enterprise that can access resources and the transfer of resources between enterprises in the group; ME_5: restructuring, adaptation, and slowdown of development processes or activities in the enterprise; ME_6: obtaining additional information and finding other possible alternatives for the acquisition of financial resources; ME_7: improving the enterprise’s credit rating on the basis of long-term regular payments to all business stakeholders; ME_8: building a good business relationship with investors through long-term cooperation and appropriate business relations; ME_9: conducting periodic business meetings with investors at the headquarters of our enterprise.

Financial performance (“FP”) was measured on the basis of the seven-point Likert scale, where the respondents would express their agreement (1—I disagree completely; 7—I agree completely) with the statement “Compared to directly competing companies, we believe that our company shows better” (FP 1–5): FP_1: net profit; FP_2: ROE—return on equity (income before taxation/average value of capital); FP_3: ROA—return on assets (income before taxation/average assets); FP_4: revenue growth percentage (revenue of the current year/revenue of the previous year); FP_5: value added per employee.

References

1. Fasil, B.; Del Rio, J.C.; Dominick, C.; Fako, P.; Flachenecker, F.; Gavigan, J.P.; Janiri, M.; Stamenov, B.; Testa, G. *High Growth Enterprises in the COVID-19 Crisis Context*; JRC Technical Report; Publication Office of the European Union: Luxembourg, 2021.
2. Penrose, E. *The Theory of the Growth of the Firm*; Oxford University Press: Oxford, UK, 1959.
3. Močnik, D.; Širec, K. Growth aspirations of early-stage entrepreneurs: Empirical investigation of South-Eastern and Western European countries. *J. East Eur. Manag. Stud.* **2016**, *21*, 298–317. [\[CrossRef\]](#)
4. Gilbert, A.B.; McDougall, P.P.; Audretsch, B.D. New venture growth: A review and extension global. *J. Manag.* **2006**, *32*, 926–950. [\[CrossRef\]](#)
5. O’Gorman, C. The sustainability of growth in small- and medium-sized enterprises. *Int. J. Entrep. Behav. Res.* **2001**, *7*, 60–75. [\[CrossRef\]](#)
6. Frešer, B.; Širec, K.; Tominc, P. *Financial Determinants of High-Growth Companies. A Conceptual Model*; Palgrave Macmillan: Amsterdam, The Netherlands, 2020.
7. Nahapiet, J.; Ghoshal, S. Social Capital, Intellectual Capital, and the Organizational Advantage. *Acad. Manag. Rev.* **1998**, *23*, 242–266. [\[CrossRef\]](#)
8. Almeida, F.; Santos, J.D.; Monteiro, A.J. The Challenges and Opportunities in the Digitalization of Companies in a Post-COVID-19 World. *IEEE Eng. Manag. Rev.* **2020**, *48*, 97–103. [\[CrossRef\]](#)
9. Kraus, P.; Stokes, P.; Cooper, S.C.; Yipeng, L.; Moore, N.; Britzelmaier, B.; Tarba, S. Cultural Antecedents of Sustainability and Regional Economic Development—A Study of SME ‘Mittelstand’ Firms in Baden-Württemberg (Germany). *Int. J.* **2020**, *7–8*, 629–653. [\[CrossRef\]](#)
10. Liadze, I.; Macchiarelli, C.; Mortimer-Lee, P.; Juanino, S.P. *The Economic Costs of the Russia-Ukraine Conflict*; NIESR Policy Paper 32; National Institute of Economic and Social Research: London, UK, 2022.
11. Nurcahyono, N.; Hanum, N.A.; Sukesti, F. The COVID-19 Outbreak and its Impact on Stock Market Returns: Evidence From Indonesia. *J. Din. Akunt. Bisnis* **2021**, *8*, 47–58.
12. Mat Nor, F.; Ramli, N.A.; Marzuki, A.; Rahim, N. Corporate Sustainable Growth Rate: The Potential Impact of COVID-19 on Malaysian Companies. *J. Muamalat Islamic Financ. Res.* **2020**, *17*, 25–38. [\[CrossRef\]](#)
13. Connell, M.C.; Lemyze, C.; McGill, L.W. The persistent link between growing talent and growing the top line: Lessons from fast-growing firms in the COVID_19 recession. *Organ. Dyn.* **2021**, *50*, 100807. [\[CrossRef\]](#)
14. Henrekson, M.; Johansson, D. Gazelles as job creators: A survey and interpretation of the evidence. *Small Bus. Econ.* **2010**, *35*, 227–244. [\[CrossRef\]](#)
15. Shane, S. Why encouraging more people to become entrepreneurs is bad public policy. *Small Bus. Econ.* **2009**, *33*, 141–149. [\[CrossRef\]](#)
16. Brnjas, Z.; Vulićević, V.; Čanaićević, D. Importance and Role of Fast Growing Companies. *Gazelles Mod. Econ.* **2015**, *48*, 44–61.
17. Birch, L.D.; Medoff, J. Gazelles. In *Labor Markets, Employment Policy and Job Creation*; Solmon, L.C., Levenson, A.R., Eds.; Westview: Boulder, CO, USA, 1994; pp. 159–167.

18. Halabisky, D.; Dreessen, E.; Parsley, C. Growth in firms in Canada, 1985–1999. *J. Small Bus. Entrep.* **2006**, *19*, 255–268. [\[CrossRef\]](#)
19. Schreyer, P. *High-Growth Firms and Employment*; Science, Technology and Industry Working Papers 2000/3; OECD: Paris, France, 2000.
20. Storey, D.J. *Understanding the Small Business Sector*; Routledge: London, UK, 1994.
21. Davidsson, P.; Delmar, F. High-growth firms and their contribution to employment: The case of Sweden 1987–96. In *Entrepreneurship and the Growth of Firms*; Davidsson, P., Delmar, F., Wiklund, J., Eds.; Edward Elgar: Cheltenham, UK, 2006; pp. 156–178.
22. IFC. *SME Finance Policy Guide*; International Finance Corporation: Washington, WA, USA, 2011.
23. Beck, T.; Demirgüç-Kunt, A. Small and medium-size enterprises: Access to finance as a growth constraint. *J. Bank. Financ.* **2006**, *30*, 2931–2943. [\[CrossRef\]](#)
24. Brüderl, J.; Preisendörfer, P. Fast-growing businesses: Empirical evidence from a German study. *Int. J. Sociol.* **2000**, *30*, 45–70. [\[CrossRef\]](#)
25. Kim-Soon, N.; Ahmad, R.A.; Poh, C.Y. Improving small and medium enterprises financing for stronger financial and non-financial performance. *Adv. Sci. Lett.* **2017**, *23*, 3025–3028. [\[CrossRef\]](#)
26. Delmar, F.; Davidsson, P.; Gartner, B.W. Arriving at the high-growth firm. *J. Bus. Ventur.* **2003**, *18*, 189–216. [\[CrossRef\]](#)
27. Bluszcz, J.; Valente, M. The Economic Costs of Hybrid Wars: The Case of Ukraine. *Def. Peace Econ.* **2022**, *33*, 1–25. [\[CrossRef\]](#)
28. Nickel, C.; Koester, G.; Lis, E. Inflation Developments in the Euro Area Since the onset of the Pandemic. *Intereconomics* **2022**, *57*, 69–75. [\[CrossRef\]](#)
29. Sharif, A.; Aloui, C.; Yarovaya, L. COVID-19 pandemic, oil prices, stock market, geopolitical risk and policy uncertainty nexus in the US economy: Fresh evidence from the wavelet-based approach. *Int. Rev. Financ. Anal.* **2020**, *70*, 101496. [\[CrossRef\]](#)
30. Vidya, C.T.; Prabheesh, K.P. Implications of COVID-19 Pandemic on the Global Trade Networks. *Emerg. Mark. Financ. Trade* **2020**, *56*, 2408–2421. [\[CrossRef\]](#)
31. Liu, Y.; Lee, M.J.; Lee, C. The challenges and opportunities of a global health crisis: The management and business implications of COVID-19 from an Asian perspective. *Asian Bus. Manag.* **2020**, *19*, 277–297. [\[CrossRef\]](#)
32. IMF. *World Economic Outlook: War Sets Back the Global Recovery*; International Monetary Fund: Washington, WA, USA, 2022.
33. Boers, B.; Henschel, T. The role of entrepreneurial orientation in crisis management: Evidence from family firms in enterprising communities. *J. Enterprising Communities People Places Glob. Econ.* **2021**, *16*, 756–780. [\[CrossRef\]](#)
34. Covin, G.J.; Wales, J.W. The Measurement of Entrepreneurial Orientation. *Entrep. Theory Pract.* **2012**, *36*, 677–702. [\[CrossRef\]](#)
35. Avlonitis, J.G.; Salavou, E.H. Entrepreneurial orientation of SMEs, product innovativeness, and performance. *J. Bus. Res.* **2007**, *60*, 566–575. [\[CrossRef\]](#)
36. Schillo, S. Entrepreneurial Orientation and Company Performance: Can the Academic Literature Guide Managers? *Technol. Innov. Manag. Rev.* **2011**, *1*, 20–25. [\[CrossRef\]](#)
37. Hughes, M.; Morgan, E.R. Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Ind. Mark. Manag.* **2007**, *36*, 651–661. [\[CrossRef\]](#)
38. Cowling, M.; Liu, W.; Ledger, A. Small business financing in the UK before and during the current financial crisis. *Int. Small Bus. J.* **2012**, *30*, 778–800. [\[CrossRef\]](#)
39. Engel, D.; Keilbach, M. Firm-level implications of early stage venture capital investment—An empirical investigation. *J. Empir. Financ.* **2007**, *14*, 150–167. [\[CrossRef\]](#)
40. Freel, S.M. Are Small Innovators Credit Rationed? *Small Bus. Econ.* **2007**, *28*, 23–35. [\[CrossRef\]](#)
41. Sahlman, A.W. The structure and governance of venture-capital organizations. *J. Financ. Econ.* **1990**, *27*, 473–521. [\[CrossRef\]](#)
42. Shepherd, A.D. Venture Capitalists' Assessment of New Venture Survival. *Manag. Sci.* **1999**, *45*, 621–632. [\[CrossRef\]](#)
43. Bilau, J.; Sarkar, S. Financing innovative start-ups in Portuguese context: What is the role of business angles networks? *J. Knowl. Econ.* **2016**, *7*, 920–934. [\[CrossRef\]](#)
44. Cho, J.H.; Pucik, V. Relationship between innovativeness, quality, growth, profitability, and market value. *Strateg. Manag. J.* **2005**, *26*, 555–575. [\[CrossRef\]](#)
45. Soininen, J.; Puumalainen, K.; Sjögren, H.; Syrjä, P. The impact of global economic crisis on SMEs: Does entrepreneurial orientation matter? *Manag. Res. Rev.* **2012**, *35*, 927–944. [\[CrossRef\]](#)
46. Su, Z.; Tang, J. Product innovation, cost-cutting and firm economic performance in the post-crisis context: Canadian micro evidence. *J. Cent. Cathedra Bus. Econ. Res. J.* **2016**, *9*, 4–26. [\[CrossRef\]](#)
47. Laton, Z.M.; Yunus, H.; Razak, A.A.M. Innovation and Organizational Cost Saving: A Case from Malaysian Innovation Project. *Mediterr. J. Soc. Sci.* **2015**, *6*, 495–502. [\[CrossRef\]](#)
48. Railborn, A.C.; Butler, B.J.; Massoud, F.M. Outsourcing support functions: Identifying and managing the good, the bad, and the ugly. *Bus. Horiz.* **2009**, *52*, 347–356. [\[CrossRef\]](#)
49. Garri, M.; Konstantopoulos, N. Market information acquisition: A prerequisite for successful strategic entrepreneurship. *Procedia-Soc. Behav. Sci.* **2013**, *73*, 643–651. [\[CrossRef\]](#)
50. OECD. *Human Capital: How What You Know Shapes Your Life*; Corporate Affairs Division of the Directorate for Financial and Enterprise Affairs: Paris, France, 2007.
51. Mu, J.; Di Benedetto, A. Networking Capability and New Product Development. *IEEE Trans. Eng. Manag.* **2012**, *59*, 4–19. [\[CrossRef\]](#)
52. Carter, S.; Shaw, E.; Lam, W.; Wilson, F. Gender, Entrepreneurship, and Bank Leading: The Criteria and Processes Used by Bank Loan officers in Assessing Applications. *Entrep. Theory Pract.* **2007**, *31*, 427–444. [\[CrossRef\]](#)

53. Lukkarinen, A.; Teich, E.J.; Wallenius, H.; Wallenius, J. Success drivers of online equity crowdfunding campaigns. *Decis. Support Syst.* **2016**, *87*, 26–38. [\[CrossRef\]](#)
54. Uzzi, B. Embeddedness in the making of financial capital: How social relations and networks benefit firms seeking financing. *Am. Sociol. Rev.* **1999**, *64*, 481–505. [\[CrossRef\]](#)
55. Batjargal, B.; Liu, M. Entrepreneurs' Access to Private Equity in China: The Role of Social Capital. *Organ. Sci.* **2004**, *15*, 159–172. [\[CrossRef\]](#)
56. Baum, C.A.J.; Silverman, S.B. Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. *J. Bus. Ventur.* **2004**, *19*, 411–436. [\[CrossRef\]](#)
57. Clark, C. The impact of entrepreneurs' oral 'pitch' presentation skills on business angels' initial screening investment decisions. *Ventur. Cap.* **2008**, *10*, 257–279. [\[CrossRef\]](#)
58. Talaia, M.; Pisoni, A.; Onetti, A. Factors influencing the fund raising process for innovative new ventures: An empirical study. *J. Small Bus. Enterpr. Dev.* **2016**, *23*, 363–378. [\[CrossRef\]](#)
59. Shane, S. A general theory of entrepreneurship. In *The Individual-Opportunity Nexus*; Edward Elgar: Cheltenham, UK, 2003.
60. Freeman, S.; Edwards, R.; Schroder, B. How Smaller Born-Global Firms Use Networks and Alliances to Overcome Constraints to Rapid Internationalization. *J. Int. Mark.* **2006**, *14*, 33–63. [\[CrossRef\]](#)
61. Antonietti, R.; Ferrante, R.M.; Leoncini, R. Local market size, social capital and outsourcing: Evidence from Emilia Romagna. *Small Bus. Econ.* **2016**, *47*, 243–260. [\[CrossRef\]](#)
62. Chou, C.-T.; Chen, R.-J.; Pan, L.S. The impacts of social capital on information technology outsourcing decisions: A case study of a Taiwanese high-tech firm. *Int. J. Inf. Manag.* **2006**, *26*, 249–256. [\[CrossRef\]](#)
63. Ali, J.A.; Al-Aali, A. Human capital and crisis management. *J. Transnatl. Manag.* **2016**, *21*, 200–216. [\[CrossRef\]](#)
64. Giones, F.; Brem, A.; Pollack, M.J.; Michaelis, L.T.; Klyver, K.; Brinckmann, J. Revising entrepreneurial action in response to exogenous shocks: Considring the COVID-19 pandemic. *J. Bus. Ventur. Insights* **2020**, *14*, 1–7. [\[CrossRef\]](#)
65. Hambrick, C.D.; Crozier, M.L. Stumblers and stars in the management of rapid growth. *J. Bus. Ventur.* **1985**, *1*, 31–45. [\[CrossRef\]](#)
66. Moreno, M.A.; Casillas, C.J. High-growth SMEs versus non-high-growth SMEs: A discriminant analysis. *Entrep. Reg. Dev.* **2007**, *19*, 69–88. [\[CrossRef\]](#)
67. ECB. *Survey on the Access to Finance of Enterprises in the Euro Area—October 2017 to March 2018*; European Central Bank: Frankfurt, Germany, 2018.
68. Baum, C.A.J. Organizational ecology. In *Handbook of Organizational Studies*; Clegg, S., Hardy, C., Nord, W., Eds.; Sage: London, UK, 1996; pp. 77–114.
69. Neville, A.B.; Bell, J.S.; Mengüç, B. Corporate reputation, stakeholders and the social performance-financial performance relationship. *Eur. J. Mark.* **2005**, *39*, 1184–1198. [\[CrossRef\]](#)
70. Kaplan, S.R.; Norton, P.D. The Balanced Scorecard—Measures That Drive Performance. *Harv. Bus. Rev.* **1992**, *70*, 71–79.
71. Bunyasi, G.W.N.; Bwisa, H.; Namusonge, G. Effects of entrepreneurial finance on growth of small and medium enterprises in Kenya. *Eur. J. Bus. Manag.* **2014**, *6*, 113–123.
72. Kisaka, S.E.; Mwewa, M.N. Effects of micro-credit, micro-savings and training on the growth of small and medium enterprises in Machakos County, Kenya. *Res. J. Financ. Account.* **2014**, *5*, 43–49.
73. White, M.; Maru, L.; Boit, J.R. Financial Resource as Drivers of Performance in Small and Micro Enterprises in Service Retail Sector: A Case of Eldoret Municipality, Uasin Gishu Country, Kenya. *Glob. J. Hum.-Soc. Sci. E Econ.* **2015**, *15*, 5–15.
74. Hwang, J.; Kim, H.; Jung, D. The Effect of ESG Activities on Financial Performance during the COVID-19 Pandemic—Evidence from Korea. *Sustainability* **2021**, *13*, 11362. [\[CrossRef\]](#)
75. Giustiniano, L.; Giulio, C. The Impact of Outsourcing on Business Performance: An Empirical Analysis. *J. Mod. Account. Audit.* **2013**, *9*, 153–168.
76. Görg, H.; Hanley, A. Does Outsourcing Increase Profitability? *Econ. Soc. Rev.* **2004**, *35*, 267–288. [\[CrossRef\]](#)
77. Kamyabi, Y.; Devi, S. Accounting Outsourcing and Firm Performance in Iranian SMEs. *Int. J. Econ. Financ.* **2011**, *3*, 181–192. [\[CrossRef\]](#)
78. Kotabe, M.; Mol, J.M. Outsourcing and financial performance: A negative curvilinear effect. *J. Purch. Supply Manag.* **2009**, *15*, 205–213. [\[CrossRef\]](#)
79. Egbunike, P.A.; Adeniyi, I.S. Cost Reduction Strategy and Firm Profitability during Recession Period: Nigerian Banking Industry Experience. *Acta Univ. Danub.* **2017**, *13*, 148–155. [\[CrossRef\]](#)
80. Mai, R.; Niemand, T.; Kraus, S. A tailored-fit model evaluation strategy for better decisions about structural equation models. *Technol. Forecast. Soc. Chang.* **2021**, *173*, 1–17. [\[CrossRef\]](#)
81. Vidotto Frasson, D.J.; Ferenhof, A.H.; Selig, M.P.; Bastos, C.R. A human capital measurement scale. *J. Intellect. Cap.* **2017**, *18*, 316–329. [\[CrossRef\]](#)
82. Brown, E.T. Resource Orientation, Entrepreneurial Orientation and Growth: How the Perception of Resource Availability Affects Small Firm Growth. Ph.D. Thesis, Rutgers University, Newark, NJ, USA, 1996.
83. Chen, M.-C.; Cheng, S.-J.; Hwang, Y. An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *J. Intellect. Cap.* **2005**, *6*, 159–176. [\[CrossRef\]](#)
84. Field, A. *Discovering Statistics Using SPSS*, 3rd ed.; SAGE Publications Ltd.: London, UK, 2009.
85. Janssens, W.; Wijnem, K.; De Pelsmacker, P.; Van Kenhove, P. *Marketing Research with SPSS*; Pearson Education: Harlow, UK, 2008.

86. Kock, N. Advanced mediating effects tests, multi-group analyses, and measurement model assessments in PLS-based SEM. *Int. J. E-Collab.* **2014**, *10*, 1–13. [[CrossRef](#)]
87. Huang, C.-C.; Wang, Y.-M.; Wu, T.-W.; Wang, P.-A. An Empirical Analysis of the Antecedents and Performance Consequences of Using the Moodle Platform. *Int. J. Inf. Educ. Technol.* **2013**, *3*, 217–221. [[CrossRef](#)]
88. Kock, N. *WarpPLS User Manual: Version 8.0*; ScriptWarp Systems: Laredo, TX, USA, 2022.
89. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*, 7th ed.; Prentice Hall: Upper Saddle River, NY, USA, 2010.
90. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*; Lawrence Erlbaum: Hillsdale, NY, USA, 1988.
91. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [[CrossRef](#)]
92. Byrne, B.M. *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*; Lawrence Erlbaum Associates: Mahwah, NY, USA, 2001.
93. Wiklund, J.; Patzel, H.; Shepherd, A.D. Building an integrative model of small business growth. *Small Bus. Econ.* **2009**, *32*, 351–374. [[CrossRef](#)]
94. Munim, Z.H.; Schramm, H.-J. The impacts of port infrastructure and logistics performance on economic growth: The mediating role of seaborne trade. *J. Shipp. Trade* **2018**, *3*, 1–19. [[CrossRef](#)]
95. Cheah, J.-H.; Thurasamy, R.; Memon, A.M.; Chuah, F.; Ting, H. Multigroup Analysis using SmartPLS: Step-by-Step Guidelines for Business Research. *Asian J. Bus. Res.* **2020**, *10*, 1–19. [[CrossRef](#)]
96. Kock, N. One-tailed or two-tailed P values in PLS-SEM? *Int. J. E-Collab.* **2015**, *11*, 1–7. [[CrossRef](#)]
97. Savignac, F. Impact of financial constraints on innovation: What can be learned from a direct measure? *Econ. Innov. New Technol.* **2008**, *17*, 553–569. [[CrossRef](#)]
98. Campello, M.; Graham, R.J.; Harvey, R.C. The real effects of financial constraints: Evidence from a financial crisis. *J. Financ. Econ.* **2010**, *97*, 470–487. [[CrossRef](#)]
99. Schneider, C.; Veugelers, R. On young highly innovative companies: Shy they matter and how (not) to policy support them. *Ind. Corp. Chang.* **2010**, *19*, 969–1007. [[CrossRef](#)]
100. Ratten, V. COVID-19 and entrepreneurship: Future research directions. *Strateg. Chang.* **2021**, *30*, 91–98. [[CrossRef](#)]
101. Castro, P.M.; Gomez Zermeno, G.M. Being and entrepreneur post-COVID-19—Resilience in times of crisis: A systematic literature review. *J. Entrep. Emerg. Econ.* **2021**, *13*, 721–746.
102. Mwei, K.P.; Okioma, M.L.; Too, K.J. Teacher-related factors in integrating information and communication technology in secondary education: A partial least squares structural equation modeling approach. *Int. J. Educ. Soc. Sci. Res.* **2020**, *3*, 1–36. [[CrossRef](#)]
103. Aasma, M.; Zhang, Y.A.; Muhammad, Q.M. Does financial availability sustain financial, innovative, and environmental performance? Relation via opportunity recognition. *Corp. Soc. Responsib. Environ. Manag.* **2019**, *27*, 562–575.
104. Lumpkin, G.T.; Dess, G.G. Clarifying the entrepreneurial orientation construct and linking it to performance. *Acad. Manag. Rev.* **1996**, *21*, 135–172. [[CrossRef](#)]
105. Groves, T.; Hong, Y.; McMillan, J.; Naughton, B. Autonomy and Incentives in Chinese State Enterprises. *Q. J. Econ.* **1994**, *109*, 183–209. [[CrossRef](#)]