

The Impact of Entrepreneurial Intention on Marketing Innovation within the Context of Economic Recessions

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Annotation. Since economic crises affect individuals' attitudes to take actions under the conditions of tough economic conditions, they can also influence individuals' entrepreneurial intention which in turn lead to changes in marketing innovation activities of businesses. In this regard, the purpose of this study is to investigate the effect of entrepreneurial intention on marketing innovation within the context of economic recessions. While entrepreneurial intention is based on the Theory of Planned Behavior, marketing innovation is a dynamic capability included in Resource-based View. The researchers create an online questionnaire and send it to purposively selected respondents from 1367 enterprises in several European countries. Furthermore, the researchers employ Ordinal Logistic Regression Test for analysis purposes. The results confirm the positive impacts of entrepreneurial intention on enterprises' marketing innovation during the periods of economic recessions. Financial and moral support of family members and previous failures of executives might be the reasons of these findings.

Keywords: marketing innovation, finance, entrepreneurial intention, Resource-based View, economic crises.

JEL classification: G01, L26, G32, M31, O32.

Introduction

Unemployment issue has been one of the biggest concerns of individuals and firms during the tough economic conditions such as Covid-19 pandemic, the war between Russia and Ukraine, and the energy crisis led by the war. This is because government policies and sanctions have caused declines in sales and revenues of enterprises (Liu *et al.*, 2022) which in turn have resulted unemployment and business bankruptcies (Caballero-Morales, 2021). In this regard, entrepreneurial intention (EI) that motivates marketing innovation (MI) activities of firms might enable businesses to overcome negative consequences of economic recessions by quickly transferring obsolete activities to fertile operations (Bosma *et al.*, 2008). Moreover, EI increases the desire of entrepreneurs to explore an economic opportunity that crises can create (Anwar *et al.*, 2024). For this reason, this paper aims to explore how EI influences MI specifically within the context of economic recessions. Hence the following research questions may arise: “Which factors do drive MI activities of enterprises during the economic crises?”, “How does EI affect MI activities of firms?”, “How does EI enable firms to overcome obstacles occurred during the economic recession periods?”

Entrepreneurship is not only a vital driver of economic growth, job creation and innovation (Uctu, Al-Silefane, 2023; Ragazou *et al.*, 2022; Cardella *et al.*, 2024) but also a crucial activity that enables firms especially small and medium-sized enterprises (SMEs) to be easily adopted to challenging conditions (Elegunde *et al.*, 2024) including economic recessions (Naisa *et al.*, 2023) and, crises (Rishi *et al.*, 2024) such as Covid-19 pandemic (Saleh, Manjunath, 2023). EI has been the most important factor of entrepreneurship since it represents individuals’ intention to start new businesses or to implement new operations to their existing firms (Zemlyak *et al.*, 2022).

Entrepreneurial intention (EI) can be defined as an individual’s willingness and tendency to take entrepreneurial actions and conscious planning to start a new business (Bullough *et al.*, 2014; Arrighetti *et al.*, 2016; Ouragini, Lakhal, 2024). It is considered the initial step of the business creation, and motivates and directs individuals to take transform intention to action (Bullough *et al.*, 2014; Ma *et al.*, 2022). Thus, EI is a strong predictor of future entrepreneurial actions (Ouragini, Lakhal, 2024) since it includes decision-making process before taking entrepreneurial initiatives (Ragazou *et al.*, 2022). EI might be explained by Ajzen’s Theory of Planned Behavior (TPB) (Nabi, Liñán, 2013; Liao *et al.*, 2022; Bruce *et al.*, 2023) that is recognized as a social psychology theory, explains behaviors of individuals, such as EI (Ouragini, Lakhal, 2024). TPB emphasizes the fact that taking entrepreneurial actions or setting new businesses are planned behaviors based on individuals’ decision-making processes and their intention (Ajzen, 1991; Arrighetti *et al.*, 2016). Thus, if individuals have strong intention to set new businesses and positively evaluate this idea, they will be more likely to transform this idea to action (Nabi, Liñán, 2013). According to TPB, individual behaviors are influenced by personal attitude, perceived behavioral control, and subjective norms (Ajzen, 1991; Liao *et al.*, 2022; Bruce *et al.*, 2023; Ilomo, Mwantimwa, 2023). Perceived behavioral control is also called as locus of control (Rodić Lukić *et al.*, 2024) or self-efficacy (Khedhaouria *et al.*, 2015; Civelek *et al.*, 2024) that refers to an individual’s belief in their ability to perform the roles and tasks regarding entrepreneurship (Nabi, Liñán, 2013). Self-efficacy is also closely linked to resilience and EI (Bullough *et al.*, 2014) as other determinants of EI such as personal attitude and subjective norm (Liñán, Chen, 2009; Nabi, Liñán, 2013).

Firms with greater EI can have superior innovation performance (García-Rodríguez *et al.*, 2022; Hughes *et al.*, 2022; Khan *et al.*, 2023; Gkypali, Roper, 2024), make more innovative investments (Ma *et al.*, 2022) that increase innovativeness of firms (Rakshit *et al.*, 2021; Ma *et al.*, 2022; Neves *et al.*, 2022; Bruce *et al.*,

2023; Pham *et al.*, 2023). For instance, firms with greater EI can generate new products and services (Rosenbusch *et al.*, 2013). Moreover, Medrona and Olarte-Pascual (2016) posit that developing new services and the creation of new distribution channels have been the best marketing innovation activities for service firms to overcome the negative impacts of economic crises. Entrepreneurs with greater EI are also prone to apply social media platforms to reach their national and international customers (Shi *et al.*, 2024).

MI refers to the application of novel marketing strategies that significantly differ from firms' existing approaches in product design, packaging, placement, pricing, promotion, or distribution (Cruz-Ros *et al.*, 2017; D'Attoma, Ieva, 2020; Huang *et al.*, 2022) to fulfill the needs of their customers and to respond to the changes in customers' demand (Wang *et al.*, 2020). For instance, firms can create new products (Khatami *et al.*, 2024), generate customer loyalty programs (Al Balushi *et al.*, 2024), use influencer marketing strategies (Varadarajan *et al.*, 2022), make price reductions, and create some technological tools for marketing purposes in the context of MI activities (Rishi *et al.*, 2024). Since firms communicate with their customers and perform their new promotional approaches via marketing communication mix (Sobre Frimpong *et al.*, 2023) such as digital marketing (Devkota *et al.*, 2023) and social media marketing tools (Ballester *et al.*, 2023; Bilan *et al.*, 2024), the changes and improvements that firms make for digital and social marketing activities are also included in MI (Dwivedi, Pawsey, 2023). For these reasons, MI is a strategic and dynamic approach that enables firms to differentiate themselves, improve customer satisfaction, and adapt to changing environments by implementing novel marketing practices and tools. In this regard, MI can be identified as a crucial ability of firms to maintain competitive advantage and superior performance (Medrano, Olarte-Pascual, 2016; Cruz-Ros *et al.*, 2017; D'Attoma, Ieva, 2020).

MI is deeply linked to the Resource Based View since it is a dynamic capability of firms to effectively deploy their resources for marketing management and marketing mix decisions (Naidoo, 2010; D'Attoma, Ieva, 2020). Firms' resources and capabilities conceptualized by RBV also enable businesses to produce valuable, rare, inimitable, and non-substitutable products and services (Kuděj *et al.*, 2023) in line with the changes in external environments (Liao *et al.*, 2022). Therefore, MI competencies, along with other strategic resources and capabilities, enable firms to gain and sustain a competitive advantage in comparison to their rivals (Barney, 1991; Civelek *et al.*, 2023a) and make business survive tough economic conditions (Civelek *et al.*, 2023b).

Firms might also apply MI activities to overcome the negative consequences of these economic recessions (Naidoo, 2010; Medrano, Olarte-Pascual, 2016; Wang *et al.*, 2020; Rishi *et al.*, 2024). This is because innovative initiatives play a powerful trigger role for the resilience of firms during crises periods (Caballero-Morales, 2021) since they include new marketing approaches to improve efficiency in firms' products or services (Cruz-Ros *et al.*, 2017). For instance, there was a rapid increase in the demand of social media promotion services during summer 2022 in Ukraine due to lowered advertising costs. Thus, firms benefit from better organic search rankings and these advantages have made them increase their sales. Moreover, people who have lost their jobs have also tried to open their own businesses and have applied promotion activities via social media in the war period (Oklander *et al.*, 2024).

Some studies find positive relationship between innovation and EI (Ho *et al.*, 2017; Schlaegel *et al.*, 2021; García-Rodríguez *et al.*, 2022). Moreover, the impacts of EI on innovation (Rakshit *et al.*, 2021; Ma *et al.*, 2022; Neves *et al.*, 2022; Bruce *et al.*, 2023; Pham *et al.*, 2023) and innovation performance have been already analyzed in some papers (Hughes *et al.*, 2022; Khan *et al.*, 2023; Gkypali, Roper, 2024). However, the impact of EI on MI received little attention.

Even though some researchers investigate the effect of entrepreneurial competencies on MI (Cruz-Ros *et al.*, 2017; D'Attoma, Ieva, 2020; Dwivedi, Pawsey, 2023), there is a paucity of studies that have explored how EI influences MI specifically within the context of economic recessions. The data of this paper was collected in 2023, shortly after the start of Russia-Ukraine war, during the period of recovery from Covid-19, and the issues related energy crises. All these factors have caused economic recessions in Europe and the rest of the world. Since this paper considers all these issues and analyzes several European firms that have encountered numerous obstacles due to these circumstances, it constitutes a unique study investigating EI and its influence on MI during challenging economic times.

This paper also brings TPB and RBV theories together to find solutions for one of the biggest issues that economic recessions cause, namely, unemployment. While EI stimulates innovation, MI based on RBV provides less expensive solutions for individuals and enterprises to take under the conditions of economic recessions. Thus, even individuals and firms face unemployment issues take can transform their EI to action by applying cost saving MI activities during the tough economic times. To sum up, the combination of TPB and RBV theories is a prerequisite ensuring business survival in the long-term including economic crises. The rest of the paper will be presented in the following sequence: Literature Review, Methodology, Results, Discussion and Conclusion.

1. Literature Review

The perception of entrepreneurs regarding current economic climate is very crucial to transform their intention to action. Although economic recessions cause negative economic consequences for SMEs, entrepreneurs might positively perceive these circumstances to set new businesses (Al-Jubari *et al.*, 2019; Hernandez-Sanchez *et al.*, 2020). This is because entrepreneurs with optimistic perception mitigate negative effects of uncertain and risky conditions, believe themselves and the feasibility of their projects (Cao *et al.*, 2020; Wang *et al.*, 2021). Thus, they become more likely to establish new firms (Bernoster *et al.*, 2018). However, their pessimistic perception regarding economic crises decreases their EI so their propensity to open a new business (Arrighetti *et al.*, 2016).

For instance, Cardella *et al.* (2024) observe some Spanish prospective entrepreneurs and analyze their EI during the Covid-19 period. The authors state that optimistic perception of Covid-19 conditions increases EI of prospective entrepreneurs during the crises. Similar to Cardella *et al.* (2024), Ruiz-Rosa *et al.* (2020) examine a group of prospective Spanish entrepreneurs and claim that, despite the challenging economic conditions based on COVID-19 crisis, the entrepreneurs' positive perceptions regarding their capabilities stimulate their EI. Moreover, Bullough *et al.* (2014) analyze EI during war conditions and support the fact that perceived danger does not reduce EI of entrepreneurs if they have greater resilience and entrepreneurial abilities. Ragazou *et al.* (2022) also investigate EI of prospective Greek entrepreneurs and state that individuals with greater self-confidence do not hesitate to take risk during times of crises and they perceive those conditions as an opportunity to start new business. Martínez-Rodríguez *et al.* (2020) also remark the restrictive monetary and tax policies that cause financial obstacles and credit impediments for entrepreneurs in crises and recovery periods such as 2001–2008 and 2009–2016. However, motivated entrepreneurs with greater EI are also interested in developing new goods even under these conditions (Cassar, 2007).

On the other hand, entrepreneurs with greater resilience and self-efficacy are also courage to start a new business under risky situations such as war conditions (Bullough *et al.*, 2014). As a determining factor of EI, self-efficacy also plays a crucial role in marketing and innovation activities (Newman *et al.*, 2019). In this regard, Khedhaouria *et al.* (2015) posit the importance of self-efficacy to take innovative initiatives

especially under uncertain conditions. Similar to Khedhaouria *et al.* (2015), Gkypali and Roper (2024) surmise that self-efficacy (perceived behavioral control) of entrepreneurs enables them making strategic decisions regarding their firms' innovation activities. When individuals feel self-efficacious, they become more likely to identify and evaluate market opportunities and can apply MI activities (Bullough *et al.*, 2014). Furthermore, Ahlin *et al.* (2014) examine SMEs from US and Slovenia and validate the fact that entrepreneurs' self-efficacy (a determinant of EI) positively affects product and process innovation activities of SMEs.

Some other studies also highlight the impact of self-efficacy on innovation intention of entrepreneurs (Miao *et al.*, 2017; Berends *et al.*, 2014). Furthermore, Liao *et al.* (2022) analyze Chinese firms and verify that determinant factors of EI, such as personal attitude, subjective norm and perceived behavioral control make positive contributions on environmental innovation that includes developments in firms' goods such as green products. Gkypali and Roper (2024) analyze entrepreneurs from the UK and prove the fact that entrepreneurs with greater self-efficacy have more intentions to make innovations regarding products. This is because even entrepreneurs face new challenges, their confidence and perceived capabilities motivate them to transform their EI to actions. Some other studies also report the relationship between entrepreneurial competencies and process, product, and service innovation (Frese, Gielnik, 2014). Cruz-Ros *et al.* (2017) analyze 26 different countries from GEM (Global Entrepreneurship Monitor) survey, and vindicate the fact that entrepreneurial competencies including EI leads to MI. Thus, entrepreneurs who intend to start a new business are more likely to apply MI activities. Due to those arguments a hypothesis might be set as follows:

H1: Firms' optimistic perception of the current economic climate to start a new business positively affects their MI.

Although economic recessions can cause unfavorable business conditions, entrepreneurs might perceive these conditions as an opportunity, not a barrier, and can have greater EI to start new businesses (Nabi, Liñán, 2013). For instance, Arrighetti *et al.* (2016) investigate the effect of economic recession on EI of some prospective Italian entrepreneurs and infer that economic crises do not create barriers for EI of entrepreneurs. Similar to Arrighetti *et al.* (2016), Lopes *et al.* (2021) claim that tough economic conditions do not restrict individuals to start a new business. The motivational role of tough economic conditions on EI and entrepreneurial activities has been also professed by various researchers (Liñán *et al.*, 2013; Luthje, Franke, 2003; Bosma *et al.*, 2008). This is because economic recessions can trigger especially EI of unemployed entrepreneurs who consider those economic issues as a chance to perform entrepreneurial activities (Nabi, Liñán, 2013; Arrighetti *et al.*, 2016).

According to Stangler (2009), the number of enterprises has increased during the economic crises. Those new firms' have also innovative posture that has improved their productivity and stimulated their innovativeness during tough economic conditions (Stangler, 2009). Ma *et al.* (2022) also analyze some Chinese firms and declare that EI increases motivation of firms' founders to implement innovative actions under the conditions of Covid-19 pandemic. The scholars also clarify that executives with greater EI can invent new products, receive patents and increase their firms' innovativeness.

Although prospective entrepreneurs' capital is usually limited, they look for cheaper options such as social media and digital marketing channels to perform their marketing activities. Therefore, entrepreneurs having EI can apply those channels to overcome their resource problems (Ouragini, Lakhal, 2024). By adopting digital innovative technologies, SMEs will also be able to interact with more

costumers, increase their market share, find more opportunities and create new strategies for their survival (Bruce *et al.* 2023). For these reasons, entrepreneurs who do not intensively perceive the economic recessions as a serious barrier might be prone to apply MI activities. In this regard, Shi *et al.* (2024) analyze some prospective entrepreneurs in Ghana and bear out the significant association between social media, e-commerce adoption and EI. Furthermore, Bano and Siddiqui (2022) refer to the importance EI for the usage of Internet of Things (IoT), artificial intelligence (AI), and virtual reality systems by enterprises.

The positive relationship between social media, e-commerce usage and EI has also been elucidated by some other studies performed in Taiwan (Do *et al.*, 2020). Moreover, Ouragini and Lakhal (2024) investigate prospective entrepreneurs from Tunisia and suggest the positive relationship between EI and technology related marketing activities. According to these researchers, EI and marketing strategies increase the competitiveness of enterprises since EI might stimulate entrepreneurs' intention to use marketing related technologies. Furthermore, Bruce *et al.* (2023) observe some SMEs from Ghana and find positive impact of EI (personal attitude, perceived behavioral control and subjective norm) on the adoption of digital marketing technologies such as the usage of media, e-marketing, and content marketing tools by SMEs. Similar to Bruce *et al.* (2023), Buchanan *et al.* (2018), and Ho *et al.* (2017) confirm the significant effects of the antecedents of EI on the usage and adoption of digital marketing tools, new media technologies and mobile applications by firms. By analyzing firms from Spain, Irimia-Diéguez *et al.* (2023) substantiate the positive impact of EI on the usage of innovative technologies. Rakshit *et al.* (2021) investigate Indian firms and verify positive effect of EI on the usage of mobile application by firms. The empirical results of these studies enable this paper to set another hypothesis as follows:

H2: Firms' less intensive perception of the current recession when considering starting a new business positively affects their MI.

Perception of risk as an opportunity positively affects EI of entrepreneurs since they see the recession conditions as favorable. For instance, large firms can look for new suppliers under tough economic conditions. In this regard, entrepreneurs can start new businesses or can perform new business activities to be supplier of those large companies (Nabi, Liñán, 2013). In this regard, proactive entrepreneurs who see and predict these opportunities before others can have greater EI even in risky situations such as Covid-19 (Al-Mamary, Alshallaqi, 2022; Kumar *et al.*, 2020). Bosma *et al.* (2008) also reveal that EI of entrepreneurs had not declined during 2008 economic crisis because of perceived opportunities. The authors also explain this fact by another reason such as entrepreneurs' fear of job loss, and their belief that crises would subside within three years. Moreover, entrepreneurs with greater EI are more confident to apply new strategies that transform risky conditions to entrepreneurial opportunities (Bullough *et al.* 2014) such as innovative activities. Engle *et al.* (2010) highlight the importance of the creation of new business during economic crises, since it enables generation of new job opportunities and causes increases in innovative activities. Brzozowski *et al.* (2019) also emphasize the positive impact of innovative investments on entrepreneurial activities during the economic crises.

Although individuals can become jobless during tough economic times, they can perceive current economic climate as favorable since they can access internal financial sources. For instance, Martínez-Rodríguez *et al.* (2020) state that entrepreneurs can reduce their financial concerns by looking some financial sources from their family members and friends. Thus, they can be motivated to start new activities. According to Miao *et al.* (2017), entrepreneurs with greater subjective norm (EI) are more likely

to make product innovations. The positive impact of subjective norm on the usage of innovation technologies has been also confirmed by other researchers (Bano, Siddiqui, 2022; Irimia-Diéguez *et al.*, 2023). On the other hand, entrepreneurs who continue their operations during the economic recessions can perceive the external environment as favorable to increase their product and service quality. Therefore, having such a motivation of entrepreneurs enable their firms to become competitive and survive. Moreover, instead of hiring new employees, entrepreneurs can exhibit EI to make investments for new technologies and innovative activities that make them becoming more competitive against their rivals (Gkypali, Roper, 2024).

As already mentioned above, proactive entrepreneurs can also perceive tough economic conditions as favorable. This is because those entrepreneurs have capabilities to use new innovative technologies such as AI programs. By examining Indian firms, Upadhyay *et al.* (2023) emphasize that proactive entrepreneurs are prone to initiate new projects regarding product, service, system, process, and MI. Moreover, Zemlyak *et al.* (2022) investigate entrepreneurs from Russia and express that entrepreneurs with greater EI are able to understand the market dynamics and develop new products and services for the existing markets, and find new markets for the existing products and services. Thus, their creative ideas enable them to perform MI activities (Shen *et al.*, 2018). Entrepreneurial attitudes such as identifying and creating new opportunities also increase innovation performance of enterprises (Ince *et al.*, 2023). Shi *et al.* (2024) also infer the crucial importance of entrepreneurship for product development and other marketing activities. Furthermore, Kim and Cho (2024) focus on some Korean software firms and enlighten the positive effect of entrepreneurial competencies such as marketing capabilities on firms' MI. According to these researchers, firms having those entrepreneurial capabilities have enough skills to enter new markets, to make market segmentation, promotion, pricing, advertising activities. Due to having those empirical findings, next hypothesis might be created as follows:

H3: Firms' favorable perception of the current economic climate positively affects their MI.

To sum up, EI has positive relationship between new product developments (Al-Mamary, Alshallaqi, 2022), and process innovation (Lee *et al.*, 2011; Schlaegel *et al.*, 2021). EI also directs firms to implement the usage of innovative technologies by firms (García-Rodríguez *et al.*, 2022; Neves *et al.*, 2022). The positive relationship between EI and innovation has been also vindicated by several researchers (Lee *et al.*, 2011; Ozaralli, Rivenburgh, 2016; Gilmartin *et al.*, 2019; Kumar *et al.* 2020; Pham *et al.*, 2023; Le *et al.*, 2024).

2. Methodology and Data

This article aims to examine the impact of EI on MI during periods of economic recession. This study focuses on the perceptions of 568 Czech, 376 Slovak, 331 Polish, and 92 Hungarian firm executives in order to achieve its research objective. Thus, 1367 survey respondents who are the executive of 1367 different firms, have fulfilled an internet-mediated questionnaire in their mother tongue. In this regard, the researchers have collected the research data by an online survey that is shared via Facebook. On the other hand, a purposive random sampling method that is based on the respondents' job status, is applied by the research team for the sample selection. The data collection process took approximately six months, beginning in early 2023.

The independent variables of the research models, are measured by the following survey questions: "ENIN1: I will be happy to start a new business in the current economic climate", "ENIN2: For me, starting up a business in the current recession is not a serious barrier", "ENIN3: I see the current

economic climate as favorable for me to start a business". These survey items were adapted from the study by Nabi and Liñán (2013), who have previously conducted reliability and validity analyses for these statements. According to Nabi and Liñán (2013), their survey questions are based on the studies of Bosma *et al.*, (2008), Luthje and Franke (2003) and Stangler (2009). Moreover, the following survey question is used to measure the dependent variable of the research models, namely, MI: "For three years, compared to the average competitor in the same industry, the firm has successfully achieved a rise in marketing innovations." This survey question is gained from the study of Ferraris *et al.* (2019).

Furthermore, the researchers employ a three-point Likert scale to measure the responses of firm executives for the survey items mentioned above. In this regard, the survey participants have selected the following choices to reply the survey questions "1= disagree", "2=neutral", or "3=agree". This scale is a transformation of a 7-point Likert scale. This method has been applied by some researchers and these researchers have also performed Ordinal Logistic Regression analyses to measure MI (Dwivedi, Pawsey, 2023).

Therefore, the research data that the researchers analyze is based on ordinal and ranked data. These data can be analyzed using Ordinal Logistic Regression, as it allows researchers to examine dependent and independent variables that are measured on an ordinal or ranked scale. The researchers have performed the Ordinal Logistic Regression analyses via SPSS program. The researchers also analyze the assumptions of Ordinal Logistic Regression by employing 2 Log-likelihood, Chi-square, Cox & Snell, Nagelkerke and Durbin-Watson test statistics in SPSS. Since the research models include only an independent variable, the researchers do not consider multicollinearity assumption of Ordinal Logistic Regression test. The research models are as follows:

"Logit ($P(Y \leq j)$) = $\beta_{j0} + \beta_{j1}X_1$ "

"X– Independent variable (X_1 : ENIN1 in the 1st research model, X_1 : ENIN2 in the 2nd research model, X_1 : ENIN3 in the 3rd research model)"

"Y= Dependent variable" (MI)

"P – Probability"

" β_{j1} – Regression coefficients"

" β_{j0} – Constant term"

"j= categories j=1 refers to "disagree", j=2 refers to "neutral" and j=3 refers to "3=agree"

Table 1 is presented below to indicate the results of the assumption testing. Concerning the first assumption, Model Fitting, p-values from Chi-square statistics will be considered. In this regard, p-values lower than a 5% level of significance represent the fact that addition of independent variables to the research models increases the predicting ability of research models and shows better model fit. As indicated in Table 1, p-values for the 1st, 2nd, and 3rd models are 0.002, 0.002, 0.014, respectively and they are less than a 5% significance level. Hence, the inclusion of ENIN1, ENIN2, ENIN3 to the research models have increased the predicting ability of these models more than the based model including only a constant term. These results also prove the fact that ENIN1, ENIN2, ENIN3 are good at predicting the variations in MIP. For these reasons, this paper fulfills the Model Fitting assumption.

Table 1. Assumptions Testing

Assumptions	Model Fitting				Goodness of Fit Pseudo R-square		Independence of Errors
Models	-2 Log likelihood	Chi-Square	df	p- values	Cox & Snell	Nagelkerke	Durbin-Watson test statistics
Model 1	73.626	12.462	2	0.002	0.009	0.010	1.923
Model 2	76.512	12.343	2	0.002	0.009	0.010	1.910
Model 3	76.228	8.496	2	0.014	0.006	0.007	1.908

Source: created by the authors.

The researchers consider the results from the Pseudo R-square to test Goodness of Fit assumption. The values shown under the column of Cox & Snell and Nagelkerke tests in *Table 2* represent the changes that the predicting variables cause in the outcome variable. Since the results from Nagelkerke are always greater than Cox & Snell statistics, this study will consider the values under Nagelkerke column when testing the Goodness of Fit assumption. In this regard, the incorporation of ENIN1 into the first research model accounts for a 1% variation in MI, whereas the independent inclusion of ENIN2 and ENIN3 in the second and third research models represents 1% and 0.7% of the changes in MI, respectively. The changes in MI caused by the ENIN1, ENIN2, and ENIN3 in the 1st, 2nd and 3rd research models allow this study to meet the Goodness-of-Fit assumption of Ordinal Logistic Regression test.

Table 2. Sample Profile

<i>n</i> : sample size		<i>n</i>	Share
<i>Firm size</i>	SMEs	987	72.20%
	Large firms	380	27.80%
	Total	1367	100%
<i>Firm sector</i>	Service	778	56.91%
	Others(Trade&Manufacturing)	589	43.09%
	Total	1367	100%
<i>Firm age</i>	up to 10 years	527	38.56%
	more than 10	840	61.44%
	Total	1367	100%
<i>Respondents' Educational Status</i>	< bachelors'	660	48.28%
	bachelors' and more	707	51.72%
	Total	1367	100%
<i>Respondents' Age</i>	Up to 45	848	62.04%
	More than 45	519	37.96%
	Total	1367	100%
<i>Respondents' year of experience</i>	Up to 10 years	713	52.16%
	More than 10	654	47.84%
	Total	1367	100%

Source: created by the authors.

Furthermore, the scholars benefit from the Dubin-Watson test statistics to analyze the Independence of Errors assumption. This assumption deals with the autocorrelation issue between the residual terms and the relationship between the cases and the research data. The absence of autocorrelation between the residual terms, and the nonexistence of the relationship between the cases and the data ensure that this assumption is not violated by the researchers (Harrell, 2015). Moreover, the Durbin-Watson test values should be approximately equal to 2 in order to uphold the assumption of Independence of Errors. The

values from Durbin-Watson test statistics in *Table 1*, range from 1.908 to 1.923, are sufficiently close to 2, thereby supporting the validity of this assumption. In conclusion, since no assumptions of Ordinal Logistic Regression test are violated, it is convenient to use this regression test to explain the results of this paper and the hypotheses testing.

This study also provides the details regarding the sample profile in *Table 2*. According to this table, the majority of firms are in SMEs segment consist of micro, small, and medium-sized enterprises (927 firms, 72.2% of the entire sample). Moreover, while 778 firms operate in service industry, the number of the businesses from trade and manufacturing industries are 380 and 209, respectively. 840 firms have been operating for more than ten years, while the remaining firms have been in business for up to ten years. *Table 2* gives details regarding the respondents' characteristics as well. The most of the survey respondents have graduated from the university (51.72% of the whole sample), are under 46 years old (62.04% of the entire sample) and have been in business for less than 10 years. All other details regarding the size, age, sector of businesses and the educational status, age and experience of the survey participants are depicted in *Table 2*.

3. Results

This paper measures the independent and dependent variables of the research models by a Three-point Likert scale, therefore, the variables have two levels (cut-offs). The first level (cutoff 1) indicates the responses for "disagree" to "neutral" and the second level (cutoff 2) shows the responses for "neutral" to "agree". The results will be explained in line with this information.

Table 3 indicates the results related to 1st research model. As already represented in the Methodology section, while ENIN1 is the independent variable, MI is the dependent variable of this model. According to *Table 3*, some significant results exist in the second cut-offs (level) of both variables since p-values for „MI=2" and „ENIN1=2" are 0.000 and 0.037 that are lower than a 5% significance level. This fact confirms that ENIN1 significantly predicts MI activities. Moreover, the coefficient (estimate in the table) of „ENIN1=2" is positive, 0.333. Hence one unit increase in businesses' EI (from "neutral" to "agree") in the current economic climate, 0.333 times raises the odds of the occurrence of MI with a 95% confidence interval between 0.020 and 0.647. In this regard, firms' optimistic perception of the current economic climate to start a business positively affect their MI. Conversely, if firms consider the current economic climate pessimistically, they will be less likely to have strong EI to indicate better MI performance. For these reasons, this paper supports H1 hypothesis.

Table 3. The results for MI and ENIN1

Variable	Estimate	S.E.	Wald	df	p-values	95% CI [Lower Upper]
MODEL-1						
MIP = 1	-0.075	0.151	0.251	1	0.616	[-0.371 0.220]
MIP = 2	0.763	0.152	25.171	1	0.000	[0.465 1.062]
ENIN1= 1	0.065	0.186	0.124	1	0.725	[-0.299 0.430]
ENIN1= 2	0.333	0.160	4.337	1	0.037	[0.020 0.647]

Notes: S.E.: Standard Error. df: Degree of freedom. CI: Confidence intervals.

Source: created by the authors.

Table 4. The results for MI and ENIN2

Variable	Estimate	S.E.	Wald	df	p-values	95% CI [Lower Upper]	
MODEL-1							
MIP = 1	0.400	0.107	14.022	1	0.000	[0.191	0.610]
MIP = 2	1.240	0.112	123.351	1	0.000	[1.021	1.459]
ENIN2= 1	0.257	0.123	4.370	1	0.037	[0.016	0.497]
ENIN2= 2	0.516	0.148	12.098	1	0.001	[0.225	0.807]

Source: created by the authors.

On the other hand, the results of the 2nd research model are presented in *Table 4*. While ENIN2 is the predicting variable, MI is the outcome variable of the 2nd model. As demonstrated in *Table 2*, p-values for the cutoffs of both variables are lower than a 5% level of significance and they are significant (MI = 1: 0.000, MI = 2: 0.000; ENIN2=1: 0.037, ENIN2=2: 0.001). Thus, ENIN2 is a significant predictor MI. Additionally, the coefficients of the cutoffs of the predicting variable are positive, 0.257 and 0.516, respectively for “ENIN2=1” and “ENIN2=2”. In this regard, it can be stated that one-unit rise on ENIN2 increases the log-odds of falling a higher-level of MI by 0.516. In other words, when firms less intensively perceive the current recession to start up a new business, they become more likely indicate greater MI performance than their rivals. Conversely, firms perceiving the current recession as a threat to start up a business are less likely to have strong MI. This result makes this paper supporting H2 hypothesis.

Table 5. The results for MI and ENIN3

Variable	Estimate	S.E.	Wald	df	p-values	95% CI [Lower Upper]	
MODEL-1							
MIP = 1	0.378	0.117	10.517	1	0.001	[0.150	0.607]
MIP = 2	1.215	0.121	101.008	1	0.000	[0.978	1.452]
ENIN3= 1	0.233	0.129	3.239	1	0.042	[0.021	0.486]
ENIN3= 2	0.472	0.164	8.238	1	0.004	[0.150	0.794]

Source: created by the authors.

Furthermore, the results of the 3rd research model are presented in *Table 5*. While the predictor is ENIN3, the dependent variable of this model is same with other research models, namely, MI. P-values presented in *Table 5* verify the significance of ENIN3 to predict MI (ENIN3=1: 0.042, ENIN3=2: 0.004). Additionally, the coefficients (estimate) of the cutoffs ENIN3 are positive 0.233 and 0.472, respectively. A-unit increase on ENIN3 0.472 times raises the odds of occurrence of MI with a 95% CI between 0.150 and 0.794. For this reason, ENIN3 has positive impacts on MI. In other words, when firms see the current economic climate as favorable, they will have greater EI to outperform higher MI performance than other firms who perceive economic climate as unfavorable. These arguments make this paper support H3 hypothesis. Since H1, H2, H3 hypotheses are supported, it can be summarized that firms' EI positively affects their MI during the current economic recession.

4. Discussion

The results of this research confirm the positive impact of EI on MI. For this reason, this paper finds compatible results with some studies that outline the positive impact of EI on product innovation (Ahlin *et al.*, 2014; Frese, Gielnik, 2014; Miao *et al.*, 2017; Liao *et al.*, 2022; Al-Mamary, Alshallaqi, 2022; Gkypali,

Roper, 2024), the usage of digital technologies (García-Rodríguez *et al.*, 2022; Neves *et al.*, 2022), and digital marketing tools (Ho *et al.*, 2017; Buchanan *et al.*, 2018; Bruce *et al.*, 2023), and service (Zemlyak *et al.*, 2022), process (Lee *et al.*, 2011; Schlaegel *et al.*, 2021; Upadhyay *et al.*, 2023) and other marketing-related innovation activities (Bullough *et al.*, 2014; Cruz-Ros *et al.*, 2017; Rakshit *et al.*, 2021; Bano, Siddiqui, 2022; Irimia-Diéguez *et al.*, 2023).

Although the results of this paper are consistent with the studies mentioned above, none of those studies considers the effect of EI on MI during the economic recessions. Concerning this economic context, this paper also finds similar results with the arguments of Stangler (2009), Engle *et al.* (2010) Khedhaouria *et al.* (2015), Brzozowski *et al.* (2019) and Ma *et al.* (2022) that state the positive impact of EI and entrepreneurial abilities on innovative activities of enterprises. However, these studies do not identify MI, and look for a general perspective for innovation activities. On the other hand, the results of this study disprove the findings of Makovec Brenčič *et al.* (2012) and Medrano and Olarte-Pascual (2016). This is because, while both of these studies profess a decline in firms' MI during economic crises, the present study argues that enterprises exhibit an increasing tendency toward MI under adverse economic conditions.

The reason of the results of this research might be related to the support provided by family members and friends since entrepreneurial attitudes and activities are influenced by entrepreneurs' immediate social environment. For instance, children raised by parents with entrepreneurial experience may be more interested in performing entrepreneurial activities, as they are likely to acquire certain entrepreneurial abilities or attitudes from their parents (Ragazou *et al.*, 2022). According to the research data, majority of firm executives who work for firms indicating greater MI performance than their rivals, have a self-employed mother, or father. In this regard, the executives analyzed in this paper might have been raised in a family firm or in their fathers' or mothers' businesses and this fact might have made them to benefit from their parents' experiences to take actions regarding MI. On the other hand, the majority of firm executives examined in this research come from families that easily afford their monthly expenses. In this regard, these executives might have received some financial support from their parents to take entrepreneurial actions and apply MI activities under tough economic conditions.

Another reason of this research's results might be explained by previous failures of entrepreneurs. Around 62% of firm executives in the research data work for businesses operating for more than ten years. Thus, they are more likely to experience some failures in their working life. According to Bullough *et al.* (2014), failed entrepreneurs can be more prone to start a new business again since they might have learnt from their previous experiences that enhance their ability to recognize and evaluate new opportunities. Moreover, when failed entrepreneurs intend to engage in new entrepreneurial activities, they become necessity-driven entrepreneurs, since such individuals are typically motivated to start businesses during periods of crisis due to a lack of job opportunities to increase their income (Arrighetti *et al.*, 2016; Martínez-Rodríguez *et al.*, 2020). For these reasons, experiencing failure might stimulate executives' EI to engage in MI activities under the conditions of economic recessions.

Although some entrepreneurs can overcome the obstacles of economic recessions by their EI that directs their MI, some firm executives especially microentrepreneurs that have lack of internal and external financial sources or lack of experiences might feel more concerned for the survival of their enterprises. In this regard, it is very crucial for those entrepreneurs to listen their customers, to be informed about customers' problems and fulfill their demands. For this reason, the effective usage of marketing communication tools such as social media and digital marketing channels is prerequisite for

entrepreneurs to have closer contact and interactions with their customers. Moreover, since the usage of artificial intelligence systems for marketing purposes has become a phenomenon among businesses, entrepreneurs need to be aware of the usage and adoption of those systems to minimize their concerns during the economic crises. Thus, there is a great need to provide educational courses for the usage of those digital technologies, and systems by entrepreneurs. Entrepreneurs who participate those courses or other educational events can increase their digital literacy and become able to use new technologies for MI activities. On the other hand, firms having enough financial resources can hire well-experienced marketing experts who might be the manager of marketing departments.

Except these policies, governments' approach on entrepreneurship and marketing carries vital importance especially under the conditions of tough economic times. This is because governments can introduce new initiatives and opportunities for entrepreneurs, can create effective legal infrastructure for business and their marketing operations. By doing so, they can minimize the negative consequences of economic recessions for entrepreneurs and increase their EI to take MI actions. Governments can also provide educational, financial, and practical supports for nascent firms. For instance, they can provide R,D subsidies for new entrepreneurs who invent new programs for MI activities of businesses. The cooperations of countries also play a key role in the creation of entrepreneurial environments for prospective and the existing entrepreneurs. In this regard, some European countries such as Czech Republic, Slovakia, Hungary, and Poland can create international entrepreneurship programs to promote MI and other entrepreneurial activities for university students. Participants of those programs can become informed about various entrepreneurial opportunities and conditions of different countries and they can be motivated to take entrepreneurial and MI actions in an international environment.

Conclusions

Although marketing innovation activities are crucial capabilities of businesses to more effectively allocate firm resources, to create enhanced customer value, and to fulfill costumers' demands. However, certain underlying motives can stimulate these initiatives of enterprises. In this regard, entrepreneurial intention can be trigger for the implementation of innovative marketing strategies and firms' intentions transform to actions by those marketing innovation activities. In line with those arguments, this paper analyzes the impact of entrepreneurial intention on marketing innovation activities within the context of economic recessions. This paper suggests to overcome tough economic conditions by integrating entrepreneurs' characteristics included in TPB and RBV theories.

This study observes 1367 executives who represent a different firm. The researchers also apply a purposive random sampling method that is based on the managerial role of the survey respondents. Then, an online survey is employed by the researchers to gather the perceptions of the survey participants. Moreover, the researchers run Ordinal Logistic Regression analyses via SPSS program for research analyses. The results substantiate that when entrepreneurs have optimistic, positive, and low-risk perceptions of the current economic climate to start a business, they are more prone to engage in marketing innovation activities. Those results might be explained by parental wealth, entrepreneurial experience, and financial support of the entrepreneurs' parents since these factors cam stimulate entrepreneurial and marketing innovation activities of entrepreneurs. Another reason for the results of this paper might be related to previous failures of the investigated entrepreneurs. This is because failed entrepreneurs can benefit from their previous experiences that increase their competencies to find and explore new opportunities.

Entrepreneurs who know how to communicate via social media, and digital marketing channels can be more ready to take entrepreneurial initiatives, since they become more informed about demands and complaints of prospective customers. In this regard, educations and trainings that teach the usage of artificial intelligence systems are prerequisite for entrepreneurs' success. The role of governments in the generation of entrepreneurial environment and providing financial opportunities represents another crucial factor to enhance entrepreneurial and marketing activities of entrepreneurs.

As already highlighted, this study addresses the research gap regarding the influence of EI on marketing innovation MI within the context of economic recessions based on COVID-19 aftermath, the Russia-Ukraine war, and energy crises. By integrating (TPB) and RBV, this article proposes that even under unemployment issues caused by economic recessions, cost-effective MI strategies driven by EI can enable long-term business survival. On the other hand, this paper has some limitations. First, the geographical scope of this paper is limited to four neighbor and member countries in Europe. Although, financial obstacles are the biggest problems of entrepreneurs and SMEs, this paper does not provide any financial data or financial analyses to evaluate financial conditions of entrepreneurs during though economic periods. Another limitation of this paper is the lack of cross-country analyses regarding the impact of EI on MI. For these reasons, further studies can investigate firms from other countries (also non-European countries), and can make cross-country analyses to indicate country level differences in the analyzed impact. Furthermore, except parental wealth, personal income of entrepreneurs can be measured by further studies to understand the antecedents of EI and MI activities.

Literature

- Ahlin, B., Drnovšek, M., Hisrich, R.D. (2014), "Entrepreneurs' Creativity and Firm Innovation: The Moderating Role Of Entrepreneurial Self-Efficacy", *Small Business Economics*, Vol. 43, pp.101-117.
- Ajzen, I. (1991), "The Theory of Planned Behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50, No 2, pp.179–211.
- Al Balushi, M.K., Soliman, M., Kennedy, R., Butt, I. (2024), "How Could Brand Image, Ethnocentrism, and Brand Attachment Impact Consumer Behaviour in the Service Industry: A Comparative Study", *Journal of Tourism and Services*, Vol. 15, No 29, pp.1-23.
- Al-Jubari, I. (2019), "College Students' Entrepreneurial Intention: Testing An Integrated Model of SDT and TPB", *SAGE Open*, Vol. 9, No 2, pp.1–15.
- Al-Mamary, Y.H., Alshallaqi, M. (2022), "Impact of Autonomy, Innovativeness, Risk-Taking, Proactiveness, and Competitive Aggressiveness on Students' Intention To Start A New Venture", *Journal of Innovation & Knowledge*, Vol. 7 No 4, pp.1-10.
- Anwar, A., Zafar, A.U., Papa, A., Pham, T.T.T., Apostolidis, C. (2024), "Exploring the Ascendancy of Social Capital in Entrepreneurial Behavior: New Insights From Mix Model Perspective In Digital Healthcare", *International Journal of Entrepreneurial Behavior & Research*, Vol. 30, No 8, pp.2001-2026.
- Arrighetti, A., Caricati, L., Landini, F., Monacelli, N. (2016), "Entrepreneurial Intention In The Time Of Crisis: A Field Study", *International Journal of Entrepreneurial Behavior & Research*, Vol. 22, No 6, pp.835-859.
- Ballester, E., Rubio, N., Ruiz, C. (2023), "Emojis and Users' Brand Engagement In Instagram. The Case Of Eco-Friendly Restaurants", *Journal of Tourism and Services*, Vol. 14, No 27, pp.64-88.
- Bano, N., Siddiqui, S. (2022), "Consumers' Intention Towards The Use Of Smart Technologies In Tourism and Hospitality (T&H) Industry: A Deeper Insight Into The Integration of TAM, TPB and Trust", *Journal of Hospitality and Tourism Insights*, Vol. 7, No 3, pp.1412-1434.
- Barney, J. (1991), "Firm Resources and Sustained Competitive Advantage", *Journal of Management*, Vol. 17, No 1, pp.99–120.

Human Capital, Entrepreneurial Dynamics, and Consumer Behavior as Investment in Human Development

- Berends, H., Jelinek, M., Reymen, I., Stultiëns, R. (2014), "Product Innovation Processes in Small Firms: Combining Entrepreneurial Effectuation and Managerial Causation", *Journal of Product Innovation Management*, Vol. 31, No 3, pp.616-635.
- Bernoster, I., Rietveld, C., Thurik, R., Torrès, O. (2018), "Overconfidence, Optimism And Entrepreneurship", *Sustainability*, Vol. 10, No 7, pp.2233-2244.
- Bilan, Y., Tovmasyan, G., Dallakyan, S. (2024), "The Impact of Digital Technologies on Tourists' Travel Choices and Overall Experience", *Journal of Tourism and Services*, Vol. 15, No 29, pp.153-175.
- Bosma, N., Acs, Z.J., Autio, E., Coduras, A., Levie, J. (2008), *Global Entrepreneurship Monitor 2008 Executive Report*, Global Entrepreneurship Research Consortium (GERA): Wellesley, MA and London.
- Bruce, E., Shurong, Z., Ying, D., Yaqi, M., Amoah, J., Egala, S. B. (2023), "The Effect Of Digital Marketing Adoption On Smes Sustainable Growth: Empirical Evidence From Ghana", *Sustainability*, Vol. 15, No 6, pp.4760-4770.
- Brzozowski, J., Cucculelli, M., Peruzzi, V. (2019), "Firms' Proactiveness During The Crisis: Evidence From European Data", *Entrepreneurship Research Journal*, Vol. 9, No 3, pp.1–14.
- Buchanan, L., Yeatman, H., Kelly, B., Kariippanon, K. (2018), "Digital Promotion Of Energy Drinks To Young Adults Is More Strongly Linked To Consumption Than Other Media", *Journal of Nutrition Education and Behavior*, Vol. 50, No 9, pp.888-895.
- Bullough, A., Renko, M., Myatt, T. (2014), "Danger Zone Entrepreneurs: The Importance Of Resilience And Self-Efficacy For Entrepreneurial Intentions", *Entrepreneurship Theory and Practice*, Vol. 38, No 3, pp.473-499.
- Caballero-Morales, S.O. (2021), "Innovation as Recovery Strategy For SMEs In Emerging Economies During The COVID-19 Pandemic", *Research In International Business And Finance*, Vol. 57, pp.1-9.
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., Zheng, J. (2020), "The Psychological Impact of The COVID-19 Epidemic On College Students in China", *Psychiatry Research*, Vol. 287, pp.1-5.
- Cardella, G.M., Barba-Sánchez, V., Meseguer-Martinez, Á., Hernández-Sánchez, B., Sánchez-García, J.C. (2024), "Analyzing University Students' Entrepreneurial Intentions Under The Influence Of The COVID-19 Pandemic", *International Entrepreneurship and Management Journal*, Vol. 20, No 4, pp.2567-2590.
- Cassar, G. (2007), "Money, Money, Money? A Longitudinal Investigation of Entrepreneur Career Reasons, Growth Preferences And Achieved Growth", *Entrepreneurship and Regional Development*, Vol. 19, No 1, pp.89-107.
- Civelek, M., Ključnikova, J., Kloudová, J., Veselá, Z., Ključnikov, A. (2024), "From Intention To Action: Understanding Bank Credit Access Through The Lens Of The Theory Of Planned Behavior", *Oeconomia Copernicana*, Vol. 15, No. 2, pp.683–715.
- Civelek, M., Krajčík, V., Ključnikov, A. (2023a), "The Impacts Of Dynamic Capabilities on SMEs' Digital Transformation Process: The Resource-Based View Perspective", *Oeconomia Copernicana*, Vol. 14, No. 4, pp.1367-1392.
- Civelek, M., Krajčík, V., Fialova, V. (2023b), "The Impacts Of Innovative And Competitive Abilities of SMEs On Their Different Financial Risk Concerns: System Approach", *Oeconomia Copernicana*, Vol. 14, No 1, pp.327–354.
- Cruz-Ros, S., Garzon, D., Mas-Tur, A. (2017), "Entrepreneurial Competencies And Motivations To Enhance Marketing Innovation in Europe", *Psychology & Marketing*, Vol. 34, No 11, pp.1031-1038.
- Devkota, N., Gajdka, K., Siwakoti, R., Klimová, M., Dhakal, K. (2023), "Promoting Sustainable Tourist Behavior Through Promotional Marketing", *Journal of Tourism and Services*, Vol. 14, No 26, pp.219-241.
- Do, B.R., Dadvari, A., Moslehpour, M. (2020), "Exploring the Mediation Effect of Social Media Acceptance On The Relationship Between Entrepreneurial Personality And Entrepreneurial Intention", *Management Science Letters*, Vol. 10, No 16, pp.3801-3810.
- Dwivedi, A., Pawsey, N. (2023), "Examining the Drivers Of Marketing Innovation in SMEs", *Journal of Business Research*, Vol. 155, pp.1-12.

- D'Attoma, I., Ieva, M. (2020). Determinants of Technological Innovation Success And Failure: Does Marketing Innovation Matter?" *Industrial Marketing Management*, Vol. 91, pp.64-81.
- Elegunde, A.F., Okunbanjo, O.I., Afolabi, B.K. (2024), "Personality Traits And Entrepreneurial Performance Of Small Businesses", *International Journal of Entrepreneurial Knowledge*, Vol. 12, No 2, pp.78–92.
- Engle, R.L., Dimitriadis, N., Gavidia, J.V., Schlaegel, C., Delanoe, S., Alvarado, I., Wolff, B. (2010), "Entrepreneurial Intent: A Twelve-Country Evaluation Of Ajzen's Model Of Planned Behavior", *International Journal of Entrepreneurial Behavior & Research*, Vol. 16, No 1, pp.35-57.
- Ferraris, A., Devalle, A., Ciampi, F., Couturier, J. (2019), "Are global R&D Partnerships Enough To Increase A Company's Innovation Performance? The Role Of Search And Integrative Capacities", *Technological Forecasting and Social Change*, Vol. 149, No 2019, pp.1–8.
- Frese, M., Gielnik, M.M. (2014), "The Psychology Of Entrepreneurship", *Annu. Rev. Organ. Psychol. Organ. Behav.*, Vol. 1, No 1, pp.413-438.
- García-Rodríguez, F.J., Gutiérrez-Taño, D., Ruiz-Rosa, I. (2022), "Parents' Support For Children's Entrepreneurial Behavior: Incentivizing The Next Generation Of Entrepreneurs", *International Journal of Entrepreneurial Behavior & Research*, (ahead-of-print) <https://doi.org/10.1108/IJEBR-05-2022-0452>
- Gilmartin, S.K., Thompson, M.E., Morton, E., Jin, Q., Chen, H.L., Colby, A. Sheppard, S.D. (2019), "Entrepreneurial Intent Of Engineering And Business Undergraduate Students", *Journal of Engineering Education*, Vol. 108, No 3, pp.316-336.
- Gkypali, A., Roper, S. (2024), "Innovation and Sales Growth Intentions Among The Solopreneurs: The Role Of Experience And Entrepreneurial Self-Efficacy", *Technological Forecasting and Social Change*, Vol. 200, pp.1-13.
- Hernandez-Sanchez, B.R., Cardella, G.M., Sanchez-Garcia, J.C. (2020), "Psychological Factors That Lessen The Impact Of COVID-19 On The Self-Employment Intention Of Business Administration And Economics' Students From Latin America", *International Journal of Environmental Research and Public Health*, Vol. 17, No 15, pp.1-17.
- Ho, S. M., Ocasio-Velázquez, M., Booth, C. (2017), "Trust or Consequences? Causal Effects Of Perceived Risk And Subjective Norms On Cloud Technology Adoption", *Computers & Security*, Vol. 70, pp.581-595.
- Hughes, M., Hughes, P., Hodgkinson, I., Chang, Y.Y., Chang, C.Y. (2022), "Knowledge-Based Theory, Entrepreneurial Orientation, Stakeholder Engagement, And Firm Performance", *Strategic Entrepreneurship Journal*, Vol. 16, No 3, pp.633–665. <https://doi.org/10.1002/sej.1409>.
- Ilomo, C., Mwantimwa, K. (2023), "Entrepreneurial Intentions of Undergraduate Students: the Moderating Role of Entrepreneurial Knowledge", *International Journal of Entrepreneurial Knowledge*, Vol. 11, No 1, pp.14-34.
- Ince, H., Imamoglu, S.Z., Karakose, M.A. (2023), "Entrepreneurial Orientation, Social Capital, And Firm Performance: The Mediating Role Of Innovation Performance", *The International Journal of Entrepreneurship and Innovation*, Vol. 24, No 1, pp.32–43.
- Irimia-Diéguez, A., Velicia-Martín, F., Aguayo-Camacho, M. (2023), "Predicting FinTech innovation adoption: The mediator role of social norms and attitudes", *Financial Innovation*, Vol. 9, No 1, pp.1–23.
- Khan, M.A., Rathore, K., Zubair, S.S., Mukaram, A.T., Selem, K.M. (2023), "Encouraging SMEs Performance Through Entrepreneurial Intentions, Competencies, And Leadership: Serial Mediation Model", *European Business Review*, Vol. 36, No 2, pp.271-289.
- Khatami, F., Ferraris, A., Palmucci, D.N., Dabić, M. (2024), "Impact Analysis Of The Digital Entrepreneurial Ecosystem To Improve The Tourism Industry and Social Sustainability", *Journal of Tourism and Services*, Vol. 15, No 29, pp.176-205.
- Khedhaouria, A., Gurău, C., Torrès, O. (2015), "Creativity, Self-Efficacy, And Small-Firm Performance: The Mediating Role Of Entrepreneurial Orientation", *Small Business Economics*, Vol. 44, pp.485–504.
- Kim, J., Cho, S.E. (2024), "Entrepreneurial Capabilities for Business Sustainability in Software Industries", *Sustainability*, Vol. 16, No 23, pp.1-18.

Human Capital, Entrepreneurial Dynamics, and Consumer Behavior as Investment in Human Development

- Kuděj, M., Civelek, M., Erben, M., Masarova, J., Kubalek, J. (2023), "Navigating Global Markets: The Role Of Enterprise Risk Management And Human Resource Management In SME International Expansions", *Equilibrium. Quarterly Journal of Economics and Economic Policy*, Vol. 18, No 4, pp.1075–1103.
- Kumar, S., Paray, Z.A., Dwivedi, A.K. (2020), "Student's Entrepreneurial Orientation And Intentions: A Study Across Gender, Academic Background, And Regions", *Higher Education, Skills and Work-Based Learning*, Vol. 11 No 1, pp.78–91.
- Le, C., Nguyen, B., Vo, V. (2024), "Do Intangible Assets Help Smes In Underdeveloped Markets Gain Access To External Finance? The Case Of Vietnam", *Small Business Economics*, Vol. 62, No 2, pp.833–855.
- Lee, L., Wong, P.K., Der Foo, M., Leung, A. (2011), "Entrepreneurial Intentions: The Influence Of Organizational And Individual Factors", *Journal of Business Venturing*, Vol. 26, No 1, pp.124-136.
- Liao, Z., Liu, Y., Dai, J., Li, Y. (2022), "An Application Of The Planned Behavior Theory To Predict Chinese Firms' Environmental Innovation", *Journal of Environmental Planning and Management*, Vol. 65, No 14, pp.2676-2695.
- Liñán, F., Chen, Y.W. (2009), "Development and Cross-Cultural Application Of A Specific Instrument To Measure Entrepreneurial Intentions", *Entrepreneurship Theory and Practice*, Vol. 33, No 3, pp.593-617.
- Liñán, F., Nabi, G., Krueger, N. (2013), "British and Spanish entrepreneurial Intentions: A Comparative Study", *Revista de economía Mundial*, Vol. 33, pp.73-103.
- Liu, Y., Zhang, Y., Fang, H., Chen, X. (2022), "SMEs' line of credit under the COVID-19: evidence from China", *Small Business Economics*, Vol. 58, No 2, pp.807-828.
- Lopes, J.M., Gomes, S., Santos, T., Oliveira, M., Oliveira, J. (2021), "Entrepreneurial Intention Before And During COVID-19: A Case Study on Portuguese University Students", *Education Sciences*, Vol. 11, No 6i pp.273-284.
- Luthje, C., Franke, N. (2003), "The 'Making' Of An Entrepreneur: Testing A Model Of Entrepreneurial Intent Among Engineering Students At MIT", *R&D Management*, Vol. 33, No. 2, pp.135-147.
- Ma, C. A., Xiao, R., Chang, H.Y., Song, G.R. (2022), "Founder Management And Innovation: An Empirical Analysis Based On The Theory Of Planned Behavior And Fuzzy-Set Qualitative Comparative Analysis", *Frontiers in Psychology*, Vol. 13, pp.1-10.
- Makovec Brenčič, M., Pfajfar, G., Rašković, M. (2012), "Managing in a Time of Crisis: Marketing, HRM And Innovation", *Journal of Business & Industrial Marketing*, Vol. 27, No 6, pp.436-446.
- Martínez-Rodríguez, I., Callejas-Albiñana, F.E., Callejas-Albiñana, A.I. (2020), "Economic and Socio-Cultural Drivers Of Necessity And Opportunity Entrepreneurship Depending On The Business Cycle Phase", *Journal of Business Economics and Management*, Vol. 21, No 2, pp.373-394.
- Medrano, N., Olarte-Pascual, C. (2016), "The Effects Of The Crisis On Marketing Innovation: An application for Spain", *Journal Of Business & Industrial Marketing*, Vol. 31, No 3, pp.404-417.
- Miao, C., Coombs, J.E., Qian, S., Sirmon, D.G. (2017), "The Mediating Role of Entrepreneurial Orientation: A Meta-Analysis of Resource Orchestration and Cultural Contingencies", *Journal of Business Research*, Vol. 77, pp.68–80.
- Nabi, G., Liñán, F. (2013), "Considering Business Start-Up in Recession Time: The Role of Risk Perception And Economic Context In Shaping The Entrepreneurial Intent", *International Journal of Entrepreneurial Behavior & Research*, Vol. 19, No 6, pp.633–655.
- Naidoo, V. (2010), "Firm Survival Through A Crisis: The Influence Of Market Orientation, Marketing Innovation And Business Strategy", *Industrial Marketing Management*, Vol. 39, No. 8, pp.1311-1320.
- Naisa, F.U.K., Xia, E., Ibrahim, A.S., Adeiza, A., Khan, A.G. (2023), "The Effect of the Global Health Crisis on Organizational Marketing and Culture of Innovation", *Journal of the Knowledge Economy*, Vol. 15, No 3, pp.15218-15242.
- Neves, C., Oliveira, T., Santini, F. (2022), "Sustainable Technologies Adoption Research: A Weight And Meta-Analysis", *Renewable and Sustainable Energy Reviews*, Vol. 165, No 2022, pp.1-9.

Human Capital, Entrepreneurial Dynamics, and Consumer Behavior as Investment in Human Development

- Newman, A., Obschonka, M., Schwarz, S., Cohen, M., Nielsen, I. (2019), "Entrepreneurial Self-Efficacy: A Systematic Review Of The Literature On Its Theoretical Foundations, Measurement, Antecedents, And Outcomes, And An Agenda For Future Research", *Journal of Vocational Behavior*, Vol. 110, pp.403-419.
- Oklander, M., Yashkina, O., Zlatova, I., Cicekli, I., Letunovska, N. (2024), "Digital Marketing in the Survival and Growth Strategies of Small and Medium-Sized Businesses During the War in Ukraine", *Marketing and Management of Innovations*, Vol. 15, No 1, pp.15–28.
- Ouragini, I., Lakhali, L. (2024), "The Effect of Entrepreneurial Marketing Education On The Determinants Of Students' Entrepreneurial Intention", *The International Journal of Management Education*, Vol. 22, No 1, pp.1-15.
- Ozaralli, N., Rivenburgh, N.K. (2016), "Entrepreneurial Intention: Antecedents to Entrepreneurial Behavior in the USA and Turkey", *Journal of Global Entrepreneurship Research*, Vol. 6, pp.1-32.
- Pham, T.T.T., Nguyen, T.V.H., Nguyen, S.K., Nguyen, H.T.H. (2023), "Does Planned Innovation Promote Financial Access? Evidence from Vietnamese SMEs", *Eurasian Business Review*, Vol. 13, No 2, pp.281–307.
- Ragazou, K., Passas, I., Garefalakis, A., Kourgiantakis, M., Xanthos, G. (2022), "Youth's Entrepreneurial Intention: A Multinomial Logistic Regression Analysis Of The Factors Influencing Greek HEI Students In Time of Crisis", *Sustainability*, Vol. 14, No 20, pp.1-16.
- Rakshit, S., Islam, N., Mondal, S., Paul, T. (2021), "Mobile Apps For SME Business Sustainability During COVID-19 and Onwards", *Journal of Business Research*, Vol. 135, pp.28-39.
- Rishi, N., Sharma, V., Gupta, D.D., Singh, Y.P., Agnihotri, R. (2024), "Crisis-driven Innovations In Marketing", *Industrial Marketing Management*, Vol. 119, pp.135-146.
- Rodić Lukić, V., Marić, M., Branković, N. (2024), "Model of Predicting Entrepreneurial Intentions Among Teachers", *International Journal of Entrepreneurial Knowledge*, Vol. 12, No 1, pp.43-57.
- Rosenbusch, N., Rauch, A., Bausch, A. (2013), "The Mediating Role Of Entrepreneurial Orientation In The Task Environment–Performance Relationship: A Meta-Analysis", *Journal of Management*, Vol. 39, No 3, pp.633–659.
- Ruiz-Rosa, I., Gutiérrez-Taño, D., García-Rodríguez, F.J. (2020), "Social Entrepreneurial Intention And The Impact Of COVID-19 Pandemic: A Structural Model", *Sustainability*, Vol. 12, No 17, pp.1-20.
- Saleh, M.A.K., Manjunath, K.R. (2023), "The Performance of Small and Medium Enterprises in Yemen: A Cross-Sectional Study", *International Journal of Entrepreneurial Knowledge*, Vol. 11, No. 2, pp.39-56.
- Schlaegel, C., Engle, R.L., Richter, N.F., Taureck, P.C. (2021), "Personal Factors, Entrepreneurial Intention, And Entrepreneurial Status: A Multinational Study in Three Institutional Environments", *Journal of International Entrepreneurship*, Vol. 19, No. 3, pp.357-398.
- Shen, W., Hommel, B., Yuan, Y., Chang, L., Zhang, W. (2018), "Risk-taking and Creativity: Convergent, But Not Divergent Thinking Is Better In Low-Risk Takers", *Creativity Research Journal*, Vol. 30, No 2, pp.224-231.
- Shi, J., Nyedu, D.S.K., Huang, L., Lovia, B.S. (2024), "Graduates' Entrepreneurial Intention In A Developing Country: The Influence Of Social Media And E-Commerce Adoption (SMEA) And Its Antecedents", *Information Development*, Vol. 40, No 1, pp.20-35.
- Sobre Frimpong, F.K., Kweku Hope, E., Obeng Acheampong, K., Kwame, A.J.J. Puttick, C.P.(2023), "Evaluating the Impact of Marketing Communication Mix on Customer Satisfaction: The Mediating Role of Service Quality Delivery", *International Journal of Entrepreneurial Knowledge*, Vol. 11, No 2, pp.67-88.
- Stangler, D. (2009), The Economic Future Just Happened, available at: www.kauffman.org/uploadedFiles/the-economic-future-just-happened.pdf, referred on 15/02/2025.
- Uctu, R., Al-Silefanee, R. (2023), "Uncovering the Factors Influencing Entrepreneurial Intentions of University Students: An Application of Shapero's Model", *International Journal of Entrepreneurial Knowledge*, Vol. 11, No 1, pp.35-50.
- Upadhyay, N., Upadhyay, S., Al-Debei, M. M., Baabdullah, A. M., Dwivedi, Y. K. (2023), "The Influence Of Digital Entrepreneurship And Entrepreneurial Orientation On Intention Of Family Businesses To Adopt Artificial Intelligence: Examining The Mediating Role Of Business Innovativeness", *International Journal of Entrepreneurial Behavior & Research*, Vol. 29, No 1, pp.80-115.

Human Capital, Entrepreneurial Dynamics, and Consumer Behavior as Investment in Human Development

Varadarajan, R., Welden, R.B., Arunachalam, S., Haenlein, M., Gupta, S. (2022), "Digital Product Innovations For The Greater Good And Digital Marketing Innovations In Communications And Channels: Evolution, Emerging Issues, And Future Research Directions", *International Journal of Research in Marketing*, Vol. 39 No 2, pp.482-501.

Wang, W., Cao, Q., Zhuo, C., Mou, Y., Pu, Z., Zhou, Y. (2021), "COVID-19 to Green entrepreneurial Intention: Role Of Green Entrepreneurial Self-Efficacy, Optimism, Ecological Values, Social Responsibility, And Green Entrepreneurial Motivation", *Frontiers in Psychology*, Vol. 12, pp.1-16.

Zemlyak, S., Naumenkov, A., Khromenkova, G. (2022), "Measuring the Entrepreneurial Mindset: The Motivations behind the Behavioral Intentions of Starting a Sustainable Business", *Sustainability*, Vol. 14, No 23, pp.1-19.

VERSLUMO KETINIMŲ POVEIKIS RINKODAROS INOVACIJOMS EKONOMINIŲ NUOSMUKIŲ KONTEKSTE

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Santrauka. Ekonominės krizės veikia individų požiūrį ir jų pasirengimą imtis veiksmų sudėtingomis ekonominėmis sąlygomis. Jos taip pat gali paveikti asmenų verslumo ketinimus, o tai savo ruožtu lemia įmonių rinkodaros inovacijų veiklos pokyčius. Straipsnio tikslas – ištirti verslumo ketinimų poveikį rinkodaros inovacijoms ekonominių nuosmukių kontekste.

Verslumo ketinimų koncepcija grindžiama suplanuoto elgesio teorija (angl. *Theory of Planned Behavior*), o rinkodaros inovacijos laikomos dinaminių pokyčių koncepcija, kuri priskiriama pagrįstam išteklių požiūriui (angl. *Resource-Based View*). Tyrėjai parengė internetinę apklausą ir išsiuntė ją tikslingai atrinktiems respondentams, dirbantiems 1367 įmonėse keliose Europos šalyse. Duomenų analizei buvo taikytas ordinacinės logistinės regresijos testas (angl. *Ordinal Logistic Regression Test*). Tyrimo rezultatai patvirtino teigiamą verslumo ketinimų poveikį įmonių rinkodaros inovacijoms ekonominių nuosmukių laikotarpiams. Šių rezultatų priežastis galėjo būti finansinė ir moralinė šeimos narių parama bei ankstesnė nesėkminga vadovų patirtis.

Reikšminiai žodžiai: rinkodaros inovacijos; finansai; verslumo ketinimai; ištekliais pagrįstas požiūris; ekonominės krizės.