



Article

# **Testing Entrepreneurial Intention Determinants in Post-Transition Economies**

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Received: 9 October 2020; Accepted: 7 December 2020; Published: 11 December 2020



Abstract: The paper aims to analyze the entrepreneurial intention determinants in nine post-transition economies of European member states. To achieve our stated goal, the study focused on the influence of fear of failure and networking on individuals' inclination towards entrepreneurship. Additionally, gender, income, education, and work status were also considered control variables. The data were collected using the Global Entrepreneurship Monitor (GEM) database. We included responses collected from nine former transition economies, giving us a total of 13,494 observations, for 2015. Logistic regression models were employed to measure the influence of perceptions on the propenisty of individuals to create a new venture. The results indicated that fear of failure is significantly and negatively correlated with entrepreneurial intentions for all groups of countries. The results also indicated that people who have entrepreneurs in the family have a higher propensity for entrepreneurial intentions than people who do not have family members with such a status.

Keywords: entrepreneurial intention; GEM; fear of failure; networking; post-transition economies

#### 1. Introduction

After the collapse of the communist regime, distinctive groups of European countries with contrasting policies and accomplishments emerged. Some countries have been more successful than others in the process of ongoing transformation, others being more erratic and enhancing progress at a much slower pace. The centralized system proves its lasting harmful effect on entrepreneurship by encouraging a culture of state dependence, by blocking the entry of those who do not have adequate resources and connections. We have to mention that the centralized system is based, predominantly, on public property and the market system is based, predominantly, on private property and free market rules. In the 1990s, in countries like Poland, Hungary, Slovenia, and Romania, the level of entrepreneurship was low, the level of fear of failure was high, and the degree of cultural acceptance of entrepreneurship was low [1]. In this context entrepreneurship was discouraged because the business environment tends to be bureaucratic, corrupt, and dysfunctional [2]. The transition to a market system started with reforms implemented in a legislative, institutional, and political environment, which was inappropriate for laying the foundations of an entrepreneurial economy. Entrepreneurial

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success depended not only on the initial conditions, but also on the speed and consistency with which the reform measures were applied.

Aidis [3] highlighted a number of characteristics and needs of entrepreneurship in transition countries. For example, fear of failure was most often analyzed in relation with the decision whether to start a business or not. Various studies indicate that entrepreneurs have a lower fear of failure in the environments where entrepreneurial approval is high, and significantly higher in the environments with lower approval [4]. In addition, in cultures where there is a relatively greater tolerance and/or acceptance of the failure of small businesses, a much larger share of the adult population tends to engage in entrepreneurial activities. The literature focused on entepreneruship determinants also reveals that personal networks and relational strategy help to overcome blockages in entrepreneurship activity, and they are seen as the main solution for recognizing opportunities, for access to resources in the desired quantity and quality, capital, and knowledge.

Moreover, during the transition period, there were major changes in socio-economic and political conditions; work was reorganized, it was necessary to form a previously non-existent entrepreneurial culture and adequate legislation, and it became necessary to eliminate bureaucracy and corruption. The process of transition from the centralized regime to the entrepreneurial economy was carried out in stages, so that the consequence was the shaping of different forms of entrepreneurship. Estrin et al. [5] explain how, in the early transition stage, opportunities arose for entrepreneurs, but it was a period characterized by increased uncertainty in the absence of previous experience. In the second stage, there was macroeconomic stabilization, the uncertainty decreased, the price mechanism started to work and to send relevant information on supply and demand, so that risk reduction stimulated investment in technology and start-up of long-term projects. In the third stage, the institutions adapted and began to provide better mechanisms for coordinating resources and collecting information, so the resources started to be increasingly accessed through the financial institutions and through the market.

For entrepreneurial development, the privatization policy was very important. It started in the form of a "small privatization" when entrepreneurial opportunities were created on the background of the maintenance of the legacy of the previous period, but in many respects the reform process acted in a way where the business environment actually became unfavorable to entrepreneurs [5]. Price liberalization and exposure of companies to market forces led many enterprises to inefficiency [6].

The newly created companies encountered a hostile environment. Starting a business is risky anywhere, but mostly in economies undergoing fundamental reforms which can radically change the business environment, which shifted from the dominance of large companies to small and medium enterprises [7]. A study conducted on the example of Poland showed that, following the reforms in the entrepreneurial field, an entrepreneurial culture developed, but the new enterprises did not receive enough support, and sometimes there were entrepreneurial and managerial deficiencies [8]. However, cultural barriers did not limit entrepreneurial orientation, young people attributed a high social value to such a career option, and the number of women entrepreneurs increased, as they were able to recognize and exploit opportunities in the new market economy and, in general, managers in Eastern Europe had a positive attitude towards entrepreneurial education compared to vocational education and training.

This paper aims to analyze entrepreneurial intention determinants by using the latest data from GEM on a group of nine countries: Bulgaria, Croatia, Estonia, Hungary, Latvia, Poland, Romania, Slovakia, and Slovenia. The countries were selected based on data availability and those meeting the condition of being a European member state. Starting from Havrylyshyn et al.'s [9] classification, the selected economies were grouped into three groups based on the early reformed strategies they adopted, namely: G1—economies which sustained big-bang; G2—advanced start-steady economies; G3—aborted big-bang and gradual reform implementation. The rhythm and manner of reforms implementation has considerably influenced the degree of entrepreneurial sector development. The analyzed countries were characterized by an economic system that was not very permissive of private property. The transition to a market economy meant a turnaround in the share of private

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and public property. We chose to introduce in the selection of countries, as the main criterion, the implementation of reforms due to the effects on the entire entrepreneurial sector and implicitly on the variables we analyze, especially on the fear of failure and networking. An important landmark for the choice and classification of countries was the study of Havrylyshyn et al. [9], which we consider relevant for the description of the European member countries according to the way of implementing the reforms. From the multitude of determinants of entrepreneurial intention, we focus in this analysis on two major attitudinal influencers, namely fear of failure and networking, also taking into consideration socio-demograhpic variables such as gender, income, education, and work status.

A study accomplished by Vodă et al. [10] showed that in less developed European countries an important impact on entrepreneurship is held by networking and social position of individuals, but the confidence in individual skills and knowledge is also very important because it contributes to entrepreneurial success. Family history adds to the entrepreneurial factors in the less developed countries of Europe. The same study emphasized that gender is strongly correlated with the fear of failure in this group of countries, but a determining factor is the necessity. The lack of jobs and the high rates of unemployment have practically determined individuals from these countries to resort to entrepreneurship as a form of survival and profesional development, hence the high rates of starting new businesses in these countries.

The novelty of the paper is twofold: first, our study seeks to investigate the separate impact of several attitudinal and socio-demographic determinants on entrepreneurial intention. Although there are many studies on entrepreneurial intention determinants, only few research works address this issue on a sample of post-transition economies. Moreover, we grouped the countries based on the early reform strategy implementation in order to determine if there is any major difference among groups. Second, by analyzing entrepreneurship in the context of post-transition economies, we can offer valuable insights into its main determinants and thus contributing to the overall entrepreneurial literature.

To achieve its goal, the study presents the following sections: the first part includes an analysis of the literature in the field as a basis for the development of research hypotheses; the second part includes the research methodology and provides information on the research method, sampling, and description of variables; and the final part contains the discussion of the results obtained, the research conclusions, limitations, and future research directions.

### 2. Literature Review and Hypotheses Development

#### 2.1. Entrepreneurial Intention

Recently, the interest in the study of entrepreneurial intention has grown considerably among researchers [11,12], and entrepreneurship research has matured and now spans multiple entrepreneurial contexts, including developing countries, emerging economies, and developed economies [13]. Entrepreneurial intention is the commitment to start a new business and also refers to the behaviour needed to start such an activity [14,15] being the first link in the entrepreneurial process [16], and one of the rapidly evolving sub-domains in the broader framework of entrepreneurial research [17]. The study of entrepreneurial intentions helped to bring serious social psychology research into the forefront of entrepreneurship, and it continues to drive the researchers in valuable directions (like entrepreneurial learning) [18].

Two main theoretical models of entrepreneurial intention emerged. Pioneering work in this field was published by Shapero [19] and Ajzen [20]. Thompson [21] stated that intentions are the first step in starting a business in a typical long-term process, while Sanchez [22] stated that inspiration is what gives rise to attitudes and intention, increasing the interest in following an entrepreneurial career.

García-Rodríguez et al. [13] studied entrepreneurial intention and its antecedents in a collectivist economy (Cuba) as compared to a developed market economy (Spain), showing that the influence of antecedents in the intention of starting up a business differs in Cuba compared to a market economy. In this sense, it appears that in a collectivist economy reducing obstacles to business activities and

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improving perceived levels of feasibility would have a greater impact on individuals' entrepreneurial intention than trying to improve individuals' perception of desirability [13].

Very important for the manifestation of entrepreneurial intention is education in general and entrepreneurial education in particular. Entrepreneurial education has a direct, positive, and significant impact on intention, according to the conclusions of a study conducted by Nowiński et al. [23] on a group of Polish students. Souitaris, Zerbinati, and Al-Laham [24] also contributed to the literature regarding entrepreneurial intentions by empirically confirming the attitude-intention link and by testing the effect of entrepreneurial education on attitudes and intentions. They found that inspiration had a positive effect on entrepreneurial attitudes and intentions, while learning and resources did not have a significant effect [24].

Other studies have also analyzed the role that entrepreneurial education has on intention. Saeed et al. [25] demonstrated the significant role of entrepreneurial education and entrepreneurial support as students perceived the education and support that they received from their universities as the most important influence on their ability to become entrepreneurs. Secundo et al. [26] considered that entrepreneurial education represents a set of actions that can be adopted by educational institutions and encouraged by policy makers, and is one of the most an important determinants of entrepreneurial intention, as shown by a study conducted by Çera and Çera [27].

A study conducted on a target group of Croatian students concluded that most of them show a strong entrepreneurial intention [28]. The same study pointed out that men show a higher inclination towards entrepreneurship than women, and people with a higher education level follow the same trend.

Other factors with an impact on entrepreneurial intention include personal attitudes. Some studies also concluded that, in order to manifest an entrepreneurial intention, an individual must demonstrate self-efficacy, a characteristic associated with risk-taking and a low fear of failure [29,30]. A survey of 160 Croatian students highlighted that networking positively affected entrepreneurial intent. The same study also stipulated that efforts to promote entrepreneurship and improvement of the entrepreneurial climate had a positive impact on entrepreneurial intention [31]. Similary, other authors revealed that entrepreneurial intention depends on personal entrepreneurial experiences and family support [32], being considered a determining behavior of the actual entrepreneurial behavior [33]. Nowiński et al. [23] argued that the decision to start a business occurs when the perception of an opportunity is present in the entrepreneurial intention is sometimes driven by negative experiences and frustration with the current work environment, or even with a business loss.

We can see in the research works above the importance of entrepreneurial intention as the first stage in starting a business. As we mentioned before, the manifestation of entrepreneurial intention is based on a series of triggers in the absence of which the transformation of intention into action becomes unlikely.

## 2.2. Hypotheses Development

## 2.2.1. Fear of Failure

Fear of failure plays an important role in creating a business, being considered one of the significant barriers in opening one's own business [34–36]. Fear of failure is a concept often used in psychology, which can be described as synonymous with fear of rejection or of criticism, and which is closely related to procrastination [37]. Fear of failure measures a negative emotion resulting from the perception of different threats, and it is considered a compelling factor for risk-taking [38]. It is considered a risk aversion [39], a negative emotion [40], which occurs when a danger is perceived [41]. Fear of failure can dominate people's choices, and when the desire for success is high enough, fear of failure becomes motivating, but it remains negatively associated with initiating an entrepreneurial approach [42]. Tsai et al. [43] characterized the concept as an emotional response associated with the decision of whether to initiate or not an entrepreneurial approach, a negative emotion, a humiliating experience

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due to failure, an assessment of a person's ability to achieve goals, or an assessment of the attitude towards risk. Similarly, Li [44] showed that fear of failure can discourage the start of projects, as it is a behavioral feature that can affect people's subjective judgment regarding risk-taking.

In the field of entrepreneurship, fear of failure is most often analyzed in relation to the decision of whether to start a business or not. The vast majority of the studies in the field considered fear of failure as an important barrier to entrepreneurship [45,46]. When starting a business, entrepreneurs often experience fear of failure, a natural aspect if one takes into account people's aversion to risk [47]. According to Beynon et al. [47], entrepreneurial intention is correlated with personal and social factors, including cultural ones, with the local economy conditions, with the perceived opportunities and capacities, but also with fear of failure. According to a study conducted by Henao-García et al. [48], fear of failure either obstructs or motivates entrepreneurial behavior, according to the case, and influences the decision to start a new business. Engel et al. [49] noted that fear of failure affects entrepreneurs' well-being and their ability to act. However, there is also the possibility that entrepreneurs' anxiety helps them achieve the required goals and standards, fear of failure being the result of anxiety and an accumulation of positive and negative emotions [50]. Fear of failure is activated by obstacles which appear in the period specific to the entrepreneurial activity start-up, as shown by Kollmann et al. [51], namely resource-based, market-based, and capital-based. Wyrwich et al. [4], Wennberg et al. [52], Welp et al. [53], and Vailland and Lafuente [54] explained fear of failure as a factor inhibiting entrepreneurial intentions and directly influencing occupational motivation and aspirations, including decisions whether to use business opportunities or not. Fear of failure is perceived with a dual influence, sometimes motivating or inhibiting [37], other times motivating or not necessarily blocking, but generating attitudes characterized by a high degree of caution [45]. Tsai et al. [43] demonstrated that entrepreneurial intention increases with age to a certain point, then entrepreneurial risk-taking enters a downward trend.

Fear of failure is directly related to the entrepreneurial intention or initiation. This was considered the most critical factor for starting an entrepreneurial approach [43]. Vodă et al. [10] also studied the impact of perceptual factors on entrepreneurship in a comparative study including 18 countries in the European Union (EU). They showed that fear of failure has a negative influence on early entrepreneurial activities, and people who perceive this negative emotion resulting from the perception of different threats are less likely to engage in early entrepreneurial activities.

A country-specific context could also be valuable for understanding the concept of fear of failure [30], because fear of failure could be influenced by the social and cultural aspects embedded in a particular country [55]. After studying the entrepreneurial intentions of the population of East Germany and West Germany, Wyrwich et al. [4] concluded that entrepreneurs have a lower fear of failure in environments where entrepreneurship approval is high, and significantly higher in environments with low approval. Landier [56] showed that the stigma associated with failure is an important determinant of entrepreneurial activity. Moreover, in cultures where there is a relatively greater tolerance and/or acceptance of the failure of small businesses, a much larger share of the adult population tends to engage in entrepreneurial activities. Socialism can be seen as the most hostile economic system to entrepreneurs [57,58].

Wennberg et al. [52] concluded that the negative effects of fear of failure are somewhat lower where there is a framework with a high level of institutional collectivism. The consequences of collectivism bring along entrepreneurial processes at the same time with identification of opportunities, emergence of motivation, and resource mobilization. Solesvik et al. [59] considered that the intensity of entrepreneurial intention is higher in transition countries which, before the system change, had not promoted risk-taking for discovering and exploiting opportunities for personal reward. Thus, according to Ivlevs et al. [2], in the case of European former communist states, people have difficulty developing entrepreneurial skills, and the success of their activities is difficult to achieve.

As a result, this study proposes to test the following hypothesis:

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**Hypothesis 1 (H1).** Regardless of the type of early reforms implemented in countries which underwent the transition process, fear of failure has a negative and significant effect on entrepreneurial intentions in all groups of countries.

#### 2.2.2. Networking

Entrepreneurial activities depend largely on people's social and personal networks. The ability to relate is one of the most important qualities of an entrepreneur [60]. The approach of social networks focuses on the relationships between entrepreneurs and third parties [61], who are both individuals and organizations [62]. Entrepreneurs make social and professional networks. Social networks have the advantage of identifying new opportunities, they offer access to resources which sometimes are accessible only in privileged circles, such as the financial one, they offer access to capital, skilled labor, and information. Professional networks are made up of potential customers, suppliers, or employees, and are a good source of information, support, advice, and trust [61].

Kanyan et al. [60] explained the differences between informal and formal networks. Informal networks are moderately related to entrepreneurial goals, and include social relationships, family, friends, and neighbours. They are important in the early stages of entrepreneurship and facilitate access to resources. Formal networks are closely related to entrepreneurial goals; however, they have a weak but positive influence on entrepreneurial intention, and include banks, institutions, lawyers, economists, consultants, researchers, consumers, suppliers who help the entrepreneurs to translate their ideas into profit. Formal networks appear when the entrepreneurs start a business but do not have all the necessary knowledge to put their ideas into practice in order to generate profit [60].

Henao-García et al. [48] showed that the probability of entrepreneurial involvement increases for a person who owns a personal network, that provides social capital, and facilitates the process of creating new activities, but provides an opening to new opportunities, a risk aversion, and especially it contributes to self-efficiency [63]. Ardagna and Lusardi [34] showed that entrepreneurs get help from their social networks whenever they need it, and the size of the network and the strength of the connection among members are essential for collecting the resources needed, and entrepreneurial success largely depends on the size and power of social networks [64]. The education in the field [11], promotes to increase in the entrepreneurial sector [65] and, especialy for women, the personal networks [66] are also important.

Newbert and Tornikovski [67] showed that the process of founding the business entrepreneur is rooted in social interactions, which stimulate business growth, create new opportunities for involvement in entrepreneurial activities and overcoming debts when entering entrepreneurship [68], with role models serving as a good source of information. They convey knowledge about how things are done, where resources can be obtained, or about potential success and failure factors [69]. According to the theory of role identification [70], social networks can initiate an imitative behaviour [71]. A study dedicated to transition countries, especially Croatia, concluded that personal networks and relational strategy help to overcome blockages in entrepreneurship activity, and they are the main solution for recognizing opportunities for access to resources in the desired quantity and quality, to capital, and knowledge [72].

Taking into account the relevance of social networks in entrepreneurial activity, this study proposes to test the following hypothesis:

**Hypothesis 2 (H2).** In countries that underwent the transition process, networking has a positive and significant effect on entrepreneurial intentions in all groups of countries.

## 2.2.3. Gender

The results of a study conducted by Santos et al. [73] showed a significant influence of gender on entrepreneurial activity. More precisely, the authors show that males are more likely to engage in early-stage entrepreneurial activities than females. Moreover, Haus et al. [74] studied gender

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differences in entrepreneurial intention for entrepreneurs in Europe and the USA. The results showed a higher average entrepreneurial intention for men compared to women. However, women's role in entrepreneurship is growing, and, as shown by a study of the interaction of three types of motivations on the entrepreneurial activity of women and men in 24 European countries, namely opportunity-based, need-driven, and mixed motivation, in the period 2009–2012, the probability of women initiating entrepreneurial activities was almost equal to that of men [75]. In recent years, the rate of women starting new businesses has exceeded that of men, in developing countries as well, according to a research conducted by Minniti and Naudé [76]. The authors argued that, despite this trend, women's businesses are outnumbered by men's, but the 1990s opened up another perspective for women in the entrepreneurial environment. Perhaps unexpectedly, the research conducted by Minniti and Naudé [76] showed that the prevalence rates of female entrepreneurship tend to be higher in developing countries than in developed ones, due to the fact that women in these states face great barriers to entry the formal labour market, and recourse to entrepreneurship becomes a way to avoid unemployment and poverty. In a theoretical synthesis, Bianco et al. [77] noted that women's evolution took place from a submissive social position, when their role was to put themselves in the service of others and to sacrifice themselves, to a more active social position, under the pressure of emancipation, as a result of acquiring skills through education. Even though women have the possibility to manifest themselves much more freely, with more confidence, the gaps still persist, women continue to face many barriers blocking their entrepreneurial careers [77]. Hechavarria and Ingram [78] concluded that gender differences are socially fuelled and perpetuated through different organizational forms.

Another analysis emphasized that women and men do not have the same opportunities in creating and running a business, and gender inequality remains high in the entrepreneurial environment [79]. Thus, the entrepreneurial intention is more pronounced with men than with women in the academic environment. The research conducted by Miranda et al. [79] shows that women have on average the same characteristics as men, but, nevertheless, women continue to show a lower entrepreneurial intention. The explanation lies in the influence of non-observable variables directly related to gender, namely customers' and investors' discrimination, cultural issues, social differences, family issues, or family preferences.

The communist system promoted the egalitarian syndrome as a preference for an equal distribution of income without taking into account the position held in the social division of labour [80]. Nevertheless, women's and men's roles are very different, and this was perpetuated after the transition to the free market and affected the entrepreneurial environment. This aspect is not only specific to the former communist countries, it is also a global one [81]. The conclusions of a study conducted by Cuberes et al. [66] showed, following the example of 40 European countries, that the incidence of entrepreneurship is higher among men than among women. An analysis of Croatia's entrepreneurial profile compared to other post-socialist European countries showed that the chances of accessing entrepreneurship are higher for men than for women, and the likelihood of engaging in opportunity-based activities in a post-socialist context is more correlated with age than with gender and innovation [58]. According to the authors of the study, women are less active than men due to their need to balance work and personal life, and to the prejudices regarding financial issues. The same view on gender inequality in the entrepreneurial sector of the former communist countries was found in Hann [82], who justified it by the fact that it is a reminiscence of the centralized period, when women were encouraged to carry out predominantly domestic and public activities. Murugesan and Jayavelu [83] attributed women's low degree of entrepreneurial involvement compared to men to the low self-confidence regarding the ability to perform entrepreneurial tasks adequately, i.e., due to the greater fear of failure caused by lack of confidence in their own abilities. Gender differences in entrepreneurship persist as a result of contextual and situational factors, with women having less confidence in their own abilities, less influence on social networks, and fear of failure, and this is a global characteristic [84]. The same conclusion was reached by a study conducted on 977 respondents from the Czech and Slovak academic environment, namely that women show less interest in entrepreneurial

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activities compared to men [85]. Women are less likely to obtain funding than men and are more likely to succeed in local activities [86].

Taking into account the relevance of gender to entrepreneurial activity, this study proposes to test the following hypothesis:

**Hypothesis 3 (H3).** Regardless of the reforms adopted in the former transition countries, men have a stronger propensity to develop their own business than women, in all groups of countries.

## 2.2.4. Education

Nabi et al. [87] showed that entrepreneurial intention is encouraged with educational progress, especially the entrepreneurial one. Ertuna and Gurel [88] noted that, under the pressure of global crises and rapid technologicalization, higher education is no longer a passport to employment, although education plays a crucial role in the development of entrepreneurial characteristics. Formal education increases the likelihood of becoming an entrepreneur, and people with higher education enjoy several options stimulating entrepreneurial intention. The same idea emerged from the research conducted by Solesvik [89], namely that people who participate in entrepreneurship courses develop higher entrepreneurial skills and show a higher entrepreneurial intention than those who do not attend such courses. Young people in the former communist states are encouraged to actively participate in various forms of beneficial entrepreneurial education in stimulating entrepreneurial initiative by providing the knowledge needed to start and run businesses, and by creating a positive and optimistic attitude [90]. According to Petković and Kisié [91], in transition countries there is a high percentage of youth unemployment for two important reasons: insufficiently rapid economic development, and the discordance between supply and demand. In the long run, according to the study, formal and non-formal education, especially the entrepreneurial one, makes an important contribution to the development of this category of states, because it encourages people to start activities, to be proactive, innovative, and to show their entrepreneurial intentions.

People with a high education level perceive a lower risk associated with entrepreneurship, because they have the certainty that the labor market can easily absorb them in case of failure of their initiative, they have greater confidence in their own strengths, and have the ability to better recognize opportunities [92]. Hutasuhut [93] considered education important in terms of providing access to knowledge, and knowledge stimulates entrepreneurial intention. On the other hand, Henao-García et al. [48] stated that entrepreneurial intention is associated with formal education and precedes behavior. According to the authors, education is a component of human capital, contributes explicitly to knowledge accumulation, and develops the qualities required by an entrepreneur. Mueller [11] considered that education helps building the social networks so useful to an entrepreneur. It seems that educated people are more oriented towards entrepreneurship because they have high expectations, but this category also includes people who prefer work at low risk, generating secure income [94].

Taking into account the relevance of education in entrepreneurial activity, this study proposes to test the following hypothesis:

**Hypothesis 4 (H4).** Education has a positive and significant influence on individuals' intentions of becoming entrepreneurs, in all groups of countries.

#### 2.2.5. Income

The results of the research conducted by Aidis et al. [95] on female entrepreneurship in the context of transition countries showed that women seem to have less access to external sources of capital than men. Aidis et al. [95] showed that access to funds is a more important barrier for business women in Lithuania and Ukraine than for their male counterparts. On the other hand, in Romania, the study conducted by Dumitru and Dumitru [96] showed a relationship between entrepreneurial intention and the level of household income. Consequently, the level of household income has a positive impact on

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entrepreneurship, due to both opportunities and mixed motives. At the same time, when income is higher, the tendency to develop entrepreneurship based on needs is lower, a conclusion also confirmed for total entrepreneurial intentions, and if the income is lower, the probability of being a needs-oriented entrepreneur is higher. Income inequality in Romania is one of the highest in the EU, and it is a negative factor for the quality and quantity of entrepreneurship in Romania, most of the population being financially constrained when starting a business.

According to Smallbone and Welter [97], in most developing countries people depend on their income to cope with the financial constraints required to start a business. Dunn and Holtz-Eakin [98] claim that high-income households are not only able to better provide the financial resources needed to grow entrepreneurial enterprise but are also likely to see more opportunities for entrepreneurial growth. Kothari [99] stated that students from families in "high" income groups are less inclined to work. Thus, Goethner et al. [100] shows that people's desire and positive attitude towards entrepreneurship are strongly influenced by the perspective of professional and material gains. Nevertheless, the results on income and entrepreneurial intentions are mixed. A study conducted by Setti [101] showed that socio-demographic factors, i.e., gender, education, income, and occupation, have a significant and positive effect on entrepreneurial intention among the young people in MENA countries (Middle East and North Africa). The results also showed that in Algeria, Egypt, Jordan, and Syria, young people from high-income households are more likely to become entrepreneurs than young people from lower-income families, while the high income of households in Iran, Morocco, Pakistan, and Yemen reduces entrepreneurial intentions among young people. Raijman [102] believes that family financial resources have a direct influence on entrepreneurial intentions, and Alibaygi and Pouya [103] showed that family income influences young people's career development. Moreover, Deli [104] emphasized the motivation beyond the choice of the entrepreneurial path with financial stability as a significant factor. The financial status of the family was also observed to have an impact on the child's choice of entrepreneurship [105]. The study conducted by Millman et al. [106] also confirmed that household incomes are positively related to their entrepreneurial intentions.

Taking into account the relevance of income in entrepreneurial activity, this study proposes to test the following hypothesis:

**Hypothesis 5 (H5).** *People in former transition countries with a higher income level* have a higher propensity to develop entrepreneurial intentions than people with a lower income level, in all groups of countries.

## 3. Research Methodology

## 3.1. Data and Sample

The paper aims to analyze the impact of entrepreneurial attributes as main determinants which explain individuals' propensity to engage in venture creation. To achieve this goal, the study focused on the influence of fear of failure and networking on individuals' inclination towards entrepreneurship. Additionally, gender, income, education, and work status were also considered as control variables.

The data were collected using the Global Entrepeneurship Monitor (GEM) database [107], which provides reliable information on the state of entrepreneurship in up to 115 economies. Moreover, through the common methodological approaches and the representatives of the collected data (more than 2000 adults' responses were collected in each country), the sample is suitable for cross-country analysis, allowing researchers to provide valuable insights on entrepreneurs and the entrepreneurial ecosystem. The GEM database is well suited for the study, as it was used in many studies focused on the entrepreneurial propensity [10,15,108].

This paper is focused on transition to market economies, as understanding when, how, and why entrepreneurship occurs is particularly important for these countries, as they underwent fundamental political and economic changes [109]. Furthermore, not all transition economies experienced the same degree of changes, as they differ drastically in terms of amount and nature of such transformations [110].

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The vast majority of countries in the first years after the falling of the communist regime established a broad pattern of the transformation process, which was largely kept to the present day. According to the early reform strategies adopted, the countries can be grouped in four categories: category I—economies which sustained big-bang; category II—advanced start-steady economies; category III—aborted big-bang; and category IV—gradual/limited reforms [9].

Our study focused on nine European member states, which witnessed more than 30 years of transformative reforms in their quest for economic and political liberalization. According to GEM data availability, we included the following countries in the analysis: Bulgaria, Croatia, Estonia, Hungary, Latvia, Poland, Romania, Slovakia, and Slovenia. Starting from Havrylyshyn et al.'s [9] classification, we divided the countries into three groups, based on data availability and inclusion criteria (European member states) (Table 1).

G1	G2	G3
Sustained Big Bang	Advanced Start/Steady	Aborted Big Bang/Gradual Reforms
Estonia	Croatia	Bulgaria
Latvia	Hungary	Romania
Poland	Slovenia	
Slovakia		

**Table 1.** European transition economics grouped by early reform implementation.

Sursa: adapted from Havrylyshyn et al. [9].

The way the reforms were implemented differed in the ex-communist group. Some European countries implemented reforms with strong and rapid impact, known as "shock therapy", "big bang" or "bitter pill"; others chose a gradual implementation [9]; and others, generally the Balkan states, chose a third way, which involved a "gradual gradualism", starting from the principle that the transition was a very long process, the privatization program was limited to small enterprises, and private property was allowed in trade, services, and tourism [111]. Each country belongs to a certain group, based on the reforms that they implemented during transition.

#### 3.2. Selection and Description of Variables

#### 3.2.1. Dependent Variable

In this study, entrepreneurial intention (FUTSUP) is used as a dependent variable. The variable represents people aged between 18 and 64 who intend to start a new business in the next three years. We measured this dichotomous variable by assigning the value 1 if the answer is affirmative to the question: "Do you expect to start a new business, alone or with other people, including any independent activity, in the next three years?" and the value 0 if the answer is different.

## 3.2.2. Independent Variables

Predictor variables: Fear of failure (fearfail): the value 1 was assigned when the answer to the question: "Will fear of failure prevent you from starting a business?" was affirmative, and the value 0 when it was negative. Networking (knowent), a variable taking the value 0 if the answer to the question "Do you know someone personally who started a business in the past 2 years?" was "no", and 1 if the answer was "yes".

Control variables:

We used several control variables in this study (see Table 2), as follows:

(a) gender (GENDER): a variable which takes the value 0 when the respondent's gender is male, and the value 1 when the respondent's gender is female;

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(b) annual household annual income, GEMHHINC variable: "lowest 33%", "average" and "top 33%". The lowest 33% was considered the reference category, taking the value 0, "average"—value 1, and "top 33%"—value 2.

- (c) education level (GEMEDUC): a categorical variable representing the respondents' education level, which has 5 possible values: "none" will have the value 0, "partially secondary"—value 1, "secondary"—value 2, "post-secondary"—value 3, and "higher education or higher"—value 4. The reference category was considered "uneducated".
- (d) work status (GEMWORK), with the answer categories: "full-time or part-time (includes self-employment)", which takes the value 0, "only part-time"—value 1, "retired and disabled"—value 2, "stay-at-home/housewife"—value 3, "student"—value 4, and "unemployed"—value 5. The basic category is "full-time or part-time (including self-employment)".

Variable	Codes of GEM	Description	Type	Scale
Entrepreneurial intentions	FUTSUP	People aged between 18 and 64 who intend to create a new entrepreneurial activity in the next three years. We measured this dichotomous variable by assigning the value 1 if the answer was affirmative to the question: "Do you expect to start a new business, alone or with other people, including any independent activity, in the next three years?" and the value 0 if the answer was different.	Binary	0–1
Fear of failure	FEARFAIL	The value 1 was assigned when the answer to the question: "Will fear of failure prevent you from starting a business?" was affirmative, and the value 0 when it was negative.	Binary	0–1
Networking	KNOWENT	A variable taking the value 0 if the answer to the question "Do you know someone personally who started a business in the past 2 years?" was "no", and 1 if the answer was "yes".	Binary	0–1
Gender	GENDER	A categorical variable which takes the value 0 when the respondent's gender is male, and the value 1 when the respondent's gender is female.	Categorical	0–1
Income	GEMHHINC	A variable representing the annual household annual income, with the answer categories: "lowest 33%", "average" and "top 33%". The lowest 33% was considered the reference category, taking the value 0, "average"—value 1, and "top 33%"—value 2.	Categorical	0–2
Education	GEMEDUC	A categorical variable representing the respondents' education level, which has 5 possible values: "none" will have the value 0, "partially secondary"—value 1, "secondary"—value 2, "post-secondary"—value 3, and "higher education or higher"—value 4. The reference category was considered "uneducated".	Categorical	0–4
Work status	GEMWORK	A variable representing work status, with the answer categories: "full-time or part-time (includes self-employment)", which takes the value 0, "only part-time"—value 1, "retired and disabled"—value 2, "stay-at-home/housewife"—value 3, "student"—value 4, and "unemployed"—value 5. The basic category is full-time or part-time (including self-employment).	Categorical	0–5

**Table 2.** Description of the variables (N = 9).

Source: Author's contribution.

## 3.3. The proposed Regression Model

The logistic regression model was used to estimate the probability that an individual belongs to a certain group (dependent = 1), or not (dependent = 0). The model can be expressed in the following form:

Prob
$$(Y = 1|X_j) = \beta_0 + \beta_1 \text{FEARFAIL} + \beta_2 \text{ KNOWENT} + \text{B3 GENDER} + \beta_4 \text{ GEMHHINC} + \beta_5 \text{ GEMEDUC} + \beta_6 \text{ GEMWORK} + \varepsilon$$
 (1)

where:  $\operatorname{Prob}(Y=1|X_j)$ , represents the probability of becoming an entrepreneur, depending on the set of explanatory variables  $X_j$ . Further on, Y is the dependent variable (FUTSUP) and represents an observable variable indicating the probability of developing the entrepreneurial intention. The predictor variables are fear of failure and networking; the control variables are gender, income, education, and work status. Therefore,  $\beta_1$  to  $\beta_6$ , represent the regression parameters estimations,  $\beta_0$  is the intercept, and  $\varepsilon$  is the error term.

The statistical analysis was performed with the help of the statistical analysis program Stata.

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#### 4. Results

#### 4.1. Descriptive Statistics

Based on the GEM database, we had a total of 13,494 observations for the nine countries included in the analysis. The valid responses ranged from 1295 in Slovenia (9.60%) to 1835 in Romania (13.60%) (see Appendix A).

Table 3 presents the descriptive statistics of the groups of countries. The descriptive statistics show that 48.30% of respondents were men and 51.70% of respondents were women. Of all the respondents, 18.62% intended to start a business. However, 48.73% of respondents said they were afraid of failure, while the remaining 51.27% of respondents said they were not afraid of failure in starting a business. Regarding networking, moreover, 34.36% of respondents consider networking an import asset in starting a business, while 65.64% do not claim that. Regarding the education level, 15.37% of respondents said that they had no education (none), 43.31% had some secondary education, 27.88% had a secondary degree, 7.11%—post-secondary, and 6.33%—graduate education. The descriptive statistics of work status show that 68.18% of respondents are employed full time or part-time, 5.47% are employed only part-time, 11.23% are retired and disabled, 3.40% are homemakers, 2.83% are students, and 8.89% are unemployed. The respondents are also divided by income, as follows: 36.70% can be considered in the lowest 33% tile regarding income, 34.49% in the middle 33% tile, and 28.81% in the upper 33% tile.

For the countries in G1 (sustained big bang), 47.82% of respondents are men, while 52.18% are women. Regarding entrepreneurial intentions, 20.60% of respondents stated that they intended to start a business, while the remaining 79.40% stated that they had no entrepreneurial intention. However, 48.54% of respondents said they were afraid of failure, while the remaining 51.46% of respondents said they were not afraid of failure in starting a business. Moreover, 36.96% of respondents consider netwoking an important factor in starting a business. Regarding the education level, 15.30% of respondents said that they had no education (none), 38.74% had some secondary education, 28.74% had a secondary degree, 9.46%—post-secondary, and 7.76%—graduate education. The descriptive statistics on work status show that 69.82% of respondents are full-time or part-time employees, 6.36% are employed only part-time, 10.14% are retired and disabled, 3.50% are homemakers, 2.56% are students, and 7.62% are unemployed. The respondents are also divided by income, as follows: 35.71% can be considered in the lowest 33% tile regarding income, 31.06% in the middle 33% tile, and 33.23% in the upper 33% tile.

For the countries in the second group, G2 (advanced start/steady), 48.85% of respondents are men, while 51.15% are women. Regarding entrepreneurial intentions, 16.23% of respondents stated that they intended to start a business, while the remaining 83.77% stated that they had no entrepreneurial intention. However, 46.32% of respondents said they were afraid of failure, while the remaining 53.68% of respondents said they were not afraid of failure in starting a business. Moreover, 31.44% of respondents consider networking an important determinant when engaging in venture creation. Regarding the education level, 15.69% of respondents said that they had no education (none), 41.52% had some secondary education, 30.54% had a secondary degree, 6.13%—post-secondary, and 6.13%—graduate education. The descriptive statistics on work status show that 64.56% of respondents are full-time or part-time employees, 6.01% are employed only part-time, 12.41% are retired and disabled, 2.78% are homemakers, 4.09% are students, and 10.15% are unemployed. The respondents are also divided by income, as follows: 30.58% can be considered in the lowest 33% tile regarding income, 38.68% in the middle 33% tile and 30.74% in the upper 33% tile.

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**Table 3.** Descriptive statistics of the variables inclued in the analysis.

Variable —	Category		All Countries			G2		G3	
	curegory	No. Total	%	No.	%	No.	%	No.	%
Entrepreneurial	No	10,982	81.38	4556	79.40	3706	83.77	2720	81.63
intentions	Yes	2512	18.62	1182	20.60	718	16.23	612	18.37
Fear of failure —	No	6919	51.27	2785	48.54	2375	53.68	1759	52.79
real of failule —	Yes	6575	48.73	2953	51.46	2049	46.32	1573	47.21
Networking —	No	8857	65.64	3617	63.04	3033	68.56	2207	66.24
- Tetworking	Yes	4637	34.36	2121	36.96	1391	31.44	1125	33.76
Gender —	Male	6517	48.30	2744	47.82	2161	48.85	1612	48.38
Gender —	Female	6977	51.70	2994	52.18	2263	51.15	1720	51.62
	None	2074	15.37	878	15.30	694	15.69	502	15.07
	Some Secondary	5844	43.31	2223	38.74	1837	41.52	1784	53.54
Education	Secondary Degree	3762	27.88	1649	28.74	1351	30.54	762	22.87
I	Post-Secondary	960	7.11	543	9.46	271	6.13	146	4.38
_	Graduate	854	6.33	445	7.76	271	6.13	138	4.14
	Full time or part time	9200	68.18	4006	69.82	2856	64.56	2338	70.17
- -	Part time only	738	5.47	365	6.36	266	6.01	107	3.21
Work status	Retired. disabled	1515	11.23	582	10.14	549	12.41	384	11.52
	Homemaker	459	3.40	201	3.50	123	2.78	135	4.05
	Student	382	2.83	147	2.56	181	4.09	54	1.62
_	Not working	1200	8.89	437	7.62	449	10.15	314	9.42
	Lowest 33%	4952	36.70	2049	35.71	1353	30.58	1550	46.52
Income	Middle 33%	4654	34.49	1782	31.06	1711	38.68	1161	34.84
	Upper 33%	3888	28.81	1907	33.23	1360	30.74	621	18.64

Source: our own calculations using the statistical analysis program Stata.

For the countries in G3 (aborted big bang and gradual reforms), 48.38% of respondents are men, while 51.62% are women. Regarding entrepreneurial intentions, 18.37% of respondents stated that they intended to start a business, while the remaining 81.63% stated that they had no entrepreneurial intention. However, 47.21% of respondents said they were afraid of failure, while the remaining 52.79% of respondents said they were not afraid of failure in starting a business. Regarding networking, 33.76% of respondents consider this trait important for business start-ups. However, regarding the education level, 15.07% of respondents said that they had no education (none), 53.54% had some secondary education, 22.87% had a secondary degree, 4.38%—post-secondary, and 4.14%—graduate education. The descriptive statistics on work status show that 70.17% of respondents are employed full time or part-time, 3.21% are employed only part-time, 11.52% are retired and disabled, 4.05% are homemakers, 1.62% are students, and 9.42% are unemployed. The respondents are also divided by income, as follows: 46.52% can be considered in the lowest 33% tile regarding income, 34.84% in the middle 33% tile, and 18.64% in the upper 33% tile.

The mean value for the variable entrepreneurial intentions ranged from 0.162 in G2 to 0.206 in G1, with a standard deviation ranging between 0.369 and 0.404. Moreover, the mean value for the variable fear of failure was 0.487 for all countries, 0.515 for G1, 0.463 for G2, and 0.472 for G3. The standard deviation values were between 0.499 and 0.500 in all countries categories. The mean

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value for networking ranged between 0.314 and 0.370 in all groups. For gender, the mean value is 0.517 for all countries, 0.522 for G1, 0.512 for G2, and 0.516 for G3, with a standard deviation value of 0.500. For income, the lowest mean was registered in G3 (0.721) and the highest was registered in G2 (1.002). For education, the highest mean was registered in G1, while for work status it was in G2 (Appendix B).

The fear of failure variable was significantly and negatively correlated with entrepreneurial intentions for all groups of countries. For the countries in G1, the correlation (rho = -0.102) was statistically significant at a significance level of p < 0.01. For the countries in G2, fear of failure was significantly negatively correlated with entrepreneurial intentions (rho = -0.095, p < 0.01), while for the countries in G3, fear of failure was significantly correlated at the sig level of p < 0.05. The networking variable was significantly and positively correlated with entrepreneurial intentions for all groups of countries. For the countries in G1, the correlation (rho = 0.191) was statistically significant at the significance level of p < 0.01. For the countries in G2, networking was significantly (p < 0.01) and positively correlated with entrepreneurial intentions, and similar results were also achieved in G3 (rho = 0.162, p < 0.01) (Appendix C).

The gender variable tended to be significantly and negatively correlated with entrepreneurial intentions for all groups of countries, as well as for the model including all countries. For the countries in G1, the variable education was poorly correlated with entrepreneurial intentions, and statistically significant at a 95% confidence level. For the countries in G2, the education variable was statistically insignificantly correlated. For the countries in G3, the variable education was positively and statistically significantly correlated with entrepreneurial intentions. The income variable was significantly and positively correlated with entrepreneurial intentions for all groups of countries at a 99% confidence level (Appendix C).

Different types of work status were significantly correlated with entrepreneurial intentions. However, for the countries in G1, including Estonia, Latvia, Poland, and Slovakia, work status was not significantly correlated with the intention to start a business. For the countries in G2, including Croatia, Hungary, and Slovenia, work status was statistically significant and positively correlated with venture creation, while for G3, Romania and Bulgaria, the variable work status was negatively correlated with our dependent variable. The income variables were positively and significantly correlated with the intention to start a business in all groups of countries. The correlation table indicated that most of the resulting values have low intensity (below 0.3), which indicates that there is no multicollinearity or factors to prevent consistent results (Appendix C).

#### 4.2. Logistic Regression Results

Table 4 shows the regression coefficients, the significance level, and the odds ratio for the countries under analysis, both overall and for each category. Thus, in model 1, all nine countries analyzed are included. In model 2, we included observations for the following countries: Estonia, Latvia, Poland, and Slovakia, or, as Havrylyshyn et al. [9] called it, the group of countries with sustained big bang reforms. Model 3 includes Croatia, Hungary, and Slovenia, and model 4 includes Bulgaria and Romania.

For model 1, which includes all countries, the results reported a statistically significant negative relationship between entrepreneurial intention and fear of failure. The odds ratios reflected a value of 0.689 for the fear of failure variable. This means that a respondent who is afraid of failure is about 30% more likely not to show entrepreneurial intentions compared to a person who is not afraid to fail. Among the control variables, gender also had a negative effect on entrepreneurial intention, which means that, in general, women are more likely to have lower entrepreneurial intentions. Education showed a significant positive relationship with the dependent variable, showing, in general, that a more educated subject is more likely to have a higher entrepreneurial intention. We can say the same about income. The higher the income, the more likely a person will show entrepreneurial intentions. Regarding the networking effect on entrepreneurial intentions, this was a statistically significant positive effect, with  $\beta = 0.783$ , p = 0.000 and an odds ratio of 2.188, which means that a

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person who knows an entrepreneur has a 2.188 times higher propensity for entrepreneurial intention. Regarding the effect of work status, for model 1 part-time employees, homemakers, and unemployed had a positive effect, while the retired, disabled, and students had a significant negative effect on entrepreneurial intentions.

**Table 4.** Logistic regression results by group of countries.

	Model 1	Model 2	Model 3	Model 4
Model	All Countries	G1 (Sustained Big Bang Countries)	G2 (Advanced Start/Steady Countries)	G3 (Aborted Big Bang and Gradual Reform Countries)
Variable	β	β	β	β
Fear of Failure	-0.371 **** (0.000)	-0.459 **** (0.000)	-0.505 **** (0.000)	-0.149 * (0.113)
Networking	0.783**** (0.000)	0.809 **** (0.000)	0.768 **** (0.000)	0.743 **** (0.000)
Gender	-0.453 **** (0.000)	-0.463 **** (0.000)	-0.488 **** (0.000)	-0.353 **** (0.000)
Education				
Some secondary	0.334 **** (0.000)	0.362 **** (0.001)	0.288 *** (0.038)	0.487 **** (0.003)
Secondary degree	0.469 **** (0.000)	0.556 **** (0.000)	0.270 ** (0.070)	0.708 **** (0.000)
Post secondary	0.320 **** (0.003)	0.028 (0.853)	0.508 *** (0.012)	0.851 **** (0.001)
Grad exp	0.064 (0.604)	0.152 (0.349)	-0.318 (0.187)	-0.658 ** (0.085)
Work Status				
Part time only	0.758 **** (0.000)	0.643 **** (0.000)	0.897 **** (0.000)	0.885 **** (0.000)
Retired, disabled	-1.114 **** (0.000)	-1.265 **** (0.000)	-1.361 **** (0.000)	-0.578 **** (0.004)
Homemaker	0.442 *** (0.001)	0.588 **** (0.001)	0.191 (0.501)	0.340 (0.185)
Student	-0.606 **** (0.000)	-0.689 **** (0.000)	0.832 **** (0.000)	-0.069(0.863)
Not working	0.762 **** (0.000)	0.774 **** (0.000)	0.909 **** (0.000)	0.634 **** (0.000)
Income				
Middle 33%tile	0.199 *** (0.001)	0.429 **** (0.000)	-0.046 (0.677)	0.098 (0.394)
Upper 33%tile	0.474 **** (0.000)	0.563 **** (0.000)	0.081 (0.504)	0.793 **** (0.000)
Constant	-2.023 **** (0.000)	-2.016 **** (0.000)	-1.856 **** (0.000)	-2.303 **** (0.000)
Number of obs.	13,494	5738	4424	3332
Omnibus test (sig. level)	0.000	0.000	0.000	0.000
Cragg & Uhler's R <sup>2</sup> (Nagelkerke)	0.116	0.137	0.124	0.117
LR chi <sup>2</sup>	1415.69 (0.000)	524.704 (0.000)	334.579 (0.000)	249.662 (0.000)
Pseudo R <sup>2</sup> (McFadden)	0.077	0.087	0.085	0.079
McKelvey and Zavoina's R <sup>2</sup>	0.160	0.188	0.182	0.146
Efron's R <sup>2</sup>	0.075	0.089	0.077	0.078

Note \*, \*\*, \*\*\*\*: indicates that p < 0.15, p < 0.10, p < 0.05, p < 0.01; Reference category for education is "none", for work status is "full time or part time", and for income is "lowest 33%". Source: Own calculations, Stata.

For model 2 including the transition countries from the big bang group, i.e., Estonia, Latvia, Poland, and Slovakia, the results reported a statistically significant negative relationship between entrepreneurial intention and fear of failure with an odds ratio of 0.631. Gender also had a negative effect on entrepreneurial intention, while networking had a positive effect on entrepreneurial intention, with an odds ratio of 2.247. The control variables were, in general, statistically significant. The education variable showed that, compared to the basic category (with no education), people with "some secondary" education and secondary degree had a significant effect on entrepreneurial intentions, while for the categories with post-secondary and graduate, we did not obtain statistically significant results (p = 0.853; p = 0.349).

The work status variable for model 2 showed a positive effect on entrepreneurial intentions for part-time employees, homemakers, and unemployed, while the retired, disabled, and students showed a significant negative effect on entrepreneurial intentions.

Regarding the income variable, the higher the income, the more likely a person will show an entrepreneurial intention.

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For model 3, including Croatia, Hungary, and Slovenia, the results indicated a negative but statistically significant relationship between entrepreneurial intention and fear of failure. Gender also had a negative effect on entrepreneurial intention, which means that women have a generally lower propensity to start their own business. The networking variable had a significant positive effect on entrepreneurial intentions. The education variable showed that, compared to the basic category (with no education), people with some secondary education, secondary degree and "post-secondary" education had a significant effect on entrepreneurial intentions, while for graduate, we did not obtain statistically significant results.

The work status variable for model 3 showed a positive effect on entrepreneurial intentions for part-time employees, students, and unemployed, while the retired had a negative and significant effect on entrepreneurial intentions. Homemakers had a statistically insignificant effect. Regarding the income variable, compared to the reference category, the results were statistically insignificant.

For model 4, including Bulgaria and Romania, the results indicated a negative but statistically significant relation for a significance level higher than 0.15 between entrepreneurial intention and fear of failure. Odds ratios reflected a sample value of 0.860 for the fear of failure variable. Among the control variables, gender had a negative effect on entrepreneurial intention, which means that women have a generally lower propensity for entrepreneurial intentions. In addition, the odds ratios indicated that a respondent who knows an entrepreneur has a 2.103 times higher propensity for entrepreneurial intentions. The education variable showed that, compared to the basic category (with no education), people with "some secondary" education, secondary degree, and post-secondary education had a significant effect on entrepreneurial intentions, while a significant negative effect on the confidence level of 90% was observed for the category graduate.

The work status variable for model 4 showed a positive effect on entrepreneurial intentions for part-time employees and unemployed, while the retired showed a significant negative effect on entrepreneurial intentions. Regarding the income variable, compared to the reference category (lowest 33% tile), the middle category 33% tile did not have a significant effect on entrepreneurial intentions, but the upper category 33% tile had a statistically significant positive effect on entrepreneurial intentions.

In all models, we presented the goodness of fit statistics showing the results of Omnibus, Nagelkerke, McFadden, McKelvey and Zavoina, and Efron  $R^2$  tests. The Omnibus tests of the model coefficients were significant (p < 0.05), confirming the causal relationship of the logit models proposed and the acceptance of the hypothesis according to which the coefficients are different from zero. Nagelkerke  $R^2$  indicated that the variables considered explain only a small part of the variation in entrepreneurial intention. The same is available for  $R^2$  by McKelvey and Zavoina and  $R^2$  for Efron.

#### 5. Discussion and Conclusions

The high majority of specialized studies consider entrepreneurship vital for economic growth, innovation, and unemployment decrease [55,112,113]. Studying the appearance of intentions and the importance of behavioral attitudes is essential and of maximum importance for the entrepreneurial field, because intention is actually the first step in starting a business. From the multitude of determined factors of entrepreneurial intention, we focused in the present analysis on attitudinal factors, namely fear of risk of failure and networking, and several socio-demographic variables. This paper aimed to analyze the entrepreneurial intention determinants by using the latest data from GEM on a group of nine countries: Bulgaria, Croatia, Estonia, Hungary, Latvia, Poland, Romania, Slovakia, and Slovenia. The countries were selected based on data availability and if they met the condition of being European member states. Starting from Havrylyshyn et al.'s [9] classification, the selected economies were grouped into three categories based on the early reformed strategies they adopted, namely: G1—economies which sustained big bang; G2—advanced start-steady economies; G3—aborted big bang and gradual reform implementation.

Former European communist states started, in the entrepreneurial process, from different positions and context from Western European ones [58]. The modality of transition from a centralized economy to

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a market economy was decided by each state, the decision makers choosing between a more aggressive and faster transition model, or a slower and staged one.

The rhythm and manner of reforms implementation has considerably influenced the degree of entrepreneurial sector development. This paper analyzed the entrepreneurial intention determinants by using the latest data from GEM on a group of nine countries: Bulgaria, Croatia, Estonia, Hungary, Latvia, Poland, the latest data from Romania, Slovakia, and Slovenia. The results of entrepreneurial intention determinants effect on entrepreneurial intention are synthesized in Table 5, as shown below:

Hypothesis	Is the Hypothesis Supported (YES/PARTIALLY/NO)?						
<b>y F</b> • • • • • • • • • • • • • • • • • • •	All Countries G1		G2	G3			
H1—Fear of failure→EI	YES	YES	YES	YES			
H2—Networking→EI	YES	YES	YES	YES			
H3—Gender (men)→EI	YES	YES	YES	YES			
H4—Education→EI	PARTIALLY	PARTIALLY	PARTIALLY	PARTIALLY			
H5—Income→EI	YES	YES	NO	PARTIALLY			

**Table 5.** The validation of hypotheses.

Source: our own calculations using the statistical analysis program Stata.

As shown in the Table 5, the first hypothesis (H1) was confirmed for the models that contain all countries, G1, G2, and G3. Hypotheses H2 and H3 were confirmed for all the groups, while H4 was just partially confirmed for all the groups, the reason being the fact that education is a categorical variable rather than a binary variable. For the fifth hypothesis (H5) mixed results were obtained for different groups. For the first group (G1), the hypothesis was confirmed, while for the second group (G2) the hypothesis was not confirmed. For the third group, the hypothesis was partially confirmed (higher EI for the individuals in the upper 33% tile of earners as compared to the lowest 33% tile, but a non-significant difference between middle 33% as compared to the 33%tile of earners).

The logistic regression analysis shows that there is a negative relationship between fear of failure and entrepreneurial intention for all models of country groups. Consequently, regardless of the reforms adopted by the former transition countries, fear of failure remains a powerful inhibitor which can annihilate the decision to start a new business. Therefore, the hypothesis according to which fear of failure has a negative effect on entrepreneurial intentions was validated (H1). Engel et al. [49] and Thomson et al. [50] obtained similar results, showing that fear of failure affects entrepreneurs' well-being and their ability to act.

The status of family members also plays an important role and influences the young members of a family, as demonstrated by Pruett et al. [32]. The results indicated that people who have entrepreneurs in the family have a higher propensity for entrepreneurial intentions than people who do not have family members with such a status. Networking has a positive effect on entrepreneurial intentions in all logit regression models. Consequently, the results indicated that people who have entrepreneurs in the family have a higher propensity for entrepreneurial intentions than people who do not have family members with such a status. Therefore, the hypothesis according to which networking has a positive effect on entrepreneurial intentions in countries which underwent the transition process was confirmed (H2).

The gender variable was significantly and negatively correlated with entrepreneurial intentions for all groups of countries, as well as for the model including all countries. Therefore, the hypothesis according to which men have a higher propensity to develop their own business than women was confirmed (H3).

Regarding the education level, the results showed that 37% of respondents said that they had no education (none), 43.31% had some secondary education, 27.88% had a secondary degree, 7.11%—post-secondary, and 6.33% had graduate education. The logistic regression analysis showed

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that different forms of education had a postive and significant impact on individual's intention of becoming an entrepreneur for all groups of contries. For G1, the education variable showed that, compared to the basic category (with no education), people with "some secondary" education and secondary degree had a significant effect on entrepreneurial intentions, while for the categories with post-secondary and graduate, we did not obtain statistically significant results. For G2, the education variable showed that, compared to the basic category (with no education), people with "post-secondary" education, some secondary education, and secondary degree had a significant effect on entrepreneurial intentions, while for the category with graduate degree, we did not obtain statistically significant results. For G3, the education variable showed that, compared to the basic category (with no education), people with "some secondary" education, secondary degree, and post-secondary education had a significant effect on entrepreneurial intentions, while a significant negative effect was observed for the category graduate. Therefore, the hypothesis according to which education has a postively and significantly influence on individual's intention of becoming entrepreneurs was partially validated (H4). This result is in line with previous studies. For instance, Rachwał et al. [113] obtained similar results, showing that entrepreneurial education prepares young people to enter the labour market and to develop a sense of initiative and entrepreneurial skills, strengthening their status on this market.

The results indicated that there is a positive and significant relationship between income level and entrepreneurial intention, indicating that individuals with a higher income have a higher propensity to start their own business. Therefore, the higher the income, the more likely a person is to show entrepreneurial intentions. Consequently, the hypothesis according to which people in transition countries with a higher income have a higher propensity to develop entrepreneurial intentions than people with a lower income was validated (H5).

Therefore, the transition to a market economy in the former communist European states took place on a more or less severe recessionary background. The uncertain economic and social environment, exposed to inflationary risks, unemployment, exchange rate fluctuations discouraged the population from showing entrepreneurial intentions, so that fear of failure proved higher than in countries which did not experience communism and transition. The old structures allowed certain categories of people to be entrepreneurs as a result of networks set up on criteria other than those specific to the market, but they were not necessarily among the successful models, because the simple existence of networks proved insufficient. However, the existence of effective formal and informal networks is a determinant of entrepreneurial intention and activity. With age, entrepreneurs succeed in strengthening the networks supporting them in their efforts, so not only fear of failure is decreasing, but also the entrepreneurial intention tends to materialize into action. The difference between the networks established during the communist period and those established later is that in the places where the transition reforms were effectively implemented, the networks were configured in less bureaucratic and corrupt ways.

Of course, this study has several limitations. Due to the lack of data availability for former transition economies, the study could not capture a longitudinal perspective on entrepreneurial intention determinants. Thus, future studies may also include this perspective, which could offer more valuable insights on entrepreneurship domain. Second, additional determinants on entrepreneurial intention could also be taken into consideration. For instance, the attitude towards risk, self-efficacy, or others. The usefulness of the paper is found in the completion of the literature on entrepreneurial intention, it brings clarifications to the subject, especially in the case of states that have undergone a system change. The fact that the results of the paper draw attention to important aspects related to entrepreneurial impact factors can inspire the formulation of entrepreneurial strategies and tactics so as to avoid the negative consequences of their application when the impact of inheriting the previous economic system is unknown. The paper leaves open the continuation of the research. The introduction in the study of other countries, classified according to other criteria, of other factors with impact on entrepreneurship, the use of other methods, or temporary intervals such as the extension of

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research to the current period will provide the possibility to clarify aspects related to entrepreneurial success factors.

**Author Contributions:** The authors' contributions were equal. A.I.V. did the introduction, literature review, designed the research, methodology, its reasoning, collected, analyzed the data and discussed the data, empirical results, conclusions, limits of the research, and future directions, and performed the paper editing. A.-P.H. did the introduction, literature review, conclusions, future directions, and performed the paper editing. A.A. did the introduction, literature review, designed the research, methodology, its reasoning, collected, analyzed the data, and discussed the data, empirical results and performed the paper editing. G.I.B. did the introduction, literature review, conclusions, and performed the paper editing. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

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

## Appendix A

**Table A1.** Responses Frequency and Percent by Country.

Country	Freq.	Percent	Cum. Percent
Hungary	1601	11.86	11.86
Romania	1835	13.60	25.46
Poland	1319	9.77	35.24
Bulgaria	1497	11.09	46.33
Latvia	1386	10.27	56.60
Estonia	1509	11.18	67.79
Croatia	1528	11.32	79.11
Slovenia	1295	9.60	88.71
Slovakia	1524	11.29	100
Total	13,494	100	

Source: our own calculations using the statistical analysis program  ${\sf Stata}.$ 

#### Appendix B

**Table A2.** Descriptive Statistics: Number of Observations, Mean, Standard Deviation, Minimum and Maximum for the Variables.

All Countries									
Variable	Obs	Mean	Std. Dev.	Min	Max				
Entrepreneurial intentions	13,494	0.186	0.389	0	1				
Fear of failure	13,494	0.487	0.500	0	1				
Networking	13,494	0.344	0.475	0	1				
Gender	13,494	0.517	0.500	0	1				
Income	13,494	0.921	0.806	0	2				
Education	13,494	2.457	1.038	0	4				
Work status	13,494	1.939	1.614	0	5				

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Table A2. Cont.

G1 (Sustained Big Bang Countries)										
Variable	Obs	Mean	Std. Dev.	Min	Max					
Entrepreneurial intentions	5738	0.206	0.404	0	1					
Fear of failure	5738	0.515	0.500	0	1					
Networking	5738	0.370	0.483	0	1					
Gender	5738	0.522	0.500	0	1					
Income	5738	0.975	0.830	0	2					
Education	5738	2.556	1.099	0	4					
Work status	5738	1.855	1.539	0	5					
G2 (Advanced Start/Steady Countries)										
Variable	Obs	Mean	Std. Dev.	Min	Max					
Entrepreneurial intentions	4424	0.162	0.369	0	1					
Fear of failure	4424	0.463	0.499	0	1					
Networking	4424	0.314	0.464	0	1					
Gender	4424	0.512	0.500	0	1					
Income	4424	1.002	0.783	0	2					
Education	4424	2.455	1.026	0	4					
Work status	4424	2.063	1.694	0	5					
G3 (Aborted Big Bar	ng and G	radual Re	form Countr	ies)						
Variable	Obs	Mean	Std. Dev.	Min	Max					
Entrepreneurial intentions	3332	0.184	0.387	0	1					
Fear of failure	3332	0.472	0.499	0	1					
Networking	3332	0.338	0.473	0	1					
Gender	3332	0.516	0.500	0	1					
Income	3332	0.721	0.758	0	2					
Education	3332	2.290	0.918	0	4					
Work status	3332	1.920	1.621	0	5					

Source: our own calculations using the statistical analysis program Stata.

## Appendix C

**Table A3.** Correlations among Variables (All Countries).

	All Countries									
	Entrepreneurial Intention	Fear of Failure	Networking	Gender	Education	Work Status	Income			
Entrepreneurial Intention	1.000									
Fear of Failure	-0.083 ***	1.000								
Networking	0.174 ***	-0.052 ***	1.000							
Gender	-0.097 ***	0.109 ***	-0.064 ***	1.000						
Education	0.042 ***	-0.002	0.074 ***	0.051 ***	1.000					
<b>Work Status</b>	0.001	0.007	-0.109 ***	0.117 ***	-0.089 ***	1.000				
Income	0.110 ***	-0.037 ***	0.148 ***	-0.097 ***	0.191 ***	-0.283 ***	1.000			

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Ta	h	٦	٨	2	C	ont

		Su	stained Big Bar	ıg			
	Entrepreneurial Intentions	Fear of Failure	Networking	Gender	Education	Work Status	Income
Entrepreneurial Intention	1.000						
Fear of Failure	-0.102 ***	1.000					
Networking	0.191 ***	-0.039 ***	1.000				
Gender	-0.107 ***	0.118 ***	-0.061 ***	1.000			
Education	0.030 **	-0.005	0.051 ***	0.053 ***	1.000		
<b>Work Status</b>	-0.006	0.001	-0.108 ***	0.144 ***	-0.051 ***	1.000	
Income	0.135 ***	-0.070 ***	0.171 ***	-0.146 ***	0.104 ***	-0.298 ***	1.000
		Adv	anced Start/Ste	ady			
	Entrepreneurial Intentions	Fear of Failure	Networking	Gender	Education	Work Status	Income
Entrepreneurial Intention	1.000						
Fear of Failure	-0.095 ***	1.000					
Networking	0.153 ***	-0.071 ***	1.000				
Gender	-0.093 ***	0.106 ***	-0.068 ***	1.000			
Education	0.013	-0.001	0.083 ***	0.093 ***	1.000		
Work Status	0.044 ***	-0.023	-0.106 ***	0.080 ***	-0.116 ***	1.000	
Income	0.039 ***	-0.019	0.141 ***	-0.050 ***	0.201 ***	-0.283 ***	1.000
		Aborted Bi	g Bang/Gradua	l Reforms			
	Entrepreneurial Intentions	Fear of Failure	Networking	Gender	Education	Work Status	Income
Entrepreneurial Intention	1.000						
Fear of Failure	-0.043 **	1.000					
Networking	0.162 ***	-0.061 ***	1.000				
Gender	-0.085 ***	0.099 ***	-0.064 ***	1.000			
Education	0.098 ***	-0.0159	0.093 ***	-0.018	1.000		
<b>Work Status</b>	-0.033 *	0.008	-0.108 ***	0.126 ***	-0.130 ***	1.000	
Income	0.153 ***	-0.014	0.122 ***	-0.073 ***	0.310 ***	-0.290 ***	1.000

Note: \*, \*\*\*, \*\*\* indicate that p < 10, p < 0.05, p < 0.01. Source: our own calculations using the statistical analysis program Stata.

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