



**Erasmus School of Economics**

Master Thesis

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**Does FDI affect perceptions about entrepreneurship?**

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## **Abstract**

Entrepreneurship is a subject that includes not only countless theories but also different perspectives about those, and has historically quite enjoyed the spotlight. Drawing interest from previous studies and the potential effects of the economic crisis, I attempt to map how Foreign Direct Investment (FDI) inflows are altering perceptions about entrepreneurship of individuals in member countries of the Organization for Economic Co-operation and Development (OECD). More specifically, the perceptions used in this research are the perceived capabilities of the individual, the fear of failure and finally the perception of entrepreneurship being a good career choice. The data used in this study are a combination of individual level and country level data, drawn from the Global Entrepreneurship Monitor and the World Bank, leading to a sample of 512,073 individual level observations, for a period between the years 2010 and 2017. I find that FDI inflows do have a positive and significant impact on perceptions about entrepreneurship when country and year fixed effects are not taken into account, but an insignificant effect when these factors are taken into account. The marginal effects suggest that FDI has a positive impact on perceptions about entrepreneurship in countries with a higher level of GDP.

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## 1 Introduction

For centuries, companies have been investing in foreign markets. Firms with presence in two or more countries are considered to be Multinational Enterprises (MNEs). The motives behind as well as the gains or losses resulting from the strategic decision of investing abroad have gained a lot of research interest. The main theory that can explain the decision to invest abroad is the “OLI” paradigm (Dunning, 1988), where the motives are summarized in three pillars. These are ownership, location and internationalization advantages. Before a firm decides to invest abroad in the form of Foreign Direct Investment (FDI), it needs to understand whether the above advantages apply to its case in order for FDI to be more beneficial than not investing abroad. In simpler terms, a company can invest abroad because it wants to gain access to new and cheaper resources/raw materials, less costly labor, seize the opportunity of a new and under-exploited market, take advantage of the spillover effects, diffuse its product/service to more people or cut back on the costs that arise from serving a market from abroad (Franco et al., 2008). Another summary of the above would be that firms have goals to lower the transport and trade costs (Markusen, 1984) while also being able to decrease labor costs (Slaughter & Ekholm, 2003).

Less is known about the impact of FDI on entrepreneurship in domestic markets. It is important to gain an understanding of this, because entrepreneurship affects society and economic development in various ways (Carree et al., 2007; Koellinger & Thurik, 2012; Albuлесcu and Tamasila, 2014). Moreover, entrepreneurship shapes the balance between employment and unemployment, and it increases the opportunities and innovative initiatives in the host country (Rusu & Roman, 2017). Previous literature agrees to the above but is contradictive when it comes down to the overall effects of FDI on entrepreneurship (Denisia, 2010; Hosseini, 2005). Some studies suggest that the effects are little to none or even negative (Hanson, 2001; Gorg & Greenaway, 2003), while others find a clear and positive effect (Denisia, 2010 ; Dunning & Lundan 2008 ; Wang 2009).

In this study, we take one step back, and we analyze the research question: “Does FDI affect perceptions about entrepreneurship?”. There are many different factors that impact the decision to engage in entrepreneurship, but perceptions about entrepreneurship are considered to be particularly impactful (Arenius & Minniti, 2005). Following the literature, we analyze three key perceptions about entrepreneurship. That is, the perceived skills that a person needs to run a business (Harper, 1998 ; Arenius & Minniti, 2005), the fear of failure as an inhibitory reason to not open a business (Arenius & Minniti, 2005 ; Weber & Milliman, 1997) and last but not least the perception whether entrepreneurship is considered a good career choice or not (Douglas & Shepherd, 2002).

The study employs data from 38 member countries of the Organization for Economic Co-operation and Development (OECD) from the years 2010 until 2017, to shed light on the period after the peak of the financial crisis until the last year that data were, publicly, available. It is an attempt to monitor the effects of such an economic shock on the, mainly, developed countries, for homogeneity purposes, in terms of perceptions about entrepreneurship. We combine data from the Adult Population Surveys (APSs) of the Global Entrepreneurship Monitor (GEM) with data from the World Bank regarding each country's FDI and GDP per capita. Two different set of hypotheses were formed, with the first questioning the sign of the relationship between the selected countries' FDI inflows and their relationship with each of the perceptions about entrepreneurship under examination. The second set of hypotheses is referring to the moderating effect of GDP on the relationship between FDI and perceptions about entrepreneurship.

Using logistic regressions, this study finds that FDI has a positive impact on the entrepreneurship perspective as the results suggest that it positively impacts the notions regarding perceived skills and entrepreneurship as a good career choice. The results also suggest that higher levels of FDI reduce fear of business failure, thereby positively impacting the mindset towards entrepreneurship. However, the result is not robust when we control for country and year fixed effects as the results show that when these factors are controlled for FDI only positively impacts the perception regarding perceived skills.

In terms of the hypotheses regarding moderation, our results suggest that economic development of a country, measured by the logarithm of per capita GDP, positively moderates the impact of FDI on all three perceptions, thereby supporting our hypotheses. The marginal effects graphs show that the impact of FDI increases with economic development suggesting that FDI has a larger impact on perceptions about entrepreneurship in countries with a higher economic development.

The remainder of this study is structured as follows. In section 2, I present the literature review and I derive my hypotheses. In section 3, the data and methodology are presented. The empirical results are presented in section 4. Finally, in section 5, I end with the discussion and conclusion.

## **2 Literature Review and Hypotheses**

In this part of the study, I will use the work of various researchers who have studied what entrepreneurship is and what are the key factors influencing it. This is followed by an analysis of what foreign direct investments (FDI) are, and how they are affecting entrepreneurship and, even more importantly, the perceptions of it. Finally, I will address the moderating effect of GDP on the hypothesized relationships between FDI and perceptions about entrepreneurship.

### *2.1 Entrepreneurship*

Trying to define what entrepreneurship is, who those people are who can be classified as entrepreneurs and hence their actions leading to entrepreneurship, is something that has proven to be truly challenging. Despite the fact that one of the simplest definitions of entrepreneurship is the process of starting a new business and/or taking advantage of an opportunity for profit, such a definition fails to cover for all aspects of it. So, why is this the case?

One of the reasons for the very broad range of definitions, therefore not allowing for a single accepted one, is that all these definitions are a result of the different ways people capture the notion of entrepreneurship (Anderson & Starnawksa, 2008). Additionally, definitions of entrepreneurship are usually based on made up theories in peoples' minds, so it is not easy to change their opinion on what entrepreneurship really entails. As if this was not enough, both entrepreneurs as well as entrepreneurship have been subject to different illustrations, that do not necessarily reflect their true essence (Atherton, 2004). For all the above, and more, entrepreneurship means different things to different people (Bennet, 2006). Therefore, we can establish that a single accepted definition is out of the picture. That said, there have also been authors who think that is actually easier to define what entrepreneurship is not, rather than what it actually is. More specifically Anderson and Starnawksa (2008) stated that entrepreneurship is not a static entity, but the result of gifted people with unique abilities and talents. In this line of reasoning, one can look for distinctive features of entrepreneurship.

A very important distinction to make refers to the occupational one and the behavioral of entrepreneurship (Wennekers & Thurik, 1999). This theory separates people who are seeking new opportunities to exploit and gaps in the markets (behavioral notion) and those who just own and are directing a business as managers (occupational notion). Those who are confined to the latter, they are conceived as entrepreneurs, but tend to focus more on the day-to-day activities. Behavioral entrepreneurs are looking to find ways to take advantage of arising opportunities and gaps in the

markets, and are usually more innovative people. The importance of this view is also emphasized by Shane and Venkataraman (2000) as well as Sternberg and Wennekers (2005). These authors stress the importance of perceptions of entrepreneurship. something that will be more thoroughly explained in the next subsection. Specifically, they state that while entrepreneurs, both behavioral and occupational ones, need to have a certain level of skills required for being successful as entrepreneurs, the behavioral ones need to also have an eye for opportunities, i.e., to be able to perceive new opportunities.

## *2.2 Perceptions about Entrepreneurship*

The behavioral notion of entrepreneurship points us to the need to consider perceptions about entrepreneurship. There are plenty of individual perceptions that people have towards different situations, and even though those are usually biased and not objective, they are still affecting people's choices and approaches towards entrepreneurship. This is due to the fact that people present a slight tendency to rely more on their biased perceptions rather than their objectives ones, a possible indication of what is otherwise called wishful thinking. Those perceptions can also be called "perceptual variables" and have been found to be a crucial factor to new business creation, all over the globe and regardless of the individual's gender. In their work, Arenius & Minniti (2005) not only stated the aforementioned issue, but also tackled some of those perceptions that will be analyzed in this study: the skills that individuals think they possess, their fear of failure that prevents them from starting a business, and whether they think entrepreneurship is a desirable career choice. These three perceptual variables are surveyed every year by the Global Entrepreneurship Monitor. We will now look at each of these three variables in detail.

### ➤ *2.2.1 Subjective Skills*

The decision to start a new business can be due to the existence of advanced planning and the position of control (Baron, 2000). Starting a new company is a deliberate act that involves repeated attempts to control processes to achieve desired results (Gartner, 1985). Harper (1998) argues that the position of internal control strengthens the link between entrepreneurial vigilance and self-efficacy and thus leads to the creation of new firms. Being a nascent entrepreneur is positively and significantly related to the individual's opinion and confidence in his own set of skills. Particularly, it was found that those who do consider themselves equipped with the necessary skills, are approximately 6.4 times more



likely to be nascent entrepreneurs, compared to those who do not believe in having enough skills (Arenius & Minniti, 2005).

A lot of important insights can be found in the work of Koellinger et al. (2007) who also studied a sample of various countries, as in this study, and concluded that since the peoples' individual perceptions about themselves are biased and not subjective, the belief that they do own a set of skills, knowledge and capability of opening a new business is the likeliest reason of becoming an entrepreneur. i.e., for someone to start thinking about becoming self-employed, they need to believe that according to their capabilities, they can generate more wealth by becoming an entrepreneur rather than working in a salary-based job. People who tend to show overconfidence into themselves, can often appear a willingness to become entrepreneurs, as they think that they can make it (Bernoster et al., 2018), even if many times the odds are against them, knowing already the low survival rates that apply in small new venture creations (Brouwer, 2000; Tang & Koveos, 2004; Santarelli & Vivarelli, 2006). Interestingly enough, Koellinger et al. (2007) also concluded that there is a significant negative correlation between self-confidence, in terms of self-perceived entrepreneurial skills, and the survival rates.

### ➤ 2.2.2 *Fear of Failure*

The emotion of being afraid of failure received interest from economists who have shown interest in the linkage between the decision of becoming an entrepreneur and risk aversion (Kihlstrom & Laffont, 1979). More specifically, the perceived and not the actual chance of failure, is playing a major role in the risk that is associated with starting a new business and therefore, if the perceived likelihood of failure could be decreased, then the probability of an individual starting a new business would rise (Weber & Milliman, 1997). Arenius and Minniti (2005), after analysis, conclude that fear of failure has a negative impact on the chance of being a nascent entrepreneur, as it decreases the likelihood of someone to become an entrepreneur by almost 33.3% compared to people who do not face this fear. Moreover, an additional important observation is that fear of failure is something that can be defined as an element of individual's character and therefore cannot be changed easily by exogenous factors.

### ➤ 2.2.3 *Entrepreneurship as a Good Career Choice*

While whether entrepreneurship is perceived as a good career choice also gained some attention from researchers, it is nowhere close to the aforementioned two perceptions. Despite this fact, I decided

to use it, as I believe that it could be able to demonstrate a change on the people's approach towards entrepreneurship as a whole, i.e., in the case where people considered entrepreneurship to not be a good choice, everything else would become ancillary to that. Moreover, the 2017/2018 GEM report shows that entrepreneurship is considered to be a good career choice to the majority of the population, but these preferences do differ somewhat across countries. More specifically, with my focus on OECD countries in the empirical analysis, it is relevant to note that across European countries (which are mostly OECD countries), 58.5% of the population considers entrepreneurship to be a good career choice.

As suggested by the expectancy theory, the individual's belief to perform adequately as an entrepreneur as well as making a profit out of it or/and other beneficiary outcomes, plays an important role on the individual's decision on becoming an entrepreneur or not (Arenius & Minniti, 2005). Previous studies found that individuals who demonstrate a more entrepreneurial attitude towards various different factors, such as work, risk, independence and income, have a much higher propensity towards entrepreneurship (Douglas & Shepherd, 2002). This means that people with a higher level of entrepreneurial way of thinking, find this working choice a good career choice. On a similar note, those individuals who know someone who has been an entrepreneur, especially in case where this entrepreneur is a successful one, have a higher inclination towards becoming entrepreneurs (Arenius & Minniti, 2005; Van Auken et al., 2006). Anggadwita and Dhewanto (2016) also highlight the role of social perceptions of an individual pursuing entrepreneurship as a career. As such, we may expect that perceiving entrepreneurship to be a desirable career choice is positively associated with actual engagement in entrepreneurship.

### *2.3 Foreign Direct Investments (FDI)*

In this part of the literature review, I will analyze what Foreign Direct Investments are and what their key characteristics are. The relationship between FDI and entrepreneurship will be analyzed in the following subsection. Following the IMF and OECD definitions, foreign direct investments comprise the target to acquire a lasting interest by an entity of one country in another one of a foreign country. The lasting interest insinuates a relationship which is going to last for quite some time between the two aforementioned parties, where the entity that expanded to the foreign country also maintains a certain level of control on the latter one (Duce & Banco de España, 2003). In other words, foreign direct investments refer to a company from one country making investments into another country (Graham & Spaulding, 2005).

While FDI comes along with a reputation that it enhances growth and that it produces many positive spillovers, it turns out that, again, just as for entrepreneurship, there is no consensus about what exactly FDI brings to the table. This is mainly due to the fact that new studies and theories arise all the time, often contradicting the existing literature (Denisia, 2010). Is FDI having only positive effects though? Many scientists disagree. Having said that, the subject is complex as even more recent studies on international trade have failed to provide us with a clear depiction of what FDI brings (Hosseini, 2005). Still to this day, the determinants of why a multinational company or an investor would decide to be involved in a market of a foreign country are overabundant and the results of these decisions provoke arguments from both sides.

Kindleberger (1969) believed that in a world that is characterized by perfect competition, FDI would not exist as it crowds out local entities and has a negative effect on the economic development of the hosting country (Denisia, 2010). On a similar note, the theory that FDI exists due to imperfections in the markets, either in terms of goods or production components, found much support (Dunning 2003, Kindleberger, 1969, Cleeve 2008). Hanson (2001) thought that the positive effects deriving from FDI are rather low, an opinion not far away from that of Lipsey (2004) who claimed that there are indeed some positive effects of FDI, but no robust, in terms of consistency, relationship between FDI and economic development. On an even harsher note, Greenwood (2002) saw mainly negative effects of FDI.

On the opposite perspective, Denisia (2010) claimed that FDI is a rather important feature towards economic growth, applied to all countries, regardless of the level of development, having though, more distinct influence on the developing countries. FDI is considered to be particularly important as it improves local economic growth, mainly achieved by the knowledge spillovers and elements such as new technologies, increased productivity and therefore enhanced job opportunities (Dunning & Lundan, 2008). Wang (2009) also agrees that there are positive effects to be derived from FDI. Finally, Alfaro et al. (2004) realized that countries with stronger financial markets have more to win from FDI than countries with not well-developed markets, as well as that the local financial markets also play an important role on whether these expected positive effects will be grasped.

Since literature seems to be torn between the two opposite opinions of FDI effects, then why do firms make the decision to invest abroad? The reason lies between many different reasons. The first FDI analyses were based on the McDougal-Kemp model, where the main motivational points were high profitability in foreign markets, capturing growth while at the same time enjoying lower labor costs and favorable exchange rates (Assunção et al., 2011). This is similar to the view of Dunning and Lundan (2008) who suggest that firms can raise their competitiveness level by investing in specific locations

which have the advantage of offering access to particular natural resources of higher quality and at the same time lower cost than in the original country. On a twist of the latter findings, Melitz (2003) and Helpman et al. (2004) expressed their prognosis that the firms' level of productivity would steer the companies towards a foreign investment. Historically, there have been multiple countries that have attempted to lure FDI investments, hoping to take advantage of the potential positive effects (Caves, 1996), leading to the assumption that they provided a good environment for investments. Similarly, many countries placed their hopes on FDI, helping them escape a financial idleness and avoiding a possible financial turmoil (Brooks et al., 2010).

Other reasons could be the lack of R&D or innovative aspects compared to their industry's competitors (Blonigen, 2005). Additionally, in the event of high market risk and soaring uncertainty, the transaction costs increase and therefore an opening to the international markets is preferred (Buckley & Gasson 1976). A different explanation could be the imitating trend that many firms have, meaning that they may follow other firms' course of action, in order to prevent the latter ones from gaining competitive advantage (Knickerbocker, 1973). Even further, the institutional level of the hosting country has a clear influence on the firms' decision to invest abroad, with a particular focus on regulations and incentives (Francis et al., 2009). Furthermore, the infrastructure of a country is also of utmost importance, as the better it is, the more FDI it can attract (Vijayakumar et al., 2010).

To understand why firms consider investing abroad, the OLI paradigm is arguably most important to consider. The OLI paradigm, put forward by Dunning (1988), is addressing the internalization theory. The key points behind a decision to invest abroad, are depending on those location criteria, and more specifically infrastructure, human capital, financial stability as well as the production costs in the host country. Even more, the institutional level is also gaining a lot of attention, as also stated before, meaning that the level of corruption, political instability, institutional quality and economic motives offered by the host countries, are also key determinants. Lastly, the final key points are regarding the market of the host country, i.e., its size, level of development and the degree that the economy is open (Assunção et al., 2011).

### *2.3.1 FDI and Domestic Entrepreneurship*

From the perspective of domestic entrepreneurs, both in and outflows of FDI have important implications. One of the earliest theories highlighting the negative spillovers of FDI was given by the occupational choice model which was proposed by Grossman (1984). The model suggests that in an open economy, FDI inflows might lead to crowding out of domestic entrepreneurial initiatives. The

underlying reason presented by the model is that the compensation provided by a foreign enterprise might be significantly higher than the immediate income accruing to economic agents through entrepreneurship in the domestic economy. Furthermore, the model argues that since the best potential entrepreneurs are also the best workers, recruitment by such foreign firms might lead to a reduced incentive for potential entrepreneurs to opt for entrepreneurship as a career alternative, as opposed to working for the foreign company. As a result, FDI inflows might lead to further competition for managerial and entrepreneurial talent in the domestic economy, resulting in fewer initiatives.

Backer and Sleuwaegen (2003) show results in line with the occupational choice models which suggest that FDI crowds out existing and potential domestic entrepreneurs due to their choices of product and labor markets. Similar to this, Danakol et al. (2013) show that FDI causes significant crowding out in the domestic entrepreneurial segment on an intra-industry as well as an aggregate economic level. In particular, they find that a 10% increase in FDI inflows as a share of GDP causes nascent entrepreneurship potential to decline by 0.18%. Albuлесcu and Tamasila (2014) make an important distinction between inward and outwards FDI flows. The study shows that while inward FDI positively influences opportunity-driven entrepreneurship, outwards FDI has a positive effect on the necessity-driven entrepreneurship and a negative impact on the other category.

In contrast to some of the previous findings, there are researchers who find not only negative associations between the two concepts but also positive associations. The focal points of the studies are the spillovers that enhance productivity of local firms after the latter ones take advantage of new innovations that were introduced by the foreign firms (Barrios et al., 2005; Ayyagari & Kosova, 2010). Positive effects can arise from mimicking behavior, i.e., actions of reproducing an action after observing. Effects can be positive in this scenario, when local firms are mimicking aspects like the behavior, ideas and innovations of foreign firms (Barry et al., 2003). Effects can also be positive because of labor mobility (Fosfuri et al., 2001).

A positive association between FDI and entrepreneurship can also be found in the work of Wach and Wojciechowski (2016), despite the result being different for each of the countries in their sample. In this study, the sample of the countries is rather small, using solely the Visegrad countries, although I consider it relevant as all of those countries are also part of the OECD group I analyze in this study. Their theory suggests that an investment from a foreign firm indeed disrupts the local markets. Even though it alters the competition in the local market as well as that it changes the needs for goods and supplies in general possibly resulting in additional obstacles for the local firms, it could create opportunities in other sectors through price reductions. Conclusions also arise from the work of Markusen and Venables (1999) showing that increasing competition in the products as well as the

factor markets leads to a decrease in the profits of the host firms. The latter ones however have the chance to take advantage of the linkage effects with vendors from various industries and thus to reduce the costs for incoming shipments, and maintain or even increase their profits, despite the increased competition.

In accordance with the above statement, the presence of FDI seems to not only have a positive effect on host countries' total factor productivity levels, but also to their proclivity towards exports (Hobday, 1995; Chung et al., 1994; Greenway et al., 2004). Noland (2004) concluded that it are countries who accept and embrace globalization that are able to not only attract more FDI but also capture positive externalities such as enhanced local entrepreneurship. When a foreign investment is taking place, it is not only a process of spatial allocation of intangible assets to a foreign country, but it also leads to knowledge spillovers who have proven to be able to boost host entrepreneurship (Acs et al., 2005).

Following the discussion above, it is still somewhat inconclusive how FDI affects entrepreneurship and perceptions about entrepreneurship. Still, given my focus on OECD countries in the empirical analysis, I believe the arguments supporting a positive relationship are stronger than the arguments put forward regarding a negative relationship. Therefore, to understand the impact of FDI on the three perceptions about entrepreneurship, the following hypotheses are proposed:

*Hypothesis 1a: FDI inflows in a country are positively associated with the likelihood that an individual in this country believes (s)he has the skills to run a business.*

*Hypothesis 1b: FDI inflows in a country are negatively associated with the likelihood that an individual in this country report that fear of failure withholds him/her from starting a business.*

*Hypothesis 1c: FDI inflows in a country are positively associated with the likelihood that an individual in this country perceives entrepreneurship as a good career choice.*

#### *2.4 The Moderating Role of GDP*

Economic growth, which can be proxied with GDP, is linked with favorable terms regarding opening a new business and thus, to higher volumes of entrepreneurship as the demand for new products and services increases (Berrill et al., 2020). There is clear evidence regarding the relations between GDP and entrepreneurial activities (Zhao et al., 2012). Bearing in mind that GDP is a good proxy for the level of financial growth of a country, when it is being increased, the economy is in a better state, allowing for more opportunities and options, therefore increasing the volume of opportunity

entrepreneurs while on the same time it decreases the necessity entrepreneurs (Albulescu & Tamasila, 2014).

In the effort to examine the moderating role of GDP in the relationship between FDI and entrepreneurship, the work of Vidal-Suñé et al. (2013) can serve as a cornerstone for my research. In their work, they reach the conclusion that a higher GDP per capita can increase the volume of entrepreneurship, as the economy is in a better state and therefore the demand has increased, thus more entrepreneurial opportunities arise. Moreover, in line with this, Wennekers et al. (2002) treat per capita income as a forecaster for start-up businesses, as well as a determining factor towards entrepreneurship (Uhlener & Thurik, 2007). GDP per capita was also conceived as a crucial factor influencing the perceptions about business opportunities (Levie & Autio, 2008). This can be justified by the fact that with higher GDP, unemployment rates are decreased and therefore, opportunities and openness towards starting a new business seem more appealing and therefore their rates increase (Uhlener and Thurik, 2007).

GDP has been found to have a greater influence on the FDI inflows, and with higher FDI inflows, the business opportunities are rising (Türkcan et al., 2008). To determine the effect of GDP on the relationship between FDI and entrepreneurship, I further looked into the effect that outward FDI has, on both sides. Having already established that a higher GDP can attract and therefore increase the volume of the FDI flows in a country, the results suggest that while outward FDI has positive impact for the investment firm, the home country does not always enjoy positive outcomes. The latter one does depend on different variables such as the traits of the investment project as well as the business conditions that characterize not only the home but also the host economy. Usually, exports are slightly affected in a positive way, while the effect on employment can be mildly negative (Kokko, 2006).

In the work of Lipsey (2001) that is focused on developed countries, following the FDI effects on both the home as well as the host countries, it turned out that those investors who are perceived to be the largest ones, based on the GDP, also attract FDI the most. Relatedly, the work of Patel and Rietveld (2022) addresses the effects of globalization on the perceptions about entrepreneurship, stating that there is no default effect outcome from the first to the latter. Additionally, they also focus on the asymmetrical effects between developed and developing countries, explaining that multinational enterprises (MNEs) originating from developed and wealthy countries, tend to exploit and impose harsh labor practices in the host countries' markets. While these findings are important, it should be noted here that their work was focused on a much greater sample of countries, consisting of both developing and developed countries, with a total of 103 making the cut. In this research, I focus on the OECD countries, therefore including only one developing country in my sample, Colombia. This

means that all the other countries are considered to be high-income economies and therefore the aforementioned results do not apply to them that much.

Considering all the factors discussed above and my sample of OECD countries, I expect that the level of economic development measured by GDP per capita will have a moderating effect on the impact of FDI on perceptions about entrepreneurship. That is, the expected associations will be stronger in case GDP per capita is higher:

*Hypothesis 2a: GDP per capita moderates the relationship between FDI inflows in a country and the likelihood that an individual in this country believes (s)he has the skills to run a business, such that the relationship is stronger when GDP per capita in a country is high.*

*Hypothesis 2b: GDP per capita moderates the relationship between FDI inflows in a country and the likelihood that an individual in this country report that fear of failure withholds him/her from starting a business, such that the relationship is stronger when GDP per capita in a country is high.*

*Hypothesis 2c: GDP per capita moderates the relationship between FDI inflows in a country and the likelihood that an individual in this country perceives entrepreneurship as a good career choice, such that the relationship is stronger when GDP per capita in a country is high.*



### **3 Data and Methodology**

#### *3.1 Data Sources*

This research's sample is derived from the publicly accessible Adult Population Surveys (APS) of the Global Entrepreneurship Monitor (GEM). The APS is yearly administered to a representative sample of approximately 2,000 adults in each of the participating countries. For this study, we merged data from the surveys for the years 2010 to 2017, as we were aiming to capture the effect right after the peak of the financial crisis and onwards. It should also be noted that there was also a limit on the data, as the 2017's dataset was the last publicly available one. The countries that are selected for this study are the 38 OECD countries, and the reason for selecting this specific group is to have a more homogeneous sample in terms of each country's development level. There have been studies before that are using a broader sample of countries, having included both developing and developed countries, but this selection will allow me to reach a more robust result about the included developed countries.

In addition to those GEM data, I used country level information taken from two sources, specifically the (i) GDP per capita and finally (ii) FDI per capita, with the latter ones having been obtained from the World Bank. In this paper, I am tackling the relationship between those two aspects, GDP and FDI, which are reported in 2011 international dollars.

The objective of the ongoing analysis is to determine the relationship between FDI inflows in an economy and the entrepreneurial perspective of the agents in the host economy, while controlling for several other economic and demographic variables such as GDP of the host economy, age, household size, gender, income, and education of the entrepreneur. The study exploits cross-sectional samples from 38 OECD economies from the time period between 2010 to 2017. Overall, the sample size is sufficiently large with 512,073 observations in total.

#### *3.2 Variables*

##### ➤ *3.2.1 Outcome Variables*

The main outcome variables in this study are the perceptions about entrepreneurship. This study uses three measures which are binary variables. These variables are: Perceived Skills (whether the person thinks he/she has the necessary skills to become an entrepreneur), Fear of Failure (would fear of failure stop the person from starting a business), and Good Career (if most of the people find starting a business a good career option).

➤ *3.2.2 Main Explanatory Variable*

For the purpose of the analysis, the study will use the logarithmic value of the FDI inflow to the 38 OECD economies as the main independent variable. This will reveal the quantum of relative change in the FDI inflows to the economy for every year. It is measured in 2011 international dollars.

➤ *3.2.3 Moderator Variable*

As moderator variable, we employ GDP per capita (in 2011 international dollars). The relative change in GDP of the economy is used because Alfaro (2003) shows a significant relationship between economic growth in a country and the FDI flows, even though the direction of the relationship varies across sectors. Similarly, Aizenman and Sushko (2011) came to the conclusion that there is a very well-established connection between FDI and economic growth, a theory that is also backed up with evidence from Borensztein et al. (1998), who studied whether there is an effect on growth deriving from FDI flows, as well as from Levine and Renelt (1992) who also found robust effects of FDI on growth.

➤ *3.2.4 Control Variables*

Several demographic variables regarding the entrepreneur are also used in order to control for their impacts in the analysis. Marin et al. (2019) shows that entrepreneurial initiatives, and social entrepreneurial initiatives in particular, are more likely to be taken by more educated and older agents. This can possibly be a result originating from other demographic characteristics that will also be investigated such as age, that partially captures experience, as well as income that is a proxy for the resources someone has to start a business. It is, however, worth mentioning that there have also been voices expressing the opposite view, that entrepreneurship needs quite an energy and creativity, which happen to be more present at younger ages (Liang et al., 2018).

Similarly, Kautonen et al. (2015) find that the entrepreneurial intention is staying at the same level, not changing with age, gender, experience or education. Further, Nguyen (2018) also shows that male agents in the economy are more likely to take up entrepreneurial initiatives than their female counterparts. However, in contrast to Marin (2019), this study finds no significant impact of education

and age on the decision to pursue entrepreneurship as a career path. Diaz-Garcia and Jimenez-Moreno (2009), as well as Kickul et al. (2005) also find a clear effect of gender on entrepreneurial intentions.

The study also considers the size of the household as an important control variable in the analysis because Molina (2020) shows a lack of entrepreneurial initiative among agents with children to support. On the other hand, it is believed that households where the parents are self-employed, tend to have larger families as this will increase the possibility of the family business staying in family hands in the future (Broussard et al., 2015).

Finally, the analysis controls for income level as suggested in Dohmen et al. (2011), because this study suggests that a higher income might potentially encourage risk-taking, and hence, entrepreneurship as the intensity of this perceived barrier reduces significantly. This is also in accordance with the results of Van der Zwan et al. (2016), who found that it is not only income that is correlated to the propensity of an individual becoming an entrepreneur out of opportunity and not necessity, but also the education level. In the countries selected, entrepreneurs primarily start a business out of opportunity. In their paper they conclude that young and wealthy individuals have a higher likelihood of running their own business compared to people who do not fit these criteria.

### *Overview*

Table 1 below briefly describes the variables being used in the analysis.

**Table 1: Variables used in the analysis.**

<b>Variable Name</b>	<b>Acronym</b>	<b>Description</b>
Perceived Skills	suskill	Whether the person thinks he/she has the necessary skills to become an entrepreneur (Yes=1, No=0)
Fear of Failure	Fearfail	Would fear of failure stop the person from starting a business (Yes=1, No=0)
Good Career Choice	nbgoodc	If most of the people find starting a business a good career option (Yes=1, No=0)
Log of FDI	LFDI	Logarithm of the FDI (base = 2011)
Log of GDP	LGDP	Logarithm of GDP (base = 2011)
Age	Age	Age of the entrepreneur in years
Squared Age	Agesq	Squared age of the entrepreneur
Size of the household	Hhsize	Number of members in an individual's family
Sex	Female	Categorical variable with value 1 if individual is female, 0 otherwise
Income (Base = Lower tercile)	Middle Tercile	Categorical variable with value 1 if individual is in middle tercile of income, 0 otherwise
	Upper Tercile	Categorical variable with value 1 if individual is in upper tercile of income, 0 otherwise
Education (Base = No education)	Primary Education	Categorical variable with value 1 if individual has primary education, 0 otherwise
	Lower Secondary	Categorical variable with value 1 if individual has lower secondary education, 0 otherwise
	Upper Secondary	Categorical variable with value 1 if individual has upper secondary education, 0 otherwise
	Post-secondary	Categorical variable with value 1 if individual has post-secondary non-tertiary education, 0 otherwise
	First Stage of Tertiary	Categorical variable with value 1 if individual has first stage of tertiary education, 0 otherwise
	Second Stage of Tertiary	Categorical variable with value 1 if individual has second stage of tertiary education, 0 otherwise

### 3.3 Econometric Model

Based on the existing models and theories discussed in the sections above, FDI is likely to have a significant impact on entrepreneurial perceptions. Firstly, FDI inflows are likely to increase the technological base of the domestic economies and enhance skills of the domestic workforce. Hence, increased FDI inflows are likely to improve the perceived skills and abilities to start a business.

Secondly, since FDI inflows are likely to increase the product market competition, it is expected that increased FDI inflows will increase the perceived riskiness and the corresponding fear of failure for the domestic businesses. Finally, as FDI increases in an economy, the social perception of businessmen and entrepreneurs is likely to improve, leading to a positive impact on the variable tracking social acceptability of entrepreneurship as a career.

Considering that the data captures multiple cross-sectional units (from 38 OECD countries) and tracks data over a period of time (between 2007 and 2017), the chosen model must be one which is able to capture all relevant relationships between the variables. Further, since the analysis is based on the probability of the final decision taken by a potential entrepreneur, the model of choice for the analysis will be a logistic one. Logistic regression, commonly known as logit regression, is an econometric method for estimating the parameters of a logistic model in regression analysis (a form of binary regression). A binary logistic model is defined when the dependent variable is divided into two categories such as '0' and '1'. In this model, the log-odds for the value that has been labelled as '1' is the linear combination of the independent variables which can be continuous or categorical (Wooldridge, 2013). The probability of this category (labelled as 1) varies between 0 to 1, inclusive.

As a starting point, the study considers a logit model without the country and year fixed effects. However, in order to appreciate the differences among the various countries and of difference years included in the data, the study also runs the logistic regression controlling for the year and country fixed effects. Lastly, this study uses the interaction term of LFDI and LGDP to capture both the standalone and joint impact of FDI and GDP.

The equation for the model is as follows:

$$\log\left(\frac{P}{1-P}\right) = \beta_1 + \beta_2 * LFDI + \beta_3 * LGDP + \beta_4 * Age + \beta_5 * Agesq + \beta_6 * Hhsize + \beta_7 * Female + \beta_8 * Middle Tercile + \beta_9 * Upper Tercile + \beta_{10} * Primary Education + \beta^{11} * Lower Secondary + \beta^{12} * Upper Secondary + \beta^{13} * Post Secondary Non Tertiary + \beta_{14} * First Stage of Tertiary + \beta_{15} * Second Stage of Tertiary + \varepsilon$$

where the term  $\beta_1$  is the intercept term in the sample. Next,  $\log(P/(1-P))$  measures the probability of a respondent answering yes to the questions. In addition to the above model, the study also estimates the same model with the addition of an explanatory variable which tracks the interaction between the

relative change in GDP of the country and the relative change in FDI. This variable is created through the multiplication of the two existing variables LFDI and LGDP. The equation of this model is as follows:

$$\log\left(\frac{P}{1-P}\right) = \beta + \beta_2 * LFDI + \beta_3 * LGDP + \beta_4 * age + \beta_5 * agesq + \beta_6 * hhsize + \beta_7 * Female + \beta_8 * Middle\ Tercile + \beta_9 * Upper\ Tercile + \beta_{10} * Primary\ Education + \beta^{11} * Lower\ Secondary + \beta^{12} * Upper\ Secondary + \beta^{13} * Post\ Secondary\ Non\ Tertiary + \beta_{14} * First\ Stage\ of\ Tertiary + \beta_{15} * Second\ Stage\ of\ Tertiary + \beta_{16} * LFDI * LGD + \varepsilon$$

## 4 Results

### 4.1 Descriptive Statistics

The study uses several categorical and continuous variables to model the dependent variables *suskill*, *fearfail* and *nbgoodc*. Some important descriptive statistics of these variables are presented in Table 2 below. The mean of the dummy variable which records whether entrepreneurship is a good career choice (*nbgoodc*) is relatively higher than the mean for the other two dependent variables in the study at 0.61. Additionally, the standard deviation of 0.49 shows that the results between 0 and 1. On the other hand, the mean value observed for the dummy variables used to measure the perception of required skills to start a business (*suskill*) was 0.49, while the standard deviation was comparable to that of *nbgoodc* at 0.50. Lastly, out of the dependent variables, the mean of the variable measuring the whether the fear of failure would keep the respondent from starting a new business (*fearfail*) was the lowest at 0.42 with a similar standard deviation of 0.49.

The mean value of the major independent variable in the analysis, LFDI, is 23.67. Further, relative to the mean value, LFDI has a small standard deviation of 1.48. This shows the relatively low spread of this variable. Similarly, LGDP has a mean value of 10.13 and a low standard deviation of 0.67. Since the major independent variables considered in the analysis are in the logarithmic form, no meaningful interpretation can be drawn from the descriptive statistics presented for these variables.

In terms of the control variables, 48% of the respondents were female, signifying an almost balanced sample between the genders considered in this analysis. The average household size is 3.28 with a standard deviation of 2.04. Further, the average age of the respondents is 42.93, signifying that on the average, the respondents were middle-aged individuals. The standard deviation of the age is comparatively low at 14.29. The share of respondents from the lowest, middle and highest income tercile is 30%, 32% and 38%. This shows that even though there is an equal representation of the lowest and middle tercile, there were comparatively more respondents from the highest tercile. Finally, 2% of the respondents had no formal education, while 8% had a primary education, 16% had a lower secondary education, 32% had an upper secondary education, 15% had a post-secondary non-tertiary education, 26% had completed the first stage of tertiary education and 2% were in the second stage of tertiary education. Overall, this signifies that there was substantial representation across all income and educational backgrounds.

**Table 2: Descriptive statistics of the analysis sample.**

Variables	Definition	Source	Mean	Std. Dev.	Min.	Max.
<i>Outcome variables</i>						
Entrepreneurship as a good career	1=Yes; 0=No	GEM	0.61	0.49	0	1
Perceived skills to start a business	1=Yes; 0=No	GEM	0.49	0.50	0	1
Fear of failure to start a business	1=Yes; 0=No	GEM	0.42	0.49	0	1
<i>Main explanatory variable</i>						
Log of FDI	2011 international dollars	WB	23.67	1.48	17.33	26.89
<i>Moderator variable</i>						
Log of GDP per capita	2011 international dollars	WB	10.13	0.67	8.68	11.72
<i>Control variables</i>						
Female	1=Female; 0=Male	GEM	0.48	0.49	0	1
Household size	Number of people in the household	GEM	3.28	2.04	0	99
Age	Years	GEM	42.93	14.29	16	65
Household income: Lowest tercile	1=Lowest tercile; 0=Middle/Highest	GEM	0.30	0.46	0	1
Household income: Middle tercile	1=Middle tercile; 0=Lowest/Highest	GEM	0.32	0.47	0	1
Household income: Highest tercile	1=Highest tercile; 0=Lowest/Middle	GEM	0.38	0.49	0	1
Education: None	1=Yes; 0=No	GEM	0.02	0.13	0	1
Education: Primary Education	1=Yes; 0=No	GEM	0.08	0.27	0	1
Education: Lower Secondary	1=Yes; 0=No	GEM	0.16	0.36	0	1
Education: Upper Secondary	1=Yes; 0=No	GEM	0.32	0.47	0	1
Education: Post-Secondary Non Tertiary	1=Yes; 0=No	GEM	0.15	0.36	0	1
Education: First Stage of Tertiary	1=Yes; 0=No	GEM	0.26	0.44	0	1
Education: Second Stage of Tertiary	1=Yes; 0=No	GEM	0.02	0.15	0	1



#### 4.2 Model Results

The results of the basic logit model (without the country and year fixed effects) are presented in columns (1), (2) and (3) of Table 3. The central variable of interest in the study is the relative change in FDI, which is computed by the logarithm of the FDI inflow to the economy. Based on the results of the model, the direction of the relationship of LFDI vis-a-vis the various variables considered as determinants of entrepreneurial perception are varying. While the slope coefficient of LFDI is positive in the case of *suskill* and *nbgoodc*, it is negative in the case of *fearfail*.

In economic terms, this signifies that after factoring out the effects of all control variables, an increase in LFDI by 1 unit increases the probability of the entrepreneur considering himself skilled and knowledgeable enough for starting a new business increases by 7.3%. Similarly, the results show that an increase in LFDI by 1 unit increases the probability of the entrepreneur perceiving a positive social opinion regarding the choice of entrepreneurship as a career in their country by 7.3%. In contrast, the results show that an increase in LFDI by 1 unit decreases the probability of the entrepreneur perceiving the risk of failure to be significant enough for her to refrain from opening a business. Further, the results also show that the *p*-value of the slope coefficient of LFDI is small enough, signifying that the variable is statistically significant in the case of all the variables used to measure entrepreneurial perception in an economy.

The impact of the control variables varies across the different models. While LGDP and Female were found to be negatively and significantly related to the *suskill* and *nbgoodc*, they were found to have a positive and significant relationship with the *fearfail* variable. On the other hand, variables measuring the income and education of the entrepreneur such as Middle Tercile, Upper Tercile, Primary Education, Lower Secondary, Upper Secondary, Post Secondary Non Tertiary, First Stage of Tertiary and Second Stage of Tertiary were found to be positively and significantly related to *suskill*, while being negatively and significantly related to the *fearfail* and *nbgoodc* dependent variables. Overall, this signifies that the probability of an entrepreneur considering themselves to be skilled enough to start a new business increases with an improvement in their educational and income background. On the other hand, entrepreneurs with a better education and income background are also more likely to overcome the fear of failure, even in the face of such risks. Finally, more educated and well-off entrepreneurs are more likely to think that entrepreneurial initiatives are not considered to be a good career option by the people in their country.

The results of the model controlling for country and year fixed effects are presented in columns (4), (5) and (6) of Table 3. The results after controlling for the country fixed effects and the year fixed

effects are starkly different from the ones in the base model. While the slope coefficient of LFDI was statistically significant for all variables used to determine entrepreneurial perception in case of the base model, when controlling for country and year effects, the variable is only significant for suskill. Additionally, changes are also observed in the direction of the relationship between LFDI and the dependent variables in some cases. While LFDI and fearfail were negatively related in the base model, the direction of their relationship reverses when controlled for country and year fixed effects. Similarly, while the relationship between LFDI and nbgoodc was positive in the base case, the direction reverses in the next model.

In economic terms, the coefficients of LFDI in columns (4), (5), and (6) imply that after controlling for other variables, an increase in LFDI by 1 unit leads to an increase in the probability of the entrepreneurs perceiving themselves to be skilled and knowledgeable enough to start a business of their own by 1%. Similarly, an increase in LFDI by 1 unit increases the probability that an entrepreneur refrains from starting up their own business due to the fear of failure by 0.2%. Finally, the results also show that an increase in LFDI by 1 unit decreases the probability of the entrepreneur perceiving that entrepreneurship is considered a good career option in their country by 0.7%.

With regards to the control variables, Columns (4), (5), and (6) also show some similarities with columns (1), (2), and (3). Control variables show that potential entrepreneurs with more education and income are more likely to perceive themselves to be skilled enough to open a new business, less likely to allow the fear of failure from stopping them from starting a new business, while also feeling that entrepreneurship is not considered as a new career option in their country. On the other hand, while LGDP and agesq were found to be negatively related to suskill and fearfail, they were positively related to nbgoodc. Further, age was found to be positively related to suskill and fearfail, while being negatively related to nbgoodc. The results also highlight that female entrepreneurs are significantly less likely to perceive themselves as skilled enough to start a business of their own, more likely to forego the opportunity to start a business due to the fear of failure and less likely to associate a positive social attitude towards entrepreneurship as a career option.

**Table 3: Results of logit models (without interaction effects).**

	(1)	(2)	(3)	(4)	(5)	(6)
	Perceived Skills	Fear of Failure	Good Career Choice	Perceived Skills	Fear of Failure	Good Career Choice
LFDI	0.073*** (0.002)	-0.090*** (0.002)	0.073*** (0.002)	0.010* (0.005)	0.002 (0.005)	-0.007 (0.005)
LGDP	-0.468*** (0.005)	0.234*** (0.005)	-0.460*** (0.005)	-0.229*** (0.050)	-0.114** (0.050)	0.577*** (0.052)
Age	0.072*** (0.001)	0.049*** (0.001)	-0.043*** (0.001)	0.080*** (0.001)	0.036*** (0.001)	-0.029*** (0.001)
Agesq	-0.001*** (0.000)	-0.001*** (0.000)	0.000*** (0.000)	-0.001*** (0.000)	-0.000*** (0.000)	0.000*** (0.000)
Hhsize	0.008*** (0.002)	-0.004*** (0.002)	0.003* (0.002)	0.008*** (0.002)	0.003** (0.002)	0.009*** (0.002)
Female	-0.550*** (0.006)	0.324*** (0.006)	-0.017*** (0.006)	-0.570*** (0.006)	0.332*** (0.006)	-0.043*** (0.006)
Income: Middle Tercile	0.090*** (0.007)	-0.040*** (0.007)	-0.009 (0.008)	0.080*** (0.008)	-0.037*** (0.008)	-0.060*** (0.008)
Income:Upper Tercile	0.310*** (0.008)	-0.188*** (0.008)	-0.072*** (0.008)	0.279*** (0.008)	-0.162*** (0.008)	-0.156*** (0.008)
Education: Primary	0.052** (0.024)	-0.104*** (0.023)	-0.379*** (0.027)	0.156*** (0.025)	-0.242*** (0.024)	-0.087*** (0.028)
Education: Lower	0.287*** (0.023)	-0.144*** (0.022)	-0.418*** (0.026)	0.406*** (0.024)	-0.296*** (0.023)	-0.133*** (0.027)
Education: Upper	0.425*** (0.023)	-0.261*** (0.022)	-0.402*** (0.025)	0.550*** (0.023)	-0.360*** (0.022)	-0.240*** (0.026)
Education: Post	0.632*** (0.023)	-0.273*** (0.023)	-0.524*** (0.026)	0.760*** (0.024)	-0.384*** (0.023)	-0.377*** (0.027)
Education: First stage of	0.726*** (0.023)	-0.237*** (0.022)	-0.787*** (0.025)	0.863*** (0.023)	-0.352*** (0.023)	-0.599*** (0.026)
Education: Second stage	0.797*** (0.029)	-0.256*** (0.029)	-0.938*** (0.031)	0.979*** (0.030)	-0.405*** (0.029)	-0.815*** (0.032)
Constant	1.063*** (0.064)	-1.257*** (0.063)	4.824*** (0.066)	0.324 (0.559)	0.058 (0.556)	-4.111*** (0.579)
Year dummies	No	No	No	Yes	Yes	Yes
Country	No	No	No	Yes	Yes	Yes
Observations	512,073	512,073	512,073	512,073	512,073	512,073

Notes: Standard errors in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$ .

#### 4.3 Models with Interaction Term

Table 4 below presents the results of the model which accounts for the interaction between LGDP and LFDI. Here, the fixed effects for the year and the country have been controlled for. In contrast to the model excluding the interaction variable between the LGDP and LFDI, the main independent variables which form the focus of the ongoing analysis are observed to be statistically significant in most cases. Both LFDI and LGDP are negative for all three dependent variables in the analysis. While LFDI is statistically significant for all the dependent variables, LGDP is statistically insignificant in the case of nbgoodc.

The slope coefficient associated with the interaction term is positive and statistically significant for all the dependent variables. This variable has a coefficient of 0.051 for the models used for suskill and fearfail, while its value is lower at 0.026 for nbgoodc. Therefore, the results of this model show that the impact of LFDI on the dependent variable is also determined by the value taken by the LGDP variable. In other words, while LFDI impacts the dependent variables on its own, the direction and magnitude of the LGDP also impacts the relationship between them. To further understand the role of FDI in this model with interaction terms, the marginal effects were examined and visualized in Figure 1. The marginal effects suggest that the impact of FDI is negative on all the perceptions for countries having low GDP. This could be due to the fact that small economies face the crowding out effect of FDI. However, the effect of FDI is positive in the richest countries.

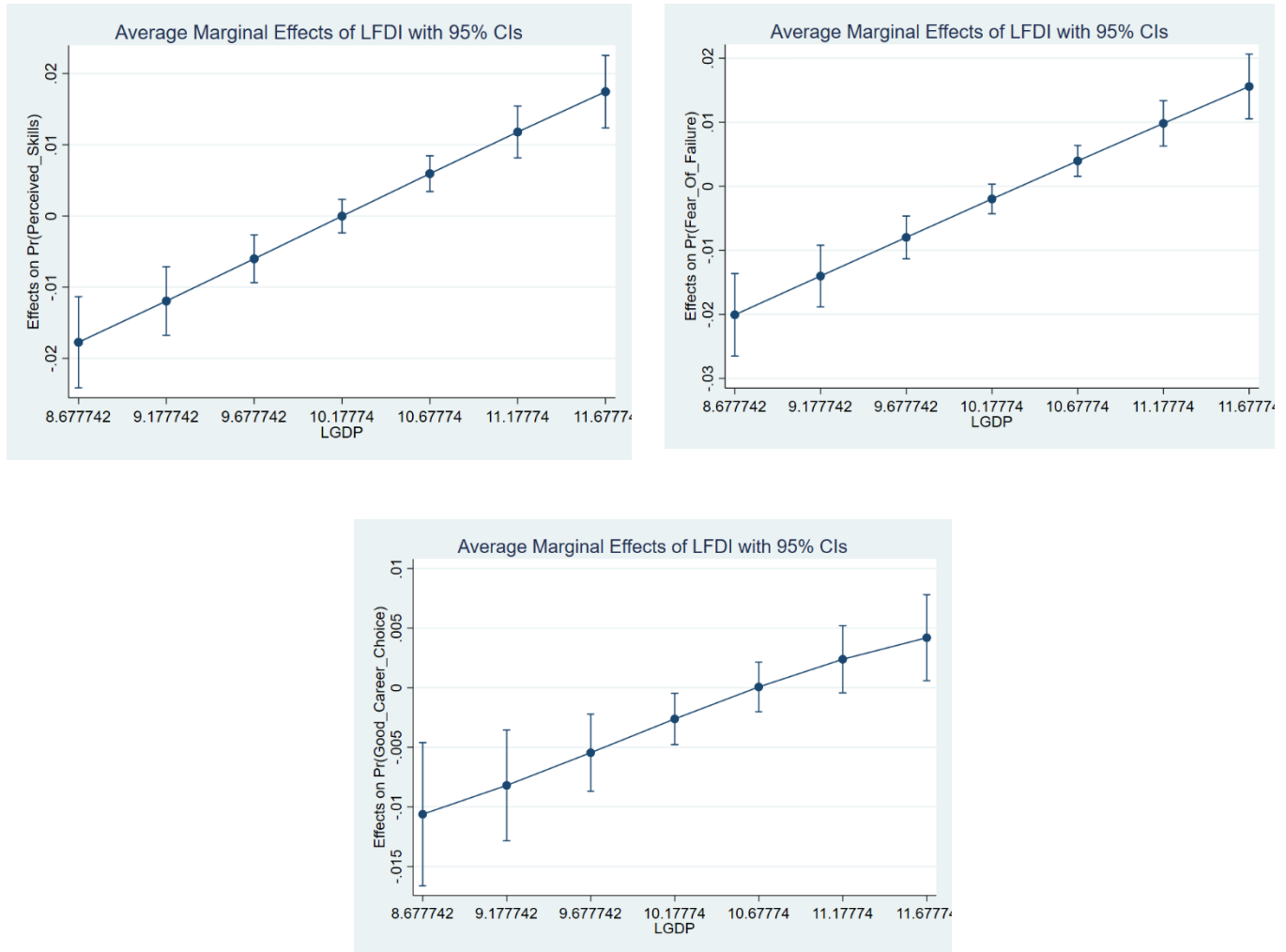
With regards to the control variables, this model also brings out some of the similar observations, as compared to the models discussed above. Potential entrepreneurs with more education and income tend to perceive themselves as skilled enough to start new businesses, are less likely to forego the opportunity to start a business due to the fear of failure and are more likely to feel that entrepreneurship is not considered as a good career option in their country. Finally, the results also indicate that if everything else is constant, female entrepreneurs are less sure about having skills to start a new business, more likely to not pursue a startup due to the fear of failure and are more likely to associate a lower social status for entrepreneurship as a career option in their country.

**Table 4: Results of logit models (with interaction effects).**

	(1) Perceived Skills	(2) Fear of Failure	(3) Good Career Choice
LFDI	-0.524*** (0.082)	-0.532*** (0.082)	-0.275*** (0.085)
LGDP	-1.421*** (0.190)	-1.300*** (0.187)	-0.025 (0.197)
LFDI x LGDP	0.051*** (0.008)	0.051*** (0.008)	0.026*** (0.008)
Age	0.080*** (0.001)	0.036*** (0.001)	-0.029*** (0.001)
Agesq	-0.001*** (0.000)	-0.000*** (0.000)	0.000*** (0.000)
Hhsize	0.008*** (0.002)	0.003** (0.002)	0.009*** (0.002)
Female	-0.570*** (0.006)	0.332*** (0.006)	-0.043*** (0.006)
Income: Middle Tercile	0.078*** (0.008)	-0.038*** (0.008)	-0.060*** (0.008)
Income: Upper Tercile	0.277*** (0.008)	-0.163*** (0.008)	-0.156*** (0.008)
Education: Primary education	0.158*** (0.025)	-0.241*** (0.024)	-0.087*** (0.028)
Education: Lower Secondary	0.408*** (0.024)	-0.294*** (0.023)	-0.132*** (0.027)
Education: Upper Secondary	0.552*** (0.023)	-0.358*** (0.022)	-0.239*** (0.026)
Education: Post-Secondary	0.762*** (0.024)	-0.382*** (0.023)	-0.376*** (0.027)
Education: First stage of	0.864*** (0.024)	-0.351*** (0.023)	-0.599*** (0.026)
Education: Second stage of	0.984*** (0.030)	-0.400*** (0.029)	-0.813*** (0.032)
Constant	12.582*** (1.961)	12.269*** (1.943)	2.107 (2.043)
Year Fixed Effects	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes
Observations	512,073	512,073	512,073

Notes: Standard errors in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$ .

**Figure 1: Marginal Effects of FDI on the three perceptual variables.**



The results suggest that FDI has a positive impact on the perceptual variables when we do not use the country and year fixed effects. However, the relationship is insignificant when the country and year fixed effects are added. However, the marginal effects of FDI suggests that the impact of FDI becomes positive with higher level of GDP suggesting that FDI leads to more positive perceptions about entrepreneurship in countries having higher GDP.

## 5 Discussion and Conclusion

### 5.1 Discussion

The findings of this study suggest that FDI inflows do have a positive impact on perceptions about entrepreneurship, although the findings are not robust as in some cases the result is not significant and in one particular case, it shows a negative impact. The results also suggest that the positive impact increases with the level of economic development-measured by the logarithm of per capita GDP. The results have important implications not only for policymakers but also for potential entrepreneurs, since they also provide an idea of how variables such as the household size and a number of individual level variables, education, income and age among others, play a role in developing perceptions about entrepreneurship.

The attempt to determine whether FDI is affecting perceptions about entrepreneurship or not, is a task that needed to be approached with caution. Studying the existing literature, it became pretty evident, early on, that drawing a robust conclusion on this research would not be easy, as for some of the key variables used in the present study, theories flow both ways. The results of this study are aligned with the findings of the previous literature, as the literature records both negative and positive spillover effects of FDI on entrepreneurship. Similarly to the case of entrepreneurship, FDI's research on what drives people and corporations to proceed with an investment on foreign grounds has also been a matter of great controversy (Denisia, 2010; Hosseini, 2005).

The positive results in this study were expected, as during the review of the literature, I stumbled upon the work of Arenius and Minniti (2005) who explained in their own words, that another term to characterize those perceptions in a simple way, is the well-known "wishful thinking". After this, just based on human nature, I was expecting a positive relationship since the majority of people want to believe that are capable and skillful in many different areas (Koellinger et al., 2007). Combining it with increased FDI inflows, and therefore higher money flows in the country, confidence builds up. Moreover, finding support with a different sign though, is the hypothesis that FDI inflows are negatively associated with the fear of failure, i.e., increased FDI can decrease the hold that fear of failure has on people from running a business. Among the different studies that led to this hypothesis, the most important one was the one from Webber and Milliman (1997), who concluded that in the scenario where the perceived likelihood of failure can be decreased, then individuals would stop paying too much attention to the fear of failure, and would not let it stop them from running a business. As also mentioned above, enhanced FDI inflows can lead to higher market openness or even causing a feeling of economic euphoria, which decreases the rate of fearing a potential failure. The

positive relationship could also be explained by the reasoning that entrepreneurship can be more easily viewed as a good career choice in times of higher FDI inflows. Higher FDI inflows could mean a potentially higher degree of openness in the market, thus strengthening the belief of individuals that they can perform on such a level that will allow them to make a profit (Arenius & Minniti, 2005).

On the other hand, the literature also finds a negative impact of FDI on entrepreneurship. Grossman (1984) theorized that in an open economy, FDI has the potential to crowd out the domestic entrepreneurs or even eliminate their incentives for selecting to become entrepreneurs, an opinion that is in line with the one of Backer and Sleuwaegen (2003), among others. Moreover, Arenius and Minniti (2005) argue that fear of failure does have a negative impact on the chance that an individual will become an entrepreneur. Given the fact that FDI inflows have a tendency to crowd out local entities (Kindleberger, 1969), individuals could consider themselves as more likely to fail, the higher the FDI inflows are. Relatedly, entrepreneurship could be seen as less of a good choice if local enterprises are being crowded out. In line with the latter one is the work of Patel and Rietveld (2022) who concluded that globalization, which is also examined here through FDI inflows, while it can have many beneficial results, it leads to an increased competition, shrinking the survival chances of small enterprises. This could lead to a change in the way people view entrepreneurship as a good career choice or not. A possible reason behind the observed change in coefficients after including country fixed effects could be the heterogeneity of countries in the sample, for example in terms of economy size and other macroeconomic variables which have the ability to change the within country effect of FDI over time.

The results obtained regarding the moderating role of GDP per capita on perceptions about entrepreneurship provide support for my hypotheses, suggesting that higher per capita GDP results in a larger and positive impact of FDI on perceptions about entrepreneurship. This could be due to the fact that FDI expands the already existing developments of the developed countries compared to the developing ones, thereby creating more opportunities.

## *5.2 Conclusion*

This paper studied the impact of FDI on perceptions about entrepreneurship. With few exceptions, the overall findings suggest towards a positive impact of FDI on these perceptions. This outcome has several policy implications. Since the study was done on OECD countries, this suggests that a strong and stable institutional quality can benefit each country with enhanced economic growth and higher FDI inflows (Raza et al., 2021). In addition to that, economic liberalization could lead to increased



motivation for the individuals on starting their own business, and specifically opportunity entrepreneurship (Angulo-Guerrero et al., 2017). Therefore, countries should attempt to gather greater FDI inflows, while on the same time providing incentives to the individuals for starting their own business, as this could lead to economic growth.

### *5.3 Limitations and Suggestions for Further Research*

Starting with the very own definition of what entrepreneurship really is, it is safe to say that the vagueness surely does not help all researchers to be on the same page. Moreover, the effects of FDI inflows on the host country's economic growth, as well as the perceptions about entrepreneurship have been subjects that regardless of the attention they have received, they have drawn quite different opinions, as they can be characterized as subjective.

On top of that, the research's raw materials, which are the data obtained from GEM and the World Bank, have included variables that are applicable for most countries of the world and not to a specific group like the one I have used here (OECD members). Therefore, our data sample is relatively selective, limiting the generalizability of the finding to other countries. Having selected the aforementioned sample can also lead to other potential limitations, as 37 out of the 38 countries of my sample are considered to be developed, high-income countries relative to the world average, therefore leaving not much space for the results of this research to be used in a big part of the world's remaining countries, more specifically the developing countries.

An additional limitation of the data is the fact that the years used are ranging from 2010 to 2017, and while on the one hand they fulfill the initial goal of exploring the period after the peak of the financial crisis, on the other hand there could be a question regarding the validity, or even better the relevance of the results in the present day, almost 4 years later and with plenty more economic, and not only economic, shocks like the COVID pandemic for example. Unfortunately, 2017 was the last year with available data on GEM.

Lastly, having established that in this study the countries selected are mainly developed ones, it is safe to assume that they present an abundance of opportunities to individuals to start their own business. Hence, the lack of accounting for the perceived opportunities in these countries could also be seen as a limitation.

Future research on this topic can take a number of directions. A comparative study on developing and developed economies would provide us with a better view of how different factors affect different

group of countries differently. Moreover, the time period can be extended, and the impact of global shocks can also be analyzed. Lastly, more advanced methodology that would capture the causal relation between the variables would be interesting to adopt. Beyond FDI, how other factors such as corruption and business freedom affect entrepreneurship perspective, can also be explored in future research.

## References

- Aizenman, J., & Sushko, V. (2011). Capital flows: Catalyst or Hindrance to economic takeoffs? *National bureau of economic research*. <https://doi.org/10.3386/w17258>
- Z.J. Acs, P. Arenius, M. Hay and M. Minniti, 2004 Global Entrepreneurship Monitor. (London Business School and Babson College. London U.K. And Babson Park, MA, 2005).
- Albulescu, C. T., & Tămășilă, M. (2014). The Impact of FDI on Entrepreneurship in the European Countries. *Procedia - Social and Behavioral Sciences*, 124, 219–228. <https://doi.org/10.1016/j.sbspro.2014.02.480>
- Alfaro, L. (2003). Foreign direct investment and growth: Does the sector matter? Working Paper, Harvard Business School.
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. (2004). FDI and economic growth: the role of local financial markets. *Journal of International Economics*, 64(1), 89–112. [https://doi.org/10.1016/s0022-1996\(03\)00081-3](https://doi.org/10.1016/s0022-1996(03)00081-3)
- Anderson, A. R., & Starnawska, M. (2008). Research Practices in Entrepreneurship. *The International Journal of Entrepreneurship and Innovation*, 9(4), 221–230. <https://doi.org/10.5367/000000008786208731>
- Anggadwita, G., & Dhewanto, W. (2016). The influence of personal attitude and social perception on women entrepreneurial intentions in micro and small enterprises in Indonesia. *International Journal of Entrepreneurship and Small Business*, 27(2/3), 131. <https://doi.org/10.1504/ijesb.2016.073974>
- Angulo-Guerrero, M. J., Pérez-Moreno, S., & Abad-Guerrero, I. M. (2017). How economic freedom affects opportunity and necessity entrepreneurship in the OECD countries. *Journal of Business Research*, 73, 30–37. <https://doi.org/10.1016/j.jbusres.2016.11.017>
- Arenius, P., & Minniti, M. (2005). Perceptual Variables and Nascent Entrepreneurship. *Small Business Economics*, 24(3), 233–247. <https://doi.org/10.1007/s11187-005-1984-x>
- Atherton, A. (2004). Unbundling Enterprise and Entrepreneurship. *The International Journal of Entrepreneurship and Innovation*, 5(2), 121–127. <https://doi.org/10.5367/000000004773863273>
- Ayyagari, M., & Kosová, R. (2010). Does FDI Facilitate Domestic Entry? Evidence from the Czech Republic. *Review of International Economics*, 18(1), 14–29. <https://doi.org/10.1111/j.1467-9396.2009.00854.x>
- Assuncao, S., Forte, R., & Teixeira, A. (2011). Location Determinants of FDI: Determinants of FDI: A Literature Review.

- Baron, R. A. (2000). Psychological Perspectives on Entrepreneurship. *Current Directions in Psychological Science*, 9(1), 15–18. <https://doi.org/10.1111/1467-8721.00050>
- Barrios, S., Gorg, H., & Strobl, E. (2005). Foreign Direct Investment, Competition and Industrial Development in the Host Country. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.688964>
- Barry, F., Görg, H., & Strobl, E. (2003). Foreign direct investment, agglomerations, and demonstration effects: An empirical investigation. *Review of World Economics*, 139(4), 583–600. <https://doi.org/10.1007/bf02653105>
- Bennett, R. (2006). Business lecturers' perceptions of the nature of entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*, 12(3), 165–188. <https://doi.org/10.1108/13552550610667440>
- Bernoster, I., Rietveld, C., Thurik, A., & Torrès, O. (2018). Overconfidence, Optimism and Entrepreneurship. *Sustainability*, 10(7), 2233. <https://doi.org/10.3390/su10072233>
- Berrill, J., O'Hagan-Luff, M., & Van Stel, A. (2018). The moderating role of education in the relationship between FDI and entrepreneurial activity. *Small Business Economics*, 54(4), 1041–1059. <https://doi.org/10.1007/s11187-018-0121-6>
- Blonigen, B. A. (2005). A Review of the Empirical Literature on FDI Determinants. *Atlantic Economic Journal*, 33(4), 383–403. <https://doi.org/10.1007/s11293-005-2868-9>
- Borensztein, E., De Gregorio, J., & Lee, J. W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45(1), 115–135. [https://doi.org/10.1016/s0022-1996\(97\)00033-0](https://doi.org/10.1016/s0022-1996(97)00033-0)
- Brooks, D., Hasan, R., Lee, J. W., & Son, H. H. (2010). Closing Development Gaps: Challenges and Policy Options. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1663440>
- Broussard, N., Chami, R., & Hess, G. D. (2003). (Why) Do Self-Employed Parents Have More Children? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.484964>
- Brouwer, M. (2000). Brouwer, M. (2000). Entrepreneurship and Uncertainty: Innovation and Competition among the Many. *Small Business Economics*, 15(2), 149–160. <https://doi.org/10.1023/a:1008147829791>.
- Buckley, P. J., & Casson, M. (2016). *The Future of the Multinational Enterprise*, 2nd ed. Palgrave Macmillan.
- Carree, M., Van Stel, A., Thurik, R., & Wennekers, S. (2007). The relationship between economic development and business ownership revisited. *Entrepreneurship & Regional Development*, 19(3), 281–291. <https://doi.org/10.1080/08985620701296318>

- Caves, Richard E. (1996). *Multinational Enterprise and Economic Analysis*. 2d ed. New York: Cambridge University Press.
- Chung, W., Mitchell, W., & Yeung, B. (2003). Foreign direct investment and host country productivity: the American automotive component industry in the 1980s. *Journal of International Business Studies*, 34(2), 199–218. <https://doi.org/10.1057/palgrave.jibs.8400017>
- Cleeve, E. (2008). How Effective Are Fiscal Incentives to Attract FDI to Sub-Saharan Africa? *The Journal of Developing Areas*, 42(1), 135–153. <https://doi.org/10.1353/jda.0.0015>
- Danakol, S., Estrin, S., Reynolds, P. D., & Weitzel, U. (2013). Foreign Direct Investment and Domestic Entrepreneurship: Blessing or Curse? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2367671>
- De Backer, K., & Sleuwaegen, L.(2003). Does foreign direct investment crowd out domestic entrepreneurship? *Review of Industrial Organization*, 22(1): 67–84
- Denisia, V. (2010). Foreign direct investment theories: An overview of the main FDI theories. *European journal of interdisciplinary studies*, (3).
- Díaz-García, M. C., & Jiménez-Moreno, J. (2009). Entrepreneurial intention: the role of gender. *International Entrepreneurship and Management Journal*, 6(3), 261–283. <https://doi.org/10.1007/s11365-008-0103-2>
- Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., & Wagner, G. G. (2011). Individual risk attitudes: measurement, determinants and behavioral consequences. *Journal of the European Economic Association*, 9(3), 522–550. <https://doi.org/10.1111/j.1542-4774.2011.01015.x>
- Douglas, E. J., & Shepherd, D. A. (2002). Self-Employment as a Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization. *Entrepreneurship Theory and Practice*, 26(3), 81–90. <https://doi.org/10.1177/104225870202600305>
- Duce, M. (2003). Definitions of Foreign Direct Investment (FDI): A Methodological Note, (unpublished: Banco de Espana
- Dunning, J. H. (1988). The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions. *Journal of International Business Studies*, 19(1), 1–31. <https://doi.org/10.1057/palgrave.jibs.8490372>
- Dunning, J. H., & Lundan, S. M. (2008). Institutions and the OLI paradigm of the multinational enterprise. *Asia Pacific Journal of Management*, 25(4), 573–593. <https://doi.org/10.1007/s10490-007-9074-z>
- Dunning JH, Rugman AM. 1985. The influence of Hymer's dissertation on the theory of foreign direct investment. *American Economic Review* 75: 228–232.

- Fosfuri, A., Motta, M., & Rønde, T. (2001). Foreign direct investment and spillovers through workers' mobility. *Journal of International Economics*, 53(1), 205–222. [https://doi.org/10.1016/s0022-1996\(00\)00069-6](https://doi.org/10.1016/s0022-1996(00)00069-6)
- Francis, J., Zheng, C., & Mukherji, A. (2009). An Institutional Perspective on Foreign Direct Investment. *Management International Review*, 49(5), 565–583. <https://doi.org/10.1007/s11575-009-0011-x>
- Franco, C., Rentocchini, F., & Vittucci Marzetti, G. (2008). Why Do Firms Invest Abroad? An Analysis of the Motives Underlying Foreign Direct Investments. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1283573>
- Gartner, W. B. (1985). A Conceptual Framework for Describing the Phenomenon of New Venture Creation. *Academy of Management Review*, 10(4), 696–706. <https://doi.org/10.5465/amr.1985.4279094>
- Global Report 2017/2018. (2018). <https://www.gemconsortium.org/file/open?fileId=50012>
- Gorg, H., & Greenaway, D. (2003). Much Ado About Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.475044>
- Graham, J. P., & Spaulding, R. B. (2005). Understanding foreign direct investment (FDI). As Contributors to Bizzed International Gateway for CITIBANK, <http://www.going-global.com/jpgconsulting/services.htm>.
- Grossman, G.M. (1983). International trade, foreign investment, and the formation of the entrepreneurial class. *American Economic Review* 74 (4), 605–614.
- Hanson, G.H. (2000). “Should Countries Promote Foreign Direct Investment?” G24 paper.
- Harper, D. (1998). ‘Institutional Conditions for Entrepreneurship’, *Advances in Austrian Economics* 5, 241–275
- Helpman, E., Melitz, M. J., & Yeaple, S. R. (2004). Export Versus FDI with Heterogeneous Firms. *American Economic Review*, 94(1), 300–316. <https://doi.org/10.1257/000282804322970814>
- Hobday, M. (1995). Innovation in East Asia: Diversity and development. *Technovation*, 15(2), 55–63. [https://doi.org/10.1016/0166-4972\(95\)96610-6](https://doi.org/10.1016/0166-4972(95)96610-6)
- Hosseini, H. (2005). An economic theory of FDI: A behavioral economics and historical approach. *The Journal of Socio-Economics*, 34(4), 528–541. <https://doi.org/10.1016/j.socec.2005.07.001>
- Kautonen, T., Van Gelderen, M., & Fink, M. (2015). Robustness of the Theory of Planned Behavior in Predicting Entrepreneurial Intentions and Actions. *Entrepreneurship Theory and Practice*, 39(3), 655–674. <https://doi.org/10.1111/etap.12056>

- Kickul, J., Krueger, N., & Maxfield, S. (2005). Special issue on "Measurement issues in entrepreneurship studies". *New England Journal of Entrepreneurship*, 8(2), 5–7. <https://doi.org/10.1108/neje-08-02-2005-b001>
- Kihlstrom, R. E., & Laffont, J. J. (1979). A General Equilibrium Entrepreneurial Theory of Firm Formation Based on Risk Aversion. *Journal of Political Economy*, 87(4), 719–748. <https://doi.org/10.1086/260790>
- Kindleberger, C.P. (1969). *American Business Abroad*. New Haven, 1969.
- Knickerbocker, F. T. (1973). Oligopolistic reaction and multinational enterprise. *The International Executive*, 15(2), 7–9. <https://doi.org/10.1002/tie.5060150205>
- Koellinger, P., Minniti, M., & Schade, C. (2007). "I think I can, I think I can": Overconfidence and entrepreneurial behavior. *Journal of Economic Psychology*, 28(4), 502–527. <https://doi.org/10.1016/j.joep.2006.11.002>
- Koellinger, P., & Thurik, R. (2009). Entrepreneurship and the Business Cycle. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1403867>
- Kokko, A. (2006). The home country effects of FDI in developed economies. European Institute of Japanese Studies (EJIS) Working Paper No. 225, Stockholm.
- Levie, J., & Autio, E. (2008). A theoretical grounding and test of the GEM model. *Small Business Economics*, 31(3), 235–263. <https://doi.org/10.1007/s11187-008-9136-8>
- Levine, R., Renelt, D., (1993). A Sensitivity Analysis of Cross-Countries Growth Regressions, *American Economic Review*, Vol. LXXXII, 942-963.
- Liang, J., Wang, H., & Lazear, E. P. (2018). Demographics and Entrepreneurship. *Journal of Political Economy*, 126(S1), S140–S196. <https://doi.org/10.1086/698750>
- Lipsey, R. (2001), Interpreting developed countries FDI, NBER Working Paper 7810.
- Lipsey, R. (2004), Home and Host Country Effects of FDI, in *Challenges to Globalization*, ed. by Robert E. Baldwin and L. Alan Winters (Chicago, University of Chicago Press), pp. 333–79.
- Marín, L., Nicolás, C., & Rubio, A. (2019). How Gender, Age and Education Influence the Entrepreneur's Social Orientation: The Moderating Effect of Economic Development. *Sustainability*, 11(17), 4514. <https://doi.org/10.3390/su11174514>
- Markusen, J. R. (1984). Multinationals, multi-plant economies, and the gains from trade. *Journal of International Economics*, 16(3–4), 205–226. [https://doi.org/10.1016/s0022-1996\(84\)80001-x](https://doi.org/10.1016/s0022-1996(84)80001-x)
- Markusen, J. R., & Venables, A. J. (1999). Foreign direct investment as a catalyst for industrial development. *European Economic Review*, 43(2), 335–356. [https://doi.org/10.1016/s0014-2921\(98\)00048-8](https://doi.org/10.1016/s0014-2921(98)00048-8)

- Melitz, M. J. (2003). The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity. *Econometrica*, 71(6), 1695–1725. <https://doi.org/10.1111/1468-0262.00467>
- Molina, J. A. (2020). Family and Entrepreneurship: New Empirical and Theoretical Results. *Journal of Family and Economic Issues*, 41(1), 1–3. <https://doi.org/10.1007/s10834-020-09667-y>
- Nguyen, C. (2018). Demographic factors, family background and prior self-employment on entrepreneurial intention - Vietnamese business students are different: why? *Journal of Global Entrepreneurship Research*, 8(1). <https://doi.org/10.1186/s40497-018-0097-3>
- Noland, M. (2004). Popular Attitudes, Globalization, and Risk. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.581501>
- Patel, P. C., & Rietveld, C. A. (2021). Does globalization affect perceptions about entrepreneurship? The role of economic development. *Small Business Economics*, 58(3), 1545–1562. <https://doi.org/10.1007/s11187-021-00455-y>
- Raza, S. A., Shah, N., & Arif, I. (2019). Relationship Between FDI and Economic Growth in the Presence of Good Governance System: Evidence from OECD Countries. *Global Business Review*, 22(6), 1471–1489. <https://doi.org/10.1177/0972150919833484>
- Rusu, V., & Roman, A. (2017). Entrepreneurial Activity in the EU: An Empirical Evaluation of Its Determinants. *Sustainability*, 9(10), 1679. <https://doi.org/10.3390/su9101679>
- Santarelli, E., & Vivarelli, M. (2006). Entrepreneurship and the Process of Firms' Entry, Survival and Growth. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.950922>
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*, 25(1), 217–226. <https://doi.org/10.5465/amr.2000.2791611>
- Slaughter, M. J., & Ekholm, K. (2003). Host-Country Determinants of U.S. Foreign Direct Investment into Europe. *Foreign Direct Investment in the Real and Financial Sector of Industrial Countries*, 7–35. [https://doi.org/10.1007/978-3-540-24736-4\\_2](https://doi.org/10.1007/978-3-540-24736-4_2)
- Sternberg, R., & Wennekers, S. (2005). Determinants and Effects of New Business Creation Using Global Entrepreneurship Monitor Data. *Small Business Economics*, 24(3), 193–203. <https://doi.org/10.1007/s11187-005-1974-z>
- Tang, L., Koveos, P.E., 2004. Venture entrepreneurship, innovation entrepreneurship and economic growth. *J. Developmental Entrepreneurship* 9 (2), 161–171
- Türkcan, B., Duman, A., and Yetkiner, I. H. 2008. How does FDI and economic growth affect each other? The OECD case. International Conference on Emerging Economic Issues in a Globalizing World, Izmir, Turkey, May 25



- Uhlaner, L., & Thurik, R. (2007). Postmaterialism influencing total entrepreneurial activity across nations. *Journal of Evolutionary Economics*, 17(2), 161–185. <https://doi.org/10.1007/s00191-006-0046-0>
- Van Auken, H., Fry, F. L., & Stephens, P. (2006). The influence of role models on entrepreneurial intentions. *Journal of Developmental Entrepreneurship*, 11(02), 157–167. <https://doi.org/10.1142/s1084946706000349>
- Van der Zwan, P., Thurik, R., Verheul, I., & Hessels, J. (2016). Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs. *Eurasian Business Review*, 6(3), 273–295. <https://doi.org/10.1007/s40821-016-0065-1>
- Vidal-Sune, A., Lopez-Panisello, M. (2013), Institutional and economic determinants of the perception of opportunities and entrepreneurial intention, *Investigaciones Regionales*, Vol. 26, pp. 75-96
- Vijayakumar, N., Sridharan, P., Rao, K.C.S. (2010), Determinants of FDI in BRICS countries: A panel analysis, *International Journal of Business Science and Applied Management*, 5 (3), 1-13
- Wach, K., & Wojciechowski, L. (2016). Entrepreneurial Intentions of Students in Poland in the View of Ajzen's Theory of Planned Behaviour. *Entrepreneurial Business and Economics Review*, 4(1), 83–94. <https://doi.org/10.15678/eber.2016.040106>
- Wang, M. (2009). Manufacturing FDI and economic growth: evidence from Asian economies. *Applied Economics*, 41(8), 991–1002. <https://doi.org/10.1080/00036840601019059>
- Weber, E. U., & Milliman, R. A. (1997). Perceived Risk Attitudes: Relating Risk Perception to Risky Choice. *Management Science*, 43(2), 123–144. <https://doi.org/10.1287/mnsc.43.2.123>
- Wennekers, S., & Thurik, R. (1999). Linking Entrepreneurship and Economic Growth. *Small Business Economics*, 13(1), 27–56. <https://doi.org/10.1023/a:1008063200484>
- Wennekers, A. R. M., Noorderhaven, N., Hofstede, G., & Thurik, A. R. 2002. Cultural and economic determinants of business ownership across countries. In W. D. Bygrave, E. Autio, C. G. Brush, P. Davidsson, P. G. Green, P. D. Reynolds, & H. J. Sapienza (Eds) *Frontiers of entrepreneurship research*: 179–190. Wellesley, MA: Babson College.
- Zhao, X., Li, H., & Rauch, A. (2012). Cross-country differences in entrepreneurial activity: The role of cultural practice and national wealth. *Frontiers of Business Research in China*, 6(4), 447–474.