

# The influence of family business background on the entrepreneurial intention of individuals A quantitative study of Hungarian university students

KRISZTOFER SZABÓ\*  and MÁRTA ARANYOSSY 

Institute of Entrepreneurship and Innovation, Corvinus University of Budapest, Budapest, Hungary

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## ABSTRACT

With an overall aim of providing insights into fostering an entrepreneurial mindset and promoting economic development, researchers have devoted notable attention to intentional and motivational factors for starting businesses, as well as those influencing processes from idea generation to the realisation of a new business. This research project aims to investigate the influence of family business background on entrepreneurial intention. One of the novel features of the approach is the rigorous statistical exploration of direct and moderating effects of family business background while accounting for other factors influencing entrepreneurial intention. The analysis is based on a survey of 590 active university students studying business and economics in the seven largest universities in Hungary. Hierarchical regression analysis was applied to examine how the existence of family business background can influence and moderate relationships between individual factors and entrepreneurial intention. Results confirm that family business background has a significant positive impact on entrepreneurial intention and is most likely to exert its impact through increased human capital levels, entrepreneurial knowledge, skills and experience. The findings not only contribute to accumulated knowledge of the interdisciplinary family entrepreneurship field, but also have policy and educational implications.

## KEYWORDS

family business, entrepreneurial intention, human capital, social capital, entrepreneurial motivation

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\* Corresponding author. E-mail: krisztofer.szabo@uni-corvinus.hu

## 1. INTRODUCTION

The COVID-19 pandemic resulted in significant economic disruptions globally. However, the GEM<sup>1</sup> Global Report concluded that entrepreneurial activity was stable during various crises in the last two and half decades and in the course of their aftermaths. Hungary displays data conforming to this overall picture (GEM 2023; Gosztonyi 2022). While some studies find that macroeconomic changes do not significantly lead to a decrease in entrepreneurial activity, others conclude that higher levels of risk and uncertainty might have an adverse effect (Cardella et al. 2024). In line with changes in economic and social contexts, examination of the impact of the pandemic on students' aspirations to initiate new businesses represents a recent development in research on entrepreneurial intention (Botezat et al. 2022), which also contributes to ongoing development of entrepreneurial education in the post-COVID era.

Entrepreneurial activity is a complex process involving different stages, one of which is the evolution of entrepreneurial intention (Ali et al. 2021; Ács et al. 2018; Davis et al. 2016; Zellweger et al. 2011). In recent years, researchers have focused efforts on intentional and motivational factors for starting businesses, as well as those influencing processes from idea generation to the realisation of a new business (Ali – Jabeen 2022; Hassan et al. 2021; Huszák – Jáki 2022; S. Gubik 2021). Several studies have examined gender differences in entrepreneurial motivational factors (Bönte – Piegeler 2013; Minniti – Nardone 2007; Osmani et al. 2022), while another specific research strand focuses on the motivation of entrepreneurs in terms of response to social and human capital influences (Brieger – De Clerq 2019; Capelleras et al. 2019; Coleman 1988; Pérez-Macías et al. 2022).

Various surveys indicate that the global proportion of adults willing to start a business within a short term period is 33.3% (Bosma et al. 2020), compared to only 10.4% in Hungary (Csákné-Filep et al. 2022; GEM 2023). In relation to this data, it is important to regularly monitor the entrepreneurial inclination of younger generations. The entrepreneurship literature has a long history of examining intentions of higher education students following graduation where an entrepreneurial career is an available option (Farkas – S. Gubik 2020; Jáki et al. 2019; Molnár – Jáki 2021; S. Gubik 2021; Sieger et al. 2021). This research project also aims to contribute to this research stream. 58 countries provided data for the 2021 sample of the 'GUESS<sup>2</sup>' survey (Sieger et al. 2021), where 17.8% of respondents indicated a plan to start a business immediately after graduation, while 32.3% of respondents planned to do so within 5 years (Sieger et al. 2021). In contrast, results of the survey conducted at universities in Hungary show a slightly different picture. Only 13.97% of students plan to start a business after leaving university, however, in five years following graduation, entrepreneurial intention indicates an increase for 36% of respondents (S. Gubik – Farkas 2022). Results of the report indicate that the effect of economic studies and the presence of an entrepreneurial environment increase entrepreneurial inclination (S. Gubik – Farkas 2022). Furthermore, the intention to start a business can be greatly influenced by the attitude of individuals acquainted with those wishing to start a business, particularly family members (Csákné-Filep et al. 2022; Szerb – Márkus 2007). If an individual receives negative feedback from close relatives, it is likely to reduce their motivation to become an entrepreneur (Criaco et al. 2017),

<sup>1</sup>Global Entrepreneurship Monitor: for more information, please visit: <https://www.gemconsortium.org>.

<sup>2</sup>Global University Entrepreneurial Spirit Students' Survey: for more information on the international survey, please visit: <https://www.guesssurvey.org>.



while in the opposite case a supportive environment greatly facilitates the conversion of entrepreneurial motivation into entrepreneurial action (Carr – Sequeira 2007; Solesvik 2013).

Interest in family businesses as a strand of entrepreneurship research has grown in the last two decades (Szabó 2023) as a result of growing awareness of the potential of entrepreneurs to create jobs, incubate new firms, and to increase economic development (Aparicio et al. 2021; Astrachan – Shanker 2003; Kárpáti – Drótos 2023). In the context of the family business literature, the study of generational change and succession is an increasingly popular emerging field of research (Sallay et al. 2023; Wieszt 2020). However, young people with family business backgrounds and strong entrepreneurial inclinations tend not only to have the option of becoming part of a family business, but also of starting their own businesses (Kelley et al. 2020; Zellweger 2017).

Previous research projects have focused on entrepreneurial motivation in the form of GUESSS or GEM longitudinal surveys (i.e. Farkas – S. Gubik 2020; Csákné-Filep et al. 2022; S. Gubik – Farkas 2016; Sieger et al. 2024). In contrast, the aim of this study is not to investigate students' entrepreneurial motivation and career plans in general, but to specifically examine factors influencing their entrepreneurial intention in the context of a family business background. Various recent studies indicate a focus whereby family business background is also examined as a sub-area (e.g. Csákné-Filep et al. 2023), which serves to confirm the relevance and purpose of this study. Moreover, a novel approach of examining the intricacies of the interrelationship of family backgrounds and other influencing factors of entrepreneurial intention by use of multiple hierarchical modelling is also applied.

This paper is structured as follows: firstly, a literature review provides an overview of previous research to support hypothesis development; the following methodology section then outlines the data collection, measurement and data analysis approach deployed; the results and discussion section reports findings and outlines their implications, while the final section contains conclusions, limitations, and suggestions for future research directions.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### 2.1. Entrepreneurial intention: theory and factors

The term “entrepreneurial intention” and various synonyms is widely used in the corpus of entrepreneurship literature (Bird 1988; Thompson 2009). Such a large diversity of terms may be related to the view that entrepreneurial activity is perceived and examined as a process (Held et al. 2018; Shane – Venkataraman 2000). Thompson (2009) defined entrepreneurial intention as the self-acknowledged conviction of an individual mind in terms of the possibility of starting up a new business with a sincere and dedicated plan to do so at a certain point of time. It can also be assumed that this process develops over time and may be considered as a mental activity of individuals, especially at early life stages (Bergmann – Stephan 2013). This is consistent with the assumption of Ajzen's theory of planned behaviour (1985), where it is suggested that the higher the level of intention, the greater the potential for displaying behaviour arising from it (Ajzen, 1991). Other models (i.e. Bandura 1977; Shapero – Sokol 1982) have also strongly emphasised that understanding entrepreneurial intention contributes significantly to understanding firm entrepreneurial actions of individuals (Krueger et al. 2000; Minniti – Nardone 2007). Other models developed in this century (i.e. Bigos – Michalik 2020; Sánchez 2011) regard the intention to start a business as a central decision since it should determine whether a new business is to be



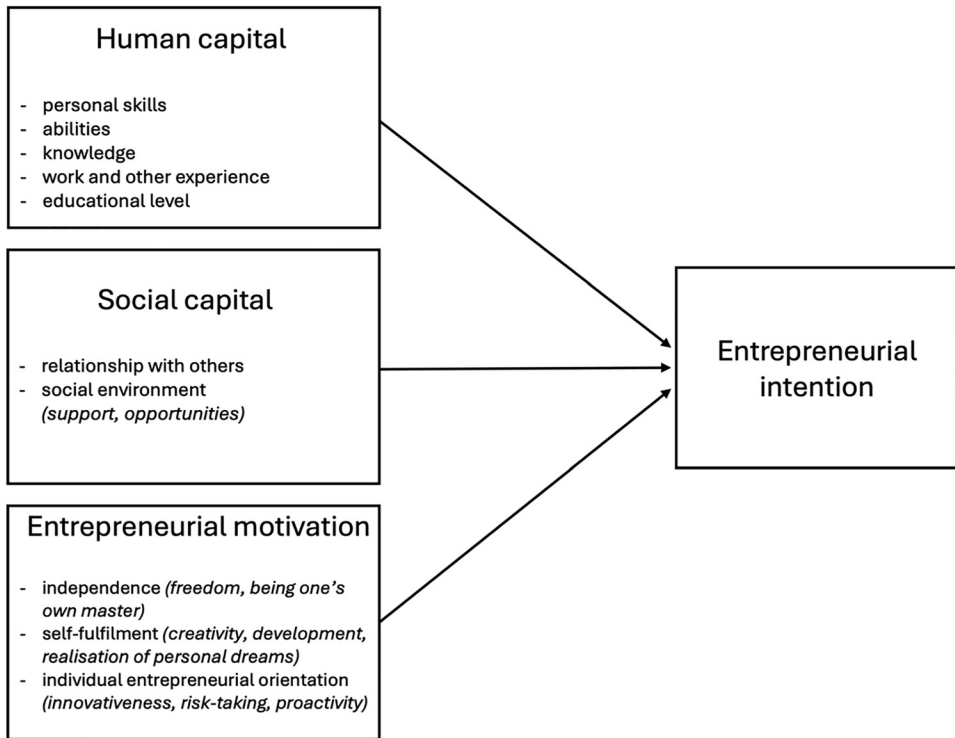
launched. Intention may as such emanate from necessity or entrepreneurial activity based on an opportunity (Krueger et al. 2000; Minniti – Nardone 2007). On this basis, a major stream of research has aimed to explore and understand antecedents predicting entrepreneurial intention (i.e. Bird 1988; Jáki et al. 2023; Peterman – Kennedy 2003). In this study, three main categories of factors influencing entrepreneurial intentions are considered: human capital, social capital and entrepreneurial motivation.

Research interest in the influence of human and social capital on entrepreneurial intent is currently very strong (Szabó – Aranyosy 2022). Human capital, taken to encompass skills, abilities, knowledge and experience of individuals, can be an important influential driver of entrepreneurial intention (Parker 2011). The role of education and experience is especially highlighted on the basis of extensive research (Capelleras et al. 2019; Vinogradova et al. 2023). Human capital may also be considered as a cognitive resource of entrepreneurial intention since it depends on the knowledge, work experience, personal skills and educational levels of individuals (Karabulut 2016). Such elements are assumed to influence entrepreneurial inclination and can support an entrepreneurial career decision (Eniola et al. 2021).

Social capital is defined by Muller (2006) as the sum of resources that individuals acquire from their relationships with others. The extent of social capital development may also depend on the level of an individual's presence within a social environment, and how it might support entrepreneurial opportunities (Lee – Jones 2015; Pearson – Carr 2011). Various studies suggest that social capital may contribute to the development of entrepreneurial intention and the implementation of a new business, and influence the extent of access of other entrepreneurs to an individual's family or social circle (Davidsson – Honig 2003; Lee – Jones 2015).

Such factors are also related to entrepreneurial motivation, which Mitchell and Daniels (2003) defined as a set of psychological processes to guide, energise, and sustain entrepreneurial action. A search for independence and self-fulfilment is of particular importance among the range of entrepreneurial motivation factors (Westhead et al. 2005). Moreover, factors underlying independence include freedom and fulfilment of personal destiny, which may accordingly be influenced by the experience of creativity, development, and the realisation of personal dreams (Ibrahim – Masud 2016; Solesvik 2013). The research corpus also highlights psychological characteristics which influence entrepreneurial intention (Baron 2000, Karabulut 2016). For example, Shaver and Scott (1991) investigated whether a specific psychological profile can be identified in relation to risk-taking, problem-solving, and innovativeness. Such aspects may relate to reinforced perceptions of individual entrepreneurial orientation (Martins – Perez 2020). Bolton and Lane (2012) developed a scale consisting of three dimensions for individual entrepreneurial orientation: innovativeness, risk-taking, and proactivity. As a result, later studies tended to define individual entrepreneurial orientation as the ability, competence, and willingness of an individual to become an entrepreneur (i.e. Taatila – Down 2012) and to consider it as a competence that can be developed through experiential learning (i.e. Sahoo – Panda 2019). On this basis, it is essential to take individual entrepreneurial orientation and entrepreneurial motivational factors into account when assessing entrepreneurial intention. Furthermore, analysing and measuring these factors can be particularly important in the case of students with family entrepreneurial backgrounds. In many cases, various desires and motivational factors may not be satisfied when taking over a family business, so the entrepreneurial intention may be fulfilled in the form of individuals setting up their own businesses (Hassan et al. 2021; Koe 2016; Zellweger et al. 2011). Figure 1 summarises these findings for a better understanding of and linking to the research model presented in Fig. 2.





**Fig. 1. Conceptual framework**

**Source:** authors (based on Bolton – Lane 2012; Capelleras et al. 2019; Davidsson – Honig 2003; Karabulut 2016; Lee – Jones 2015; Martins – Perez 2020; Muller 2006; Parker 2011; Pearson – Carr 2011; Shaver – Scott 1991; Taatila – Down 2012; Vinogradova et al. 2023; Westhead et al. 2005).

## 2.2. Family business background and entrepreneurial intention

Previous studies indicate that family business background is one of the main factors which may positively influence entrepreneurial intention (i.e. Ayalew – Zeleke 2018; Georgescu – Herman 2020; S. Gubik – Farkas 2016). The GUESSS 2011 study in conducted Hungary found that the majority of students from entrepreneurial families make no plans to take over a family business. However, they displayed a greater inclination to become entrepreneurs themselves after their university studies (S. Gubik 2014; Szerb – Lukovszki 2013). Other international studies display similar findings: a family business background has a positive influence on a student's entrepreneurial intentions (Fadillah –Thamrin 2019; Georgescu – Herman 2020; Saraswati et al. 2022). This positive effect of family business background on entrepreneurial intention may accordingly materialise through diverse causal paths. For example, students with a family entrepreneurial background may be relatively more optimistic about their self-efficacy to pursue an entrepreneurial career (Zellweger et al. 2011). From other studies, it is suggested that having entrepreneurial parents as role models may influence the attractiveness of selecting an entrepreneurial career (i.e. Mahto et al. 2020; Mosolygó-Kiss et al. 2022; Scherer et al. 1989). However there is



currently no scientific consensus on how family business background relates to the previously outlined factors underlying entrepreneurial intention (Aloulou – Algarni 2022; Maresch et al. 2016; Zellweger et al. 2011) in that the relationships between such factors is relatively unexplored.

Therefore, this study aims to assess the effects of family business background on entrepreneurial intention, by considering the interrelated influence of other dominant factors located in the literature. On this basis the following hypotheses are formed.

H1: Family business background has a significant positive direct effect on entrepreneurial intention.

While some studies have already examined the influence of family business background (Sieger – Minola 2016; Zellweger et al. 2011), and others in a wider context of entrepreneurial factors (Hassan et al. 2021; Nungsari et al. 2023; S. Gubik – Farkas 2022), there is a lack of research on the intricacies of effective mechanisms of entrepreneurial action and the interrelationship between such factors. Following from the aim of this study, it is proposed to examine the direct, contingent and moderating effects of family business background on entrepreneurial intention. Figure 2 illustrates the research model. The hypothesised relationships between key concepts are outlined as follows:

H2: Family business background has a moderating effect on the influence of other factors on entrepreneurial intention.

H2a: Family business background has a moderating effect on the influence of human capital on entrepreneurial intention.

H2b: Family business background has a moderating effect on the influence of social capital on entrepreneurial intention.

H2c: Family business background has a moderating effect on the influence of entrepreneurial motivation on entrepreneurial intention.

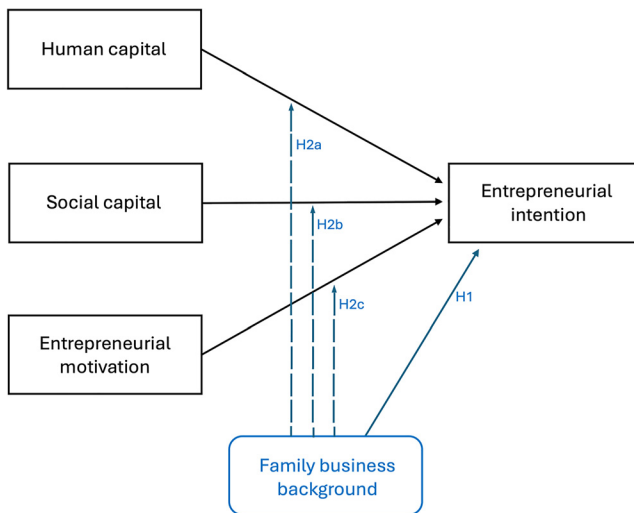


Fig. 2. Research model

Source: authors.



### 3. METHODOLOGY

#### 3.1. Data collection and measurement

Similarly to data collection trends observed in the corpus of international literature (S. Gubik – Farkas 2022; Sieger et al. 2021), we surveyed students attending Hungarian universities, who study business and economics. Data was collected through an online questionnaire in the autumn of 2023, which was opened to and shared with business faculties of major Hungarian universities for voluntary contribution. The final database contains responses of 590 students from the seven largest universities active in the areas of business and economics (see Table 1), in line with sample sizes of similar surveys in other countries (Chilenga et al. 2022; Malebana 2023). Characteristics of the sample composition are also outlined in Table 1. The sample is homogenous in the regard that all respondents had already studied entrepreneurship-related foundational courses. However, sample composition is not representative in terms of university affiliation. Although Corvinus University of Budapest students make up 47% of the respondents, the university has only a 10% share of undergraduate and master's students on business and

**Table 1.** Sample characteristics

| Age  | Frequency        | Relative frequency        | University                                      | Frequency        | Relative frequency        |
|--|------------------|---------------------------|---|------------------|---------------------------|
| 18–20 years  | 209              | 35%                       | Corvinus University of Budapest                 | 278              | 47%                       |
| 21–25 years  | 324              | 55%                       | Budapest Business University                    | 6                | 1%                        |
| 26+ years  | 57               | 10%                       | Budapest University of Technology and Economics | 21               | 4%                        |
| <b>Total</b>                                       | <b>590</b>       | <b>100%</b>               | University of Debrecen                          | 88               | 15%                       |
| <b>Gender</b>                                      | <b>Frequency</b> | <b>Relative frequency</b> | Óbuda University                                | 121              | 21%                       |
| Male   | 258              | 44%                       | Széchenyi István University                     | 54               | 9%                        |
| Female   | 332              | 56%                       | University of Szeged                            | 22               | 4%                        |
| <b>Total</b>                                       | <b>590</b>       | <b>100%</b>               | <b>Total</b>                                    | <b>590</b>       | <b>100%</b>               |
| <b>Intention to start a business in the future</b> | <b>Frequency</b> | <b>Relative frequency</b> | <b>Level of studies</b>                         | <b>Frequency</b> | <b>Relative frequency</b> |
| No   | 178              | 30%                       | Bachelor  | 531              | 90%                       |
| Yes  | 412              | 70%                       | Master  | 59               | 10%                       |
| <b>Total</b>                                       | <b>590</b>       | <b>100%</b>               | <b>Total</b>                                    | <b>590</b>       | <b>100%</b>               |

Source: authors.





management courses in Hungary (FIR 2024). Nonetheless, since Corvinus is also ranked as the best university in the country by the QS ranking (Kurucz 2024), it is assumed it possesses over-representation of the best and most motivated students (Fábry 2023).

The questionnaire was sent by e-mail and contained a cover letter outlining the purpose of the survey and also guaranteed anonymity of respondents. Upon recommendations of Chang et al. (2010), the use of vague and unfamiliar terms was eliminated by a pre-test pilot survey. The questionnaire covered demographic characteristics, human capital, social capital, entrepreneurial motivation, family business background and entrepreneurial intention and related plans. Wherever possible, survey questions were modelled on previous studies (adapted chiefly from the GUESSS survey) to ensure reliability and comparability.

For modelling purposes, family business background was measured directly by the number of close family members such as parents, grandparents or siblings running a business. All other independent variables were measured on equally spaced 5-point Likert scales (Maeda 2015). We used entrepreneurial knowledge and skills as a proxy variable for human capital based on the assessment of respondents. Social capital was assessed through the perceived availability of successful entrepreneurs in the immediate environmental vicinity of respondents. Finally, entrepreneurial motivation was measured by means of individual entrepreneurial orientation, thereby reflecting the perceived attractiveness of an entrepreneurial career path.

Entrepreneurial intention acting as the dependent variable was measured on a 5-point Likert scale, where respondents could indicate the seriousness of their intentions based on where they currently perceive their standing in the entrepreneurial process (0 – no intention, 1 – intention with no business idea, 2 – business idea, 3 – collecting resource needs, 4 – product/service portfolio, 5 – live business). This was similar to the methodology applied by Antončič and Auer Antončič (2023). Descriptive statistics of the key variables are outlined in Table 2.

**Table 2.** Descriptive statistics

|   | N   | Minimum | Maximum | Mean | Std. deviation | Skewness | Kurtosis |
|---|-----|---------|---------|------|----------------|----------|----------|
| Family business: family members running a business      | 590 | 0       | 4       | 0.59 | 0.907          | 1.464    | 1.367    |
| Human capital: entrepreneurial knowledge                | 590 | 1       | 5       | 2.77 | 1.067          | 0.204    | -0.485   |
| Social capital: directly knows successful entrepreneurs | 590 | 1       | 5       | 3.94 | 1.315          | -0.955   | -0.433   |
| Entrepreneurial motivation: individual orientation      | 590 | 1       | 5       | 3.91 | 1.191          | -0.926   | -0.083   |
| Entrepreneurial intention                               | 585 | 0       | 5       | 0.51 | 1.12           | 2.22     | 4.056    |

Source: authors.





### 3.2. Data analysis

Inferential statistical techniques of correlation and linear regression were used for the testing of hypotheses. Association between the relevant variables was examined by use of Spearman's correlational analysis. Wherever significant correlations were observed, variables were entered in regression analysis to study the impact of individual factors and family business background on entrepreneurial intention. Linear regression analysis was chosen over structural equation modelling (SEM) due to the nature of the measurement model and measurement level used to calibrate independent variables. It was also influenced by SEMs's lack of ability to robustly model categorical variables (Nunkoo – Ramkissoon 2012). As linear regression analysis assumes the normality of independent variables (Casson – Farmer 2014) and given the measurement scale of our variables, fulfilment of this condition needed to be investigated. Properly modelled Likert-type items, which include a neutral central category and where the mean is the most accurate indicator of central tendency, can also be analysed as scale level measures (Tutz 2021). Although Likert-scale data may not strictly follow a normal distribution, the Central Limit Theorem states that the distribution of sample means will tend towards normality as the sample size increases (Zhang et al. 2022). Furthermore, use of linear regression with variables measured on five-point Likert-scales is a traditional and frequent methodological choice of similar studies (Chilenga et al. 2022; Nungsari et al. 2023; Quagraine 2023).

Hierarchical regression analysis was conducted (Gelman – Hill 2006), where each set of independent variables was entered one at a time, to determine if independent variables explained a statistically significant portion of the variance in entrepreneurial intention, after accounting for all other factors. Similar hierarchical frameworks were applied in this research field by Chilenga et al. (2022) or Malebana and Mothibi (2023). With regard to our research model, we theoretically assumed that regression should proceed through the origin point. Hence regression models did not include an intercept or constant variable (see also Malebana – Mothibi 2023). In addition to the main effect approach, whereby the dependent variable is expressed as a function of independent variables, a moderation approach was also applied. This modelled the possibility that the extent and direction of an independent variable's impact on the dependent variable will vary under certain circumstances or the presence of a third variable. Moderation analysis was performed to examine the extent to which the existence of a family business background could moderate the relationship between individual factors and entrepreneurial intention. This practice was similar to that of Nungsari et al. (2023) and Quagraine (2023). For each model, a stepwise algorithm (Johnsson 1992) was used to identify and include only those independent variables that contribute the most to explaining variance in entrepreneurial intention. Statistical analysis was conducted by using IBM SPSS Statistics 29 software.

## 4. RESULTS

The results of hierarchical regression analysis are summarised in Table 3. Statistical tests were conducted to test for violations of assumptions of linear regression analysis. James et al. (2021) suggest that a variance inflation factor (VIF) value above 10 indicates the presence of multicollinearity. As VIF values in all our models are below 10, we can thus presume its absence. The Durbin-Watson tool was also used to test the assumption of independence of errors and



**Table 3.** Hierarchical regression analysis models

|  | <b>Model 1</b>            | <b>Model 2</b>            | <b>Model 3</b>            | <b>Model 4</b>            | <b>Model 5</b>            |
|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>Dependent variable:</b>   | Entrepreneurial intention | Entrepreneurial intention | Entrepreneurial intention | Entrepreneurial intention | Entrepreneurial intention |
| <b>Related hypothesis</b>  | H1                        | H1                        | H1                        | H1                        | H2                        |
| <b>N</b>   | 585                       | 585                       | 585                       | 585                       | 585                       |
| <b>Independent variable coefficients:</b>                          |                           |                           |                           |                           |                           |
| - Family business: family members running a business               | 0.382***                  | 0.104*                    | 0.147*                    | 0.157**                   | ns                        |
| - Human capital: entrepreneurial knowledge                         |                           | 0.180***                  | 0.279***                  | 0.177***                  | 0.142**                   |
| - Social capital: directly knows successful entrepreneurs          |                           |                           | -0.083*                   | -0.152***                 | -0.142***                 |
| - Entrepreneurial motivation: individual orientation               |                           |                           |                           | 0.147***                  | 0.158***                  |
| - Family business * Human capital (moderating effect)              |                           |                           |                           |                           | 0.060***                  |
| - Family business * Social capital (moderating effect)             |                           |                           |                           |                           | ns                        |
| - Family business * Entrepreneurial motivation (moderating effect) |                           |                           |                           |                           | ns                        |
| <b>F value</b>   | 73.205***                 | 91.521***                 | 64.726***                 | 55.158***                 | 57.156***                 |
| <b>R</b>   | 0.334                     | 0.489                     | 0.500                     | 0.525                     | 0.531                     |
| <b>R<sup>2</sup></b>   | 0.111                     | 0.239                     | 0.250                     | 0.275                     | 0.282                     |
| <b>Adjusted R<sup>2</sup></b>                                      | 0.110                     | 0.236                     | 0.246                     | 0.270                     | 0.277                     |

Note: P value: \*\*\* <0.001; \*\*<0.01; \*<0.05, ns - non-significant.

Source: authors.



possessed scores ranging from 1.702 to 2.001, within a suggested range of between 1.5 and 2.5 (Turner 2020), indicating acceptable levels of autocorrelation.

F-values (Table 3) reflect the overall significance and validity of the model. The  $R^2$  values suggest that qualitative the examined factors explained between 11 and 28% of the variance in entrepreneurial intention values. Although acceptable  $R^2$  levels vary strongly between the research fields, research scopes and models in the context of factors of entrepreneurial intentions and family background, similar studies indicate comparable levels of  $R^2$  (i.e. Malebana and Mothibi (2023): 0.112 – 0.298; Nungsari et al. (2023): 0.337). The increase in  $R^2$  through the hierarchical extension of the models is continuous. Hence independent variables with significant coefficients all add to the explanatory power of the model.

## 5. DISCUSSION

The study had the initial objective of testing the direct effect of family business background on entrepreneurial intentions as postulated in *Hypotheses 1*, with results presented in Table 3, (Models 1–4). Model 1 indicates the relationship between family business background and entrepreneurial intentions when no other factors are considered. As the significant positive regression coefficient ( $P < 0.001$ ) suggests, family business background as an external factor positively contributes to and significantly helps to predict entrepreneurial intentions. Thus, the presence of one or more entrepreneurs in a family may help young people who want to start a business. On such a basis, they may more easily develop the entrepreneurial mindset that is important for entrepreneurial success (Carr – Sequeira 2007) and which is related to self-employment intention (Chilenga et al. 2022) or increased perceptions of entrepreneurial efficiency (Janney – Dess 2006; Zellweger et al. 2011). The results provide support for *H1*.

Models 2, 3 and 4 indicate results of hierarchical regression analysis examining the focal relationship whereby human capital, social capital and entrepreneurial motivation are also considered. Results indicate that the relationship between family business background and entrepreneurial intention remained significant ( $P < 0.01$  or 0.05) and positive throughout the process of including other influencing factors in the model. This suggests that an entrepreneurial family may possess its own positive impact which is at least in part independent of human and social capital and individual internal motivation, thereby confirming *H1 in this regard*. Family business background can moreover be regarded as an influencing factor of entrepreneurial intention in its own right, and knowledge regarding it provides a clearer picture to predict individuals' intentions to start a business.

By contrast, Model 4 also confirms the significance ( $P < 0.01$ ) of all the variables in the model. As suggested in the course of the literature review, entrepreneurial knowledge and individual motivation have a positive relationship with entrepreneurial intention but the effect of social capital seems to be negative in our study. Although this is beyond our research scope, such a counter-intuitive negative relationship might be partly caused by the presence of family business background in the model. After accounting for the presence or lack of an entrepreneurial family background, the presence of other social connections for entrepreneurs or more indirect or sporadic knowledge of the entrepreneurial lifestyle without the chance to build related competencies might discourage some individuals from choosing an entrepreneurial career (Zapkau et al. 2015). This may occur through for example increased perceived barriers to entry or by fostering feelings of inadequacy.



In addition, the study also aimed to explore interrelationships between independent factors by measuring the moderating effect of family business background on the influence of other factors upon entrepreneurial intention (*H2*). Individuals raised in family businesses where the firm is managed and operated by a family with a transgenerational perspective (Chua et al. 1999) are often closely exposed to opportunities and challenges associated with an entrepreneurial career (Veider – Matzler 2016). Such early experiences of family business also play a significant role in shaping the human and social capital affecting the entrepreneurial outlook of individuals (Bronfenbrenner 1986; Wieszt 2020). However, it is not clear which dimensions of entrepreneurial motivation (Sharma – Irving 2005) are influenced by such external factors and to what extent they encourage younger individuals to become entrepreneurs. *Hypotheses H2a-H2b-H2c* were tested by Model 5.

In Model 5, the moderating effect of family business background on the influence of human capital in the form of entrepreneurial knowledge can be seen as significant and positive ( $P < 0.001$ ), thereby suggesting that both of these factors mutually strengthen each other. A prime theme of the entrepreneurship literature is that individuals from entrepreneurial families judge their abilities to start a business through observational learning and by comparing themselves to their parents (Boyd – Vozikus 1994; Pearson – Carr 2011; Wieszt et al. 2021), hence ultimately influencing the entrepreneurial intention of individuals.

Such students can be assumed to possess a “lived experience” on the basis of their family business backgrounds which can be translated into entrepreneurial competencies and thus contribute to increased entrepreneurial intention. Hence our results confirm hypothesis *H2a*.

Moderating effects relating to social capital and entrepreneurial motivation are unclear: non-significant coefficients of the composite variables thereby lead to the rejection of *H2b* and *H2c*. Entrepreneurial families can also play multiple roles in an individual’s social capital in that they can serve as mentors or financial supporters (Zellweger 2011), but also act as deterrent factors. This suggests that the relationship between social capital and family business background can be multi-directional or neutral. Previous studies have examined the impact of family business background on students’ motivation to start a business, generally finding that the financial capital of families retards entrepreneurial intention, while social capital levels have a positive impact (Edelman et al. 2016; Hockerts 2017; Sieger – Minola 2016). The role of family business background in shaping students’ entrepreneurial intentions also depends to a large extent on the level of social and financial support provided by parents (S. Gubik – Farkas 2016).

## 6. CONCLUSIONS

The aim of this paper was to investigate the effect of family business background on entrepreneurial intention with a novel approach of examining the intricacies of the interrelationship between family backgrounds and other influencing factors. We aimed to contribute and complement existing literature on entrepreneurial intention and family business by reinforcing evidence for the influential role of family business background. Similarly to the prevailing approach of mainstream research on entrepreneurial intention (e.g. Szerb – Lukovszki 2013; Tan et al. 2021), we surveyed university students studying business and economics at Hungarian universities, thereby exploring individual determinants of entrepreneurial intention. In deploying this approach, we have contributed to the literature with Central-Eastern European empirical findings, and with a deliberately narrow focus and deep emphasis on family business



background, and by not selecting the more common general, all-encompassing approach. One of the novel features of our study is the rigorous statistical exploration of direct and moderating effects of family business background, while also accounting for other key influencing factor categories of entrepreneurial intention. Results confirm a view that family business background has a significant positive impact on entrepreneurial intention, and is most likely to exert its impact through increased human capital levels in the form of entrepreneurial knowledge, skills and experience.

With regard to practical implications, universities focusing on business and economics with the goal of preparing future generations for business careers (Stoica et al. 2020) might support entrepreneurial intentions by taking into account the family business backgrounds of students (Feola et al. 2021; Hernández-Linares – López-Fernandez 2018), in order to motivate and support their entrepreneurial plans in a personalised form. Such students might also be able to utilize their experience to benefit other students. Our findings indicate that a family business background can have a reinforcing effect on the determinants of entrepreneurial intention. Based on our results, we consider that students' entrepreneurial motivation should be nurtured and fostered during education, especially where there is a large proportion of students with a family business background. In relation to a proposal by Georgescu and Herman (2020), we consider that formal and informal entrepreneurship education should complement each other in order to increase the propensity of entrepreneurial intention of university students. We propose the introduction of courses promoting student's interests and knowledge of family business and entrepreneurial motivation, so as to increase their awareness of their self-efficacy and other personal factors, which may help them to start their own businesses, maintain and develop existing family businesses, or to find an entirely new career path. In the post-COVID-19 economic environment, all educational initiatives which foster entrepreneurship, increase proactivity and optimism, and decrease perceived risks can have a positive economic influence (Cardella et al. 2024).

The relationship between intention and actual behaviour is also notable in that the entrepreneurial intention of an individual may vary over time and may or may not transform into actual behaviour (Do Paco et al. 2011; McCann – Vroom 2015). Although intentions are largely deemed to be the best individual predictors of action (Fishbein – Ajzen 1975), they remain to be only predictors, hence the results must be interpreted solely on the basis of existing knowledge. It might require a longitudinal approach (Ephrem et al. 2019) to examine the motivational background of individuals declaring entrepreneurial intentions and who postpone concrete action. In this regard, it might be enquired as to whether family business background has an influence if an individual prefers to wait for ideal personal or business circumstances to arise.

Our results may be limited by our sample size, nonetheless they compare favourably with similar studies (Bignotti – Le Roux 2020; Chilenga et al. 2022; Malebana 2023). As entrepreneurship studies focusing on Hungary are not scarce and the country has a strong entrepreneurial culture and provides students with education, resources, and policy support for entrepreneurship (Wu – Rudnák 2021), such aspects limit the novelty of advantages our empirical data has in terms of comparability and generalisability. Nevertheless, previous studies have demonstrated that entrepreneurial intentions may vary between countries (Carsrud – Brannback 2011; Hessels et al. 2008). This aspect and the nature of the business student sample naturally limits the generalisability of our findings.

Therefore, it is recommended that future studies should focus on data collection featuring populations with diverse geographic and demographic characteristics. Furthermore, although



this paper considered a relatively wide range of influencing factors of entrepreneurial intention, other personal psychological characteristics such as self-efficacy or risk aversion and contextual factors such as role models and financial capital could also be explored in the context of family business background in future.

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