STUDY

Requested by the FEMM committee

European Parliament

# Women's entrepreneurship and self-employment, including aspects of gendered Corporate Social Responsibility


Policy Department for Citizens' Rights and Constitutional Affairs
Directorate-General for Internal Policies
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# Women's entrepreneurship and self-employment, including aspects of gendered Corporate Social Responsibility

**Abstract**

This study was commissioned by the European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs at the request of the FEMM Committee. It highlights that despite the increasing number of public policies and institutional resources designed to promote women-led business, the entrepreneurship gender gap persists. This study aims to analyse this apparent contradiction, focusing on three main questions: What are the constraints that women face when deciding to become entrepreneurs? What factors attract women's interest and motivate them to start their own business? And which policies may benefit women's entrepreneurship?

This document was requested by the European Parliament's Committee on Women's rights and Gender Equality.


**AUTHOR**
María BASTIDA, Associate Professor of Economics at the University of Santiago de Compostela (Spain)

**ADMINISTRATOR RESPONSIBLE**
Martina SCHONARD

**EDITORIAL ASSISTANT**
Ginka TSONEVA



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To contact the Policy Department or to subscribe for updates, please write to:
Policy Department for Citizens' Rights and Constitutional Affairs
European Parliament
B-1047 Brussels
Email: poldep-citizens@europarl.europa.eu



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# LIST OF ABBREVIATIONS

| | |
|---|---|
| **APS** | Adult Population Survey |
| **CSR** | Corporate Social Responsibility |
| **CR** | Composite realibility |
| **EC** | European Commision |
| **EES** | Entrepreneurial Ecosystems |
| **EP** | European Parliament |
| **EU** | European Union |
| **GEM** | Global Entrepreneurship Monitor |
| **GEM NECI** | Global Entrepreneurship Monitor's National Entrepreneurship Context Index |
| **OECD** | Organisation for Economic Cooperation and Development |
| **PLS** | Partial Least Squares |
| **SRS** | Simple Randon Sample |
| **R&S** | Resarch and development |
| **SDGs** | Sustainable Development Goals |
| **STEM** | Science, Technology, Engineering and Mathematics |
| **TEA** | Total Entrepreneurial Activity |
| **USA** | United States of America |
| **UK** | United Kingdom |
| **UN** | United Nations |
| **UNGC** | United Nations Global Compact |
| **WOS** | Web of Science |

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# EXECUTIVE SUMMARY

## Background

The European Union aims to be a leading economic power and entrepreneurship reveals as a crucial tool to achieve this goal. Entrepreneurship has not only been recognised as a driving force for employment and economic growth, but it also promotes innovation and develops skills that can be an invaluable source of competitive advantage for countries. Therefore, understanding the factors driving entrepreneurial activity is key for improving public policies.

The promotion of entrepreneurship has become a priority for governments when designing development strategies. Entrepreneurship is embedded in a social context, so external factors and environmental conditions greatly affect the creation and development of enterprises. However, entrepreneurial activity begins with entrepreneurs, those who may want to go into business. Consequently, understanding these individuals, their motivations and challenges, seems crucial to better implement policies aimed at enhancing entrepreneurship.

This growing interest in entrepreneurship has recently highlighted the role of women in entrepreneurial activity. In fact, despite the strong increase in their labour market participation women are still under-represented as entrepreneurs. In 2019, women were less likely than men to be entrepreneurs in several European countries, although this unevenness varied across countries. As a case in point, the gender gap in entrepreneurial intention is relatively small in Spain, the Netherlands, Luxembourg, or Greece, while it increases in Latvia, Croatia, or Ireland.

This evidence of the under-representation of women entrepreneurs, coupled with the belief that entrepreneurship brings significant benefits to both women and nations, has raised high expectations about the role that governments can play in promoting entrepreneurship. As a result, public authorities and international bodies -such as the European Union (EU) and the United Nations (UN)- have introduced women's entrepreneurship into their discourse. In addition, the UN Sustainable Development Goals (SDGs) have driven the need to apply the gender lens as part of sustainable development, while reducing inequalities, prioritising equality, and avoiding discrimination are specifically addressed through this agenda (SDGs 10 and 5, respectively).

Women have traditionally faced significant barriers at the time of becoming entrepreneurs. In response to these difficulties, national strategies and European support actions have been designed to promote female entrepreneurship. Hence, entrepreneurship is supported through various measures that help women overcome barriers and provide advice to better enter business. These actions seem necessary to boost female entrepreneurship, but they are not sufficient to understand women entrepreneurs. Policy makers need to realise that women are a specific group with their own motivations, expectations and challenges.

This study aims to provide an overview of women's entrepreneurship, focusing on European countries. The study provides an analysis of women's motivations when starting a business, as well as information on the challenges they face and the elements that women perceive as facilitators to become entrepreneurs. Based on this analysis, a proposal for a new policy approach to support women in entrepreneurship is provided. This proposal for a gender-aware framework for entrepreneurship supplies a roadmap for policy makers to better harness women's latent entrepreneurial spirit.

## Aim

- The aim of this study is twofold. The first goal is to identify the main motivations of women entrepreneurs in the European context, as well as the barriers they face and the main enhancers they perceive to start business. The second goal is to provide possible actions for empowering

female entrepreneurship. Additionally, this study identifies useful practices and policies to foster women's entrepreneurship, focusing on those that can could reduce the negative impact of barriers that undermine women's progress in entrepreneurship.

## Methodology

This study is based in a set of research steps:

- An in-depth review of relevant literature on women entrepreneurship that includes a bibliometric analysis aimed at identifying both the most relevant topics and the main researchers in this field.
- A desk-based review on information and data on women's entrepreneurship.
- Interviews with entrepreneurs, to better understand the main factors that were identified from literature review as motives, barriers, and enhancers to entrepreneurial activity.
- A Delphi panel, to secure previous results and make assumptions about entrepreneurial behaviour.
- A questionnaire, distributed to a number of people in the EU countries. The aim of this questionnaire was to capture first-hand information on the main reasons that have driven their entrepreneurial activity, the barriers they face on this path and the elements that could help them to become entrepreneurs. The questionnaire was distributed between women and men to better capture possible differences in their responses.
- An empirical study to better understand gender differences in entrepreneurial activity.
- A review of entrepreneurial ecosystems within the EU.

## Structure

The study consists of six chapters. Chapter 1 presents an overview of women's entrepreneurship, providing a general introduction to the topic. Particular attention has been paid in this chapter to identifying the drivers, barriers, and enablers of female entrepreneurship. Chapter 2 describes the main elements of national support schemes for female entrepreneurship. Chapter 3 presents the empirical research, where the main results are identified highlighting gender differences. Chapters 4 and 5 discuss alternatives to address the constraints of women entrepreneurship more effectively, as well as measures to improve entrepreneurship among women. Finally, Chapter 6 presents the main conclusions, including policy orientations.

## KEY FINDINGS

- **Women entrepreneurship is an underestimated phenomenon**. Women represent one of the fastest growing entrepreneurial populations worldwide. However, there is a broad consensus that women's contribution to self-employment and entrepreneurship is considerably less than that of their male counterparts. Hence, women are clearly under-represented among entrepreneurs.
- **Women entrepreneurship is a hot topic for researchers and governments alike**. For the first ones, and despite growing interest in recent years, research on this topic is still in its infancy. As for governments, they realise that ignoring women's potential as a source of entrepreneurs means overlooking a valuable and untapped source of economic development.
- **Researching women entrepreneurship has an economic and social impact**. In addition to general benefits of entrepreneurship, such as economic development, growth and employment creation, women entrepreneurs find other results from their activity, such as empowerment, emancipation, and self-fulfilment. Additionally, for many women is a first step to achieve economic independence.
- **Women enter entrepreneurship for similar reasons as men, but also show quite different motivations for becoming entrepreneurs.** Women entrepreneurs seem to be more interested in entering entrepreneurship driven by desire and expectations, such as advancing their professional development, creating their own project, or managing and controlling their working life. Men seem more likely to enter business for reasons of strength, e.g., as an alternative to unemployment.
- **The barriers that women identify to becoming entrepreneurs, as well as the challenges they face in their entrepreneurial journey, are also different from those identified by men**. Thus, women find more difficulties in personal barriers to entrepreneurship, for example, due to the lack of specific training, a lower level of self-confidence, less access to social and business networks or because they are discouraged by difficulties in reconciling work and family life. Male entrepreneurs attach more importance to external barriers, such as difficulties in accessing finance, lack of support and bureaucracy.
- **Women's views on useful entrepreneurship enablers are different from men's perspective.** Women seem to be more interested in measures aimed at increasing their personal resources and improving their competences and capabilities (e.g., training programmes, entrepreneurship education and actions to increase self-confidence), while men seem to be more interested in direct support, such as access to financial resources or consultancy services.
- **Women entrepreneurship is internal-driven, whereas men entrepreneurship is external-driven.** This different approach must be specifically addressed in the process of planning and designing supportive policies aimed at fostering entrepreneurship.

- **Building on these differences, institutional conditions need to be improved**. As women and men are influenced by different factors, it is important to promote gender-sensitive frameworks to enhance entrepreneurship. A male-centred framework is outward-oriented, while a female-centred support system is inward-oriented. Actions such as the promotion of successful women entrepreneurs as role models, mentoring and access to networks are particularly useful in this second framework. Moreover, a reinforcing effect of these actions can be expected in the medium term. Finally, specific actions can be taken to ensure that personal concerns do not undermine entrepreneurship.
- **A different approach to support measures is needed**. A more proactive, positive, well-adjusted, and long-term focused support system is advisable. In addition, the potential beneficiaries of support measures should be thoroughly reviewed to achieve a better democratisation of the support system and a broad diversification of entrepreneurship. New lines of support can be added, such as financial instruments as a single line or combined with grant support. The *NextGeneration* tool appears as a great opportunity to test these new support measures. In addition, simpler and more active communication is also advisable. The whole system must be rigorously monitored, both to check its efficiency and to identify opportunities for improvement.
- **In addition, the decision-making process also needs to be scrutinised**. The co-production of public policies seems to be a useful scheme to better design public policies aimed at fostering entrepreneurship. In this context, first-hand knowledge of women entrepreneurs makes it possible to design a bottom-up model of supportive measures that adds value to the classic top-down systems driven by male decision-makers with no entrepreneurial experience.
- **Eradicating gender gaps in entrepreneurship**. Female entrepreneurship needs to be promoted in the EU. This can be done by simply changing the content and focus of existing programmes. These actions are always need as they are important, although today's context makes them urgent. The pandemic outbreak has caused business closures, disrupted commerce and tourism, and blocked multiple exchanges of goods, services, and people. It has changed the way we work, interact and live. The immediate challenge for economies is to survive; the medium-term challenge is to grow and compete in a new economy underpinned by sustainability. Growth, development, and sustainability are not possible without women; indeed, they are most feasible with them.

# 1. WOMEN ENTREPRENEURSHIP

## 1.1. Introduction

In recent years both academics and institutions have become increasingly interested in women entrepreneurship. Despite some variations in the rate of women's entrepreneurship across countries, there is a broad consensus that women's contribution to self-employment and entrepreneurship is considerably less than that of their male counterparts (i.e., Guzman and Kacperczyk, 2019; Panda, 2018; Verheul et al., 2006). For instance, the last Global Women's Report[1] (2018) shows substantial differences in the Total Entrepreneurial Activity[2] (TEA) rates between men and women in the 74 economies participants on the Global Entrepreneurship Monitor's (GEM) panel. According to these data, the TEA rate for women is 10.2 %, almost three-quarters of that for men; while the global average for women's intentions to start a business is 17.6 % (four percentage points less than for men). Interestingly, this low level of participation is higher as a country's development level increases (Coduras and Autio, 2013).

European countries do not seem to follow this trend. In addition to first-hand data on entrepreneurial activity, the Global Entrepreneurship Monitor (GEM) reports are a useful source to provide cross-country insights into adult participation in business creation. The most recent report includes data from fifty countries, of which 15 belong to the EU-27[3]. As can be seen in Figure 1, these European countries have higher levels of male entrepreneurial activity than female.

Consequently, the relative entrepreneurship gender gap[4] varies from close to 0.5 points in Latvia (i.e., there are almost two early-stage male entrepreneurs for each female entrepreneur) to 0.9 in Spain, meaning that women are at least nine-tenths as active as men in entrepreneurship. However, data also show that women have lower TEA in all the European countries included in GEM's panel. Men's TEA exceeds that of women's by an average of seven points. According to these data, this difference is especially important in Latvia, while less noticeable in Italy, Poland and Spain.

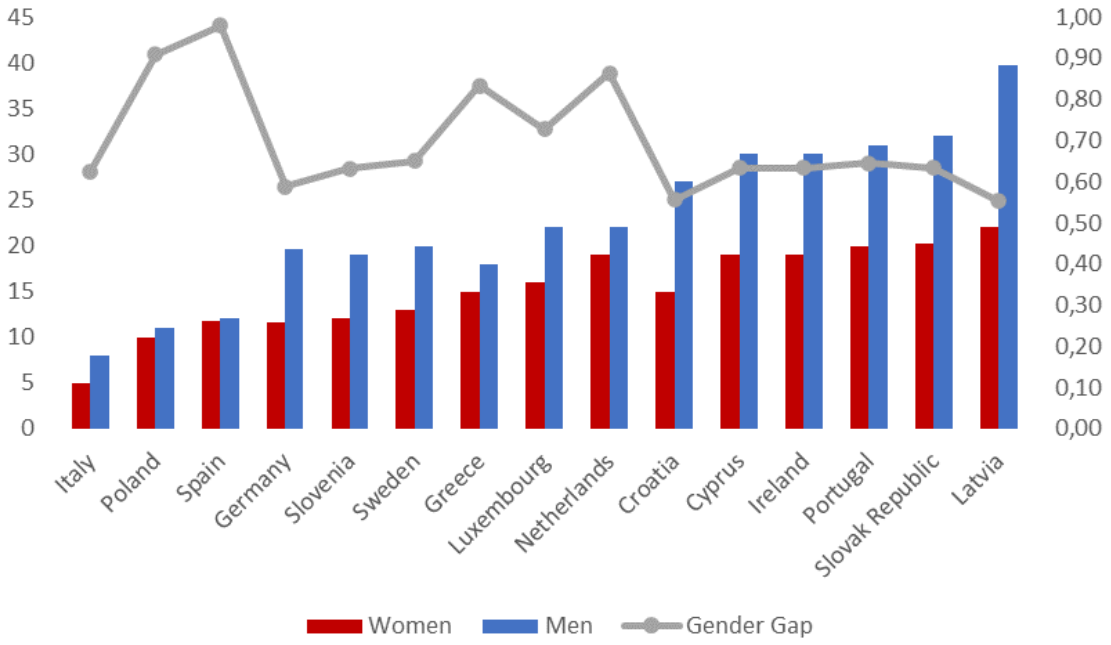
[1] The Global Women's Report is a monograph dedicated to women with data from Global Entrepreneurship Monitor (GEM). GEM provides annual reliable information on entrepreneurship and entrepreneurial ecosystems around the world through wide survey-based research on these topics.

[2] The Total Entrepreneurial Activity (TEA) represents the percentage of the adult working-age population (18–64) who are either nascent or new entrepreneurs (GEM Global Report, 2020).

[3] Croatia, Cyprus. Germany, Greece, Ireland, Italy, Latvia, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain and Sweden.

[4] GEM calculates this gender gap as the female's entrepreneurship rate divided by the male rate.

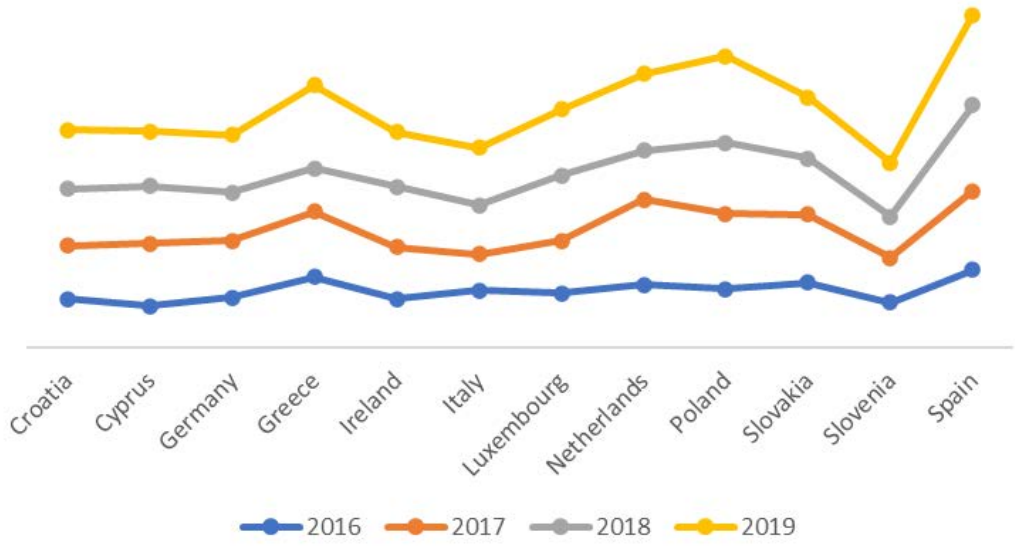
Figure 1: TEA by gender and relative entrepreneurship gender gap in EU-countries




Source: Author's own elaboration with GEM (2018–2019) data

GEM reports use the GEM Adult Population Survey (APS) data to measure entrepreneurial activity around the world. This allows data for a specific period of time to be explored. It should be noted that direct comparisons are not always possible since participant countries vary over time. Figure 2 shows the evolution of relative entrepreneurship gender gaps where the countries' data were comparable (meaning, where four years of information was available).

Figure 2: Relative entrepreneurship gender gap in EU-countries (2016-2019)

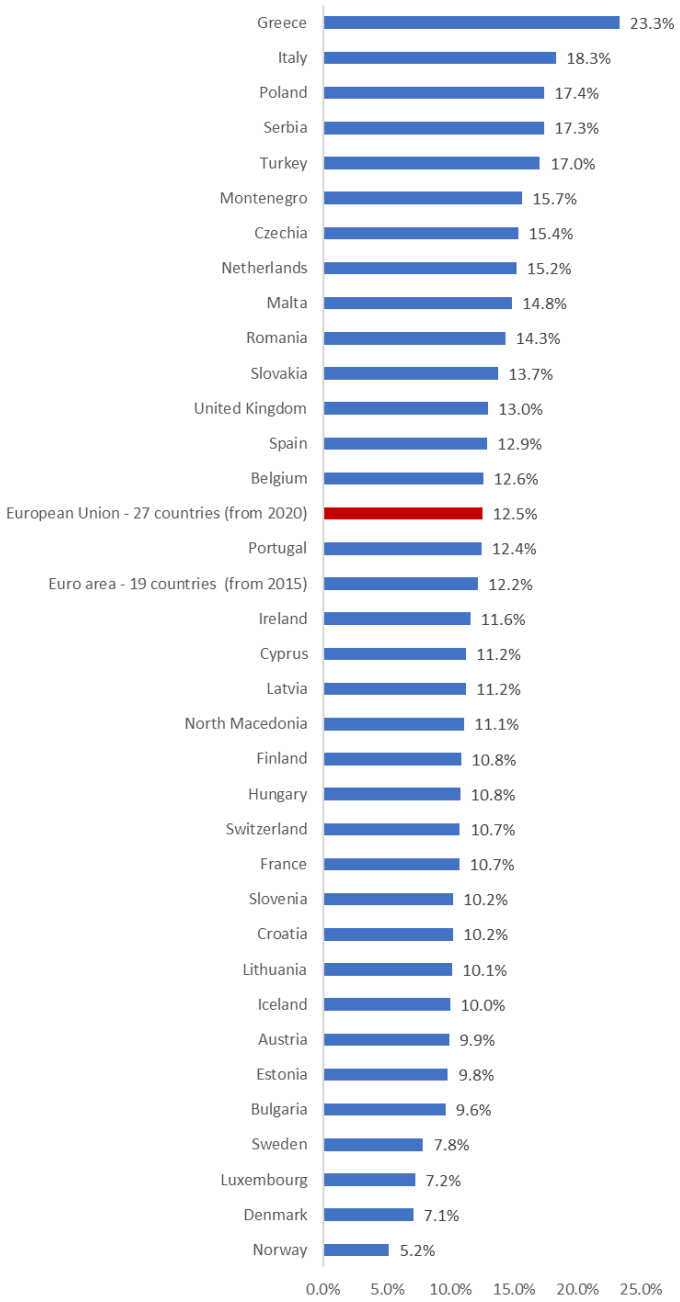



Source: Author's own elaboration with GEM (2018–2019) data

As can be seen, the number of female entrepreneurs for each male entrepreneur increases year on year. This increase is more evident in Spain, Poland and Greece, while Italy or Ireland show more constant rates. As can be seen in Figure 1, these evolutions correspond to the countries where the percentage of women entrepreneurs is quite similar to that of their male peers.

Eurostat databases provide a better understanding of the importance of entrepreneurship in EU countries, although it should be noted that these data count self-employment as a proxy of entrepreneurship. According to these data, entrepreneurs are about 12.5 % of European active population, although with high variations between countries.

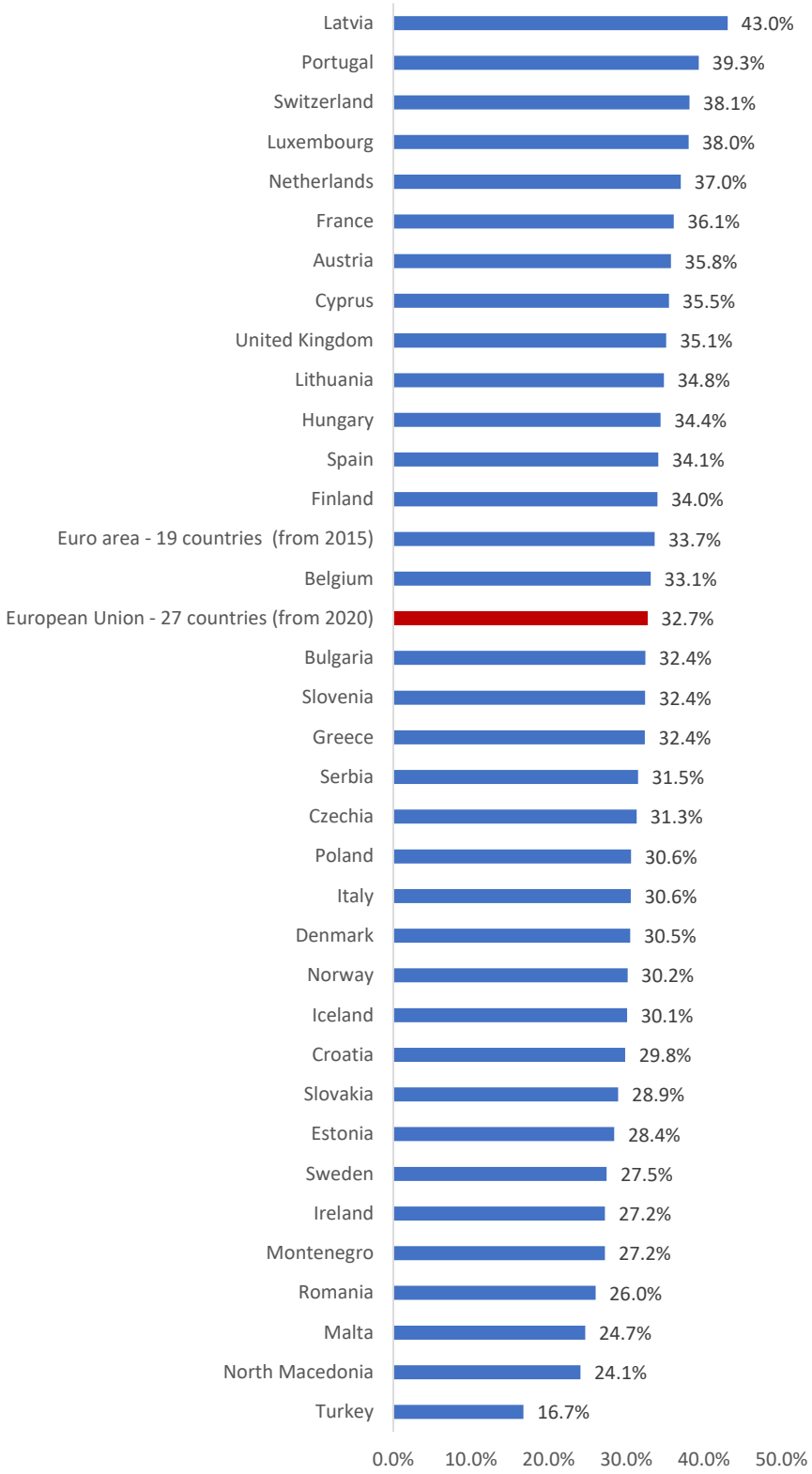
Figure 3: Self-employment in EU-countries (2016-2020)




Source: Author's own elaboration with Eurostat data

Also, according to these data, only three out of ten of the self-employed are women on average.

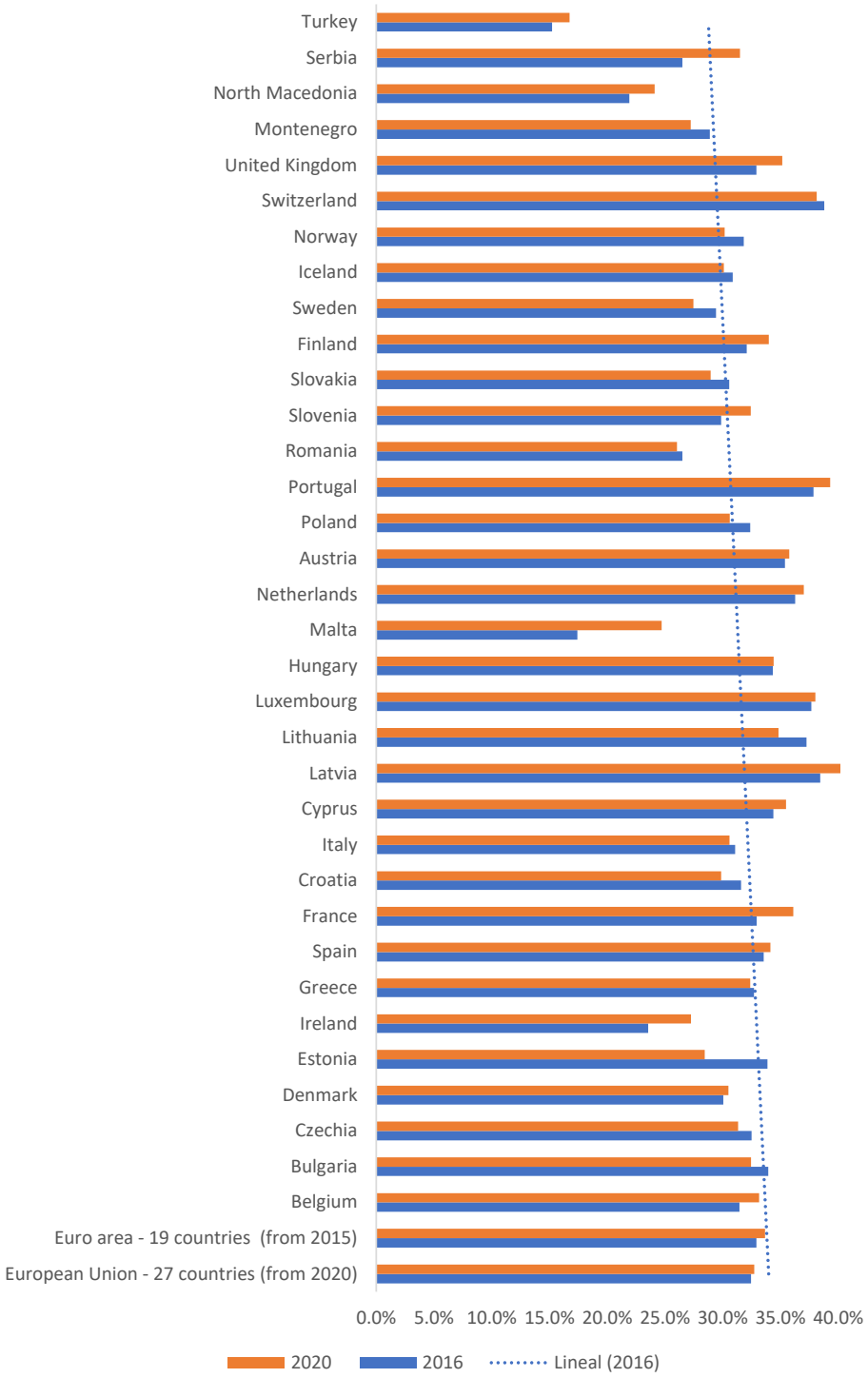
Figure 4: Female self-employment in EU-countries (2016-2020)




Source: Author's own elaboration with Eurostat data

Interestingly, a comparison of the data between 2020 and 2016 suggests that this low participation of women in self-employment is a fairly stable trend.

Figure 5: Female self-employment in EU-countries (2016 *vs* 2020)




Source: Author's own elaboration with Eurostat data

Besides these data, it has been widely recognised that women entrepreneurs can make a significant contribution to boosting economic development, creating jobs, and alleviating poverty and social exclusion (Hechevarría et al., 2019; Kimbu and Ngoasong, 2015; Zhu et al., 2019). Entrepreneurial activity can also benefit women since it offers economic security and empowers them (Nair, 2020;

Sharma et al., 2012). Thus, as Minniti (2010) noted, the relative scarcity of women entrepreneurs should be considered an untapped source of economic growth and development.

From this evidence on women entrepreneurs' lower participation rates, both academics and politicians have reached consensus on the need to further understand the factors that explain women's difficulties in becoming an entrepreneur. Research has been fruitful for explaining the main constraints that women seem to face in their entrepreneurship careers, while governments have also tried to implement public policies aimed at favouring this activity. However, despite this plethora of policies, programmes and practices aimed at facilitating women's entrepreneurship, unsteady participation rates among women suggest that something is wrong with these initiatives.

Regarding this point, it is important to note that previous studies have stressed the need to examine the entrepreneurial ecosystem through a gendered lens (Hughes and Yang, 2020; Hughes, 2017). Scholars have also highlighted that there is little research on the relationship between public policies and the growth of women-owned businesses (Jennings and Brush, 2013). More interestingly, in their recent review of the policy implications of women's entrepreneurship research over a period of more than 30 years, Foss et al. (2019) found that research findings do not address the policy level explicitly, are formulated with unspecified targets and tend to avoid policy suggestions. Their pessimistic view of public policies asserts that "*policy implications from women's entrepreneurship research are mostly vague, conservative, and centre on identifying skills gaps in women entrepreneurs that need to be fixed*" (Foss et al., 2019:1). Additionally, in her study with 25 technicians from an EU-funded support programme, Pardo del Val (2010) found that policies for the support of women entrepreneurs should aim at strengthening motivators and concentrate on the type of business, focusing on long-term initiatives.

Thus, this work aims to highlight this gap between public policies and effectiveness, on the basis that actions to improve women's entrepreneurship must result in growing participation as business owners. To this end, this study firstly reviews the main academic contributions to understand how academics have approached women's entrepreneurial experiences as well as the main challenges that women face in their business growth process. Next various entrepreneurial ecosystems throughout the European Union (EU) are scrutinised to identify the main strategies aimed at favouring women's entrepreneurship. This is followed by a survey conducted to analyse how individuals approach their entrepreneurship activity, to better understand how women perceive the difficulties in establishing their own business as well as the main motives for doing so. Finally, this analysis identifies the main gaps between individuals' perceptions and entrepreneurship support policies to offer recommendations aimed at improving the efficacy of public actions. To summarise, this work advances knowledge from what ails women entrepreneurs to what makes women entrepreneurship work.

## 1.2. Clarifying terms

### 1.2.1. Reviewing knowledge

Women entrepreneurship can be currently considered as an outstanding topic of research. However, its novelty suggests that this topic is still in its infancy (Henry et al., 2015). Researchers have carried out studies across different disciplines where social sciences have an outstanding role. Additionally, some studies have provided in-depth reviews of the women entrepreneurship literature. These works have summarised the main findings and topics that have already been addressed and have provided a more systematic understanding of women entrepreneurship. Table 1 reports some of this analysis:

Table 1: Women entrepreneurship literature reviews

| Article example | Authors | Topics |
|---|---|---|
| Pioneers | Bowen and Hisrich 1986; Brush, 1992; Carter et al., 2001; Gatewod et al., 2003; Moore 1990 | Definitions, careers, personal attributes, gender, and business networks |
| Laying the ground | Terjesen, 2004; Mueller, 2004; Brush, 2006; Gundry et al. 2002; de Bruin et al. 2006; Minniti 2009; Stanger 2002; 2004 | Theory, methodology, future directions, reasons for absence of women-centred research, history of the field, cross-cultural differences, policy and practice aspects |
| Providing directions | Brush et al. 2009; Terjesen et al., 2011; Sullivan and Meek 2012; Ahl and Marlow 2012; Ahl 2006; Carter and Marlow, 2006 | Need for a special framework and topic for women, advancing women's entrepreneurship theory, barriers and conflicts, stages of firm creation |
| Recent research | Jennings and Brush 2013; Henry et al. 2015; Poggesi et al., 2015; Santos et al., 2018; Hughes and Jennings, 2020; Deng et al., 2020; Carella et al., 2020 | Quantitative analysis, bibliometric studies, main topic identification, new directions, focus on developing countries |

Source: The author

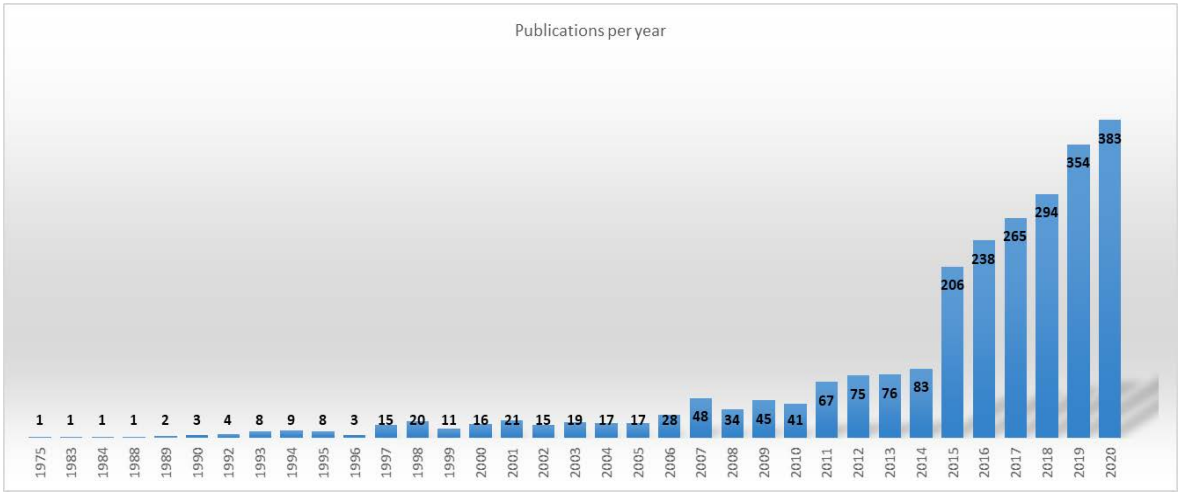
As aforementioned, in recent years there has been a clear inflation of studies focused on women entrepreneurship. Thus, before starting this study a decision was made to use a systematic review to better identify and summarise the main topics that have been addressed. This methodology has been widely used in different research areas, especially in social sciences (e.g., Jennings and Brush, 2013; Meyer et al., 2014; Henry et al., 2015; Santos et al., 2018).

A systematic search of online data from the web of science (WOS) core collection was thus conducted. "Entrepren" and "women" were searched for using the TS field tag, and the Boolean operator "AND" was used between the terms to narrow the search results. The search was restricted to English language articles published in scholarly journals, with no time span[5]. This analysis' objective was to analyse the temporal evolution of scientific production, this topic's most influential authors, the most productive scientific journals, and the countries with the highest number of scientific contributions. The query resulted in 2.429 papers (Figure 6). As can be seen, there is a clear proliferation of articles in the last decade, when eight out of ten papers were published. The search also showed a high dispersion of journals: close to a thousand have at least one published article on this topic. However, 54 of these journals have published more than 7 articles focused on women entrepreneurship. The 'International Journal of Gender and Entrepreneurship' and 'Small Business Economics' clearly head the rankings, with 96 and 82 papers on this issue. Next, the Journal of Small Business Management, Gender in Management, Gender, Work and Organization, the Journal of Business Venturing, the International Entrepreneurship and Management Journal and International Journal of Gender and Entrepreneurship each published between 40 and 50 articles[6].

[5] TS is a code that combines title, abstract, keywords (from authors) and Keywords Plus. The search was restricted to articles, namely scientific papers published in peer-reviewed journals, since they have been labelled as valid sources of knowledge (Podsakoff et al., 2005). As there were no time span limits, articles were included from 1900 (first year that can be queried in WOS) to 2020 (a full year closest to the query). Finally, it is acknowledged that excluding documents written in a language other than English can represent a limitation; however, it is usual practice in this kind of study (Nicholas et al., 2012).

[6] See Annex I for more details on data of systematic search.

Figure 6: Publications on women entrepreneurship per year




Source: The author

Female researchers top the list of cited authors; papers contributed by Helen Ahl, Susan Marlow, Candida Brush, Jennifer Jennings, and Maria Minniti have attained most interest from subsequent authors. This result is unsurprising since previous research has also noted that the female entrepreneurship topic has primarily been carried out by women (Ahl and Nelson, 2010; Santos et al., 2018). Only one man, Vishal Guptka, is in this list of top cited authors, while some reports from institutions (European Commission, Organisation for Economic Cooperation and Development (OECD) or the World Bank) are also often referenced. Regarding the authors' countries of origin, most are from the United States (USA) and the United Kingdom (UK), followed by Canada and Spain, as can be seen in Figure 7[7].

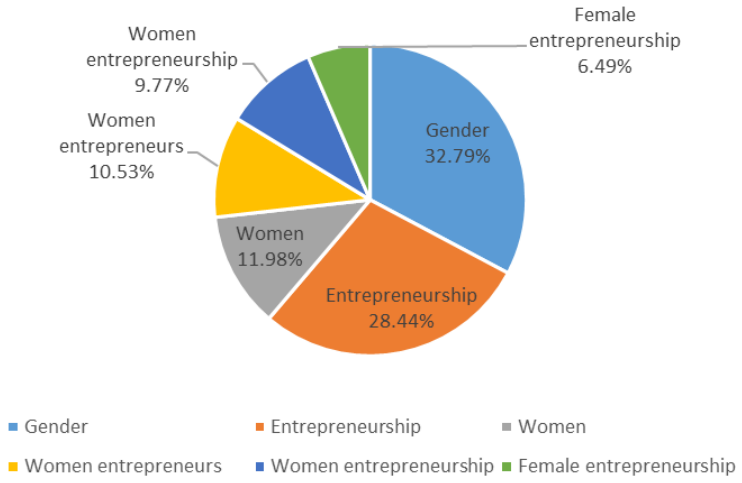
Figure 7: Papers by country of origin


[7] The cut-off is 10 papers per country.

Source: The author

As reported in previous bibliometric analyses (e.g., Santos et al., 2018; Deng et al., 2020), American and European countries have played a leading role in the academic output of women entrepreneurship research. However, it is interesting to see that several other countries have recently been included, to the extent that 120 countries of origin were identified. This fact relates to the incipient inclusion of developing countries and emerging economies as a topic of research (e.g., Gautam and Mishra, 2016; Salamzadeh et al., 2013), since the factors behind women entrepreneurs' participation seems to be different in these countries than in developed economies. Hence, studies have reported that women in developed countries are more likely to suffer from gender-related discrimination and hostile work environments. These women are also resource-constrained and face unique challenges because they live and work in patriarchal societies (Panda and Dash, 2014, 2016; Verheul et al., 2006). Finally, gender, entrepreneurship, women, women entrepreneurs, women entrepreneurship, and female entrepreneurship are the most common keywords used by authors (Figure 8), although a wide range of keywords were found (11,554).

Figure 8: Most common keywords used by authors




Source: The author

References to women entrepreneurs or women entrepreneurship rather than female entrepreneurs and female entrepreneurship seem to be preferred by authors. Fourteen of these keywords had a frequency greater than 40, including self-employment, innovation, entrepreneurs, female entrepreneurs, social capital, empowerment, and social entrepreneurship. The revision of these keywords highlights some relevant trends: first, researchers seem to use the concept of women entrepreneurs rather than female entrepreneurs; second, women entrepreneurship usually includes self-employment; third, studies on this topic seem to concentrate on social entrepreneurship.

Box 1: An outstanding topic of interest

- Publications on women entrepreneurship have substantially increased in the last decade. Also, recent years have seen a growing interest in the difficulties that women entrepreneurs face in emerging economies.
- The topic of women entrepreneurship has primarily been carried out by women. Authors commonly use women entrepreneurship to refer to this topic, including self-employment.
- Most authors come from the USA, United Kingdom, Canada, and Spain.

This wide range of keywords illustrates the ample concerns that have been addressed to date. The next sections outline these major topics.

### 1.2.2. The concept of women's entrepreneurship

The literature on women/female entrepreneurship emerged around the 1970s[8], since at that time academics were basically convinced that women and men entrepreneurs were similar and, accordingly, there was no need for a separate field of study (Bruni et al., 2004; Jennings and Brush, 2013). This hypothesis of similarity continued until the early 2000s when the sub-domain of women entrepreneurship evolved as an independent area of research. Noticeably in 1998 the OCDE launched a policy-oriented conference on women entrepreneurs. Hence, the beginning of the 21st century witnessed the emergence of a conjoint relationship between academics and politicians to better explore the circumstances and peculiarities of women entrepreneurs.

While the concept of women's entrepreneurship[9] may be simple according to a Schumpeterian approach[10] (namely, women who innovate and take risks when undertaking a business activity), scholars involved in this topic have different opinions on the concept's scope[11]. Thus, on the one hand researchers have stressed the importance of assuming risks—either personal or financial—and innovating when undertaking entrepreneurial activities. In this sense, women entrepreneurs mobilise resources to create a new venture and assume risks when taking this initiative (e.g., Adom and Asarte-Yeboa, 2016; Humbert and Brindley, 2015). On the other hand, academics have also used a broad definition to emphasise the role of business as a professional career (e.g., Dolinsky et al., 1993; Marlow, 2002; Welch et al., 2008; Hughes et al., 2012; Hecheverría et al., 2019; Santos et al., 2018; Deng et al., 2020) hence including business owners and self-employment under the scope of entrepreneurship.

[8] According to Santos et al.'s (2018) recent review on women entrepreneurship, the first publication on this topic appeared in 1976 (Schwartz, E. B. (1976). Entrepreneurship-New female frontier. *Journal of Contemporary business*, 5(1), 47–76). Ten years later, Bowen and Hisrich (1986) published "The female entrepreneur: A career development perspective" (*Academy of management review*, 11(2), 393–407. Despite these seminal works, the identification of women/female entrepreneurship as an individualised topic of research was prompted in early 2000s. During the 1975–2006 period, fewer than 50 papers on female entrepreneurship were published per year; since 2014 this average has exceeded 150 papers (Dent et al., 2020).

[9] Entrepreneurship is itself a debatable concept. For example, GEM relates this concept to "Any attempt at new business or new venture creation, such as self-employment, a new business organisation, or the expansion of an existing business, by an individual, a team of individuals, or an established business". This definition offers a broad approach to entrepreneurship.

[10] As is well known, Schumpeter's seminal work (1934) differentiated "entrepreneurs" and "business owners".

[11] According to the EU framework, entrepreneurship is a "*mindset which allows individuals to engage their motivation and capacity into the identification of an opportunity and the drive to pursue it to its full realisation*" (European Institute for Gender Equality, 2015). The EC defines entrepreneurs as '*persons aged 15 years and older who work in their own business, farm or professional practice to make a profit, and spend time on the operation of a business, or are in the process of setting up a business*' (European Commission, 2014).

Another group of studies identifies women entrepreneurs simply as women who decide to start a business (Bowen and Hisrich, 1986; Brush, 1992; Carter et al., 2001; Terjessen 2005).

According to the aforementioned bibliometric analyses, this report equates entrepreneurship with business ownership, including self-employment. Hence, women entrepreneurs are businesswomen who have their own business. Likewise, for readability purposes female entrepreneurship and women's entrepreneurship are used interchangeably.

### 1.2.3. Women entrepreneurship gaps

When discussing research gaps on women and men entrepreneurs, it is advisable to start with the first approaches to this field of study. Seminal works on women's entrepreneurship have focused on simple differences between women and men, thus focusing on sex rather than on gender and using a 'gender as a variable' perspective (i.e., Marlow 2002; Lewis, 2006). However, more recent studies have highlighted the gendered nature of entrepreneurship (Ahl, 2006; Bruni et al., 2004; Pines et al., 2010), understanding gender as "social practices and representations associated with femininity or masculinity" (Ahl, 2006:596). This change of approach to academic research means broadening the study of gender gaps from those centred on simple differences between women and men to others that analyse both the social and material implications of gender[12].

Consequently, the entrepreneurship gender gap is not limited to the different number of women and men engaged in entrepreneurial activities. Likewise, gender gaps do not exclusively refer to comparative frames (Eddleston and Powell, 2008; Godwin et al., 2006). Successive gender studies primarily based on GEM reports have also highlighted that women and men report different motives for starting a business. Worldwide, women are more likely to be driven by necessity than men, although this difference gradually disappears as economies develop. According to Minniti (2009) and Amorós et al. (2009) this evidence relates to job availability since entrepreneurship is the main option to provide income when no jobs or any other options are available. Moreover, GEM data also show that women are mostly engaged in the consumer and retail sectors but are underrepresented in manufacturing and construction. Finally, women's businesses tend to be smaller with less growth expectations than those owned by men. Accordingly, women earn less income from entrepreneurial activity; however, these data rely on GEM reports, which are a source of data that has been the object of criticism (Bergmann et al., 2014).

On the side of academic research, scholars have been persuaded by the women underperformance hypothesis[13] (Du Rietz and Henrekson, 2000), which argues that female entrepreneurs underperform relative to their male counterparts (Bosma et al., 2004; Failie and Robb, 2009; Kapler and Parker, 2011; Raina, 2016). Thus, at the aggregate level it is believed that women-owned businesses grow more slowly and are less profitable and successful than those businesses owned by men. However, subsequent research has not found significant differences in failure rates between women and men (Kepler and Shane, 2007) after controlling factors such as sectorial distribution, demographic differences and when appropriate performance measures are used (Robb and Watson, 2012). Additionally, Justo et al. (2015) noted that most studies are based on evidence about higher exit rates for women-led business; however, exit and failure are different constructs and consequently these

[12] As Ahl (2006:5) noted, this research is not concerned with what women or men are but with how femininity and masculinity are constructed and with the effects of this construction on the social order. Hence, gender refers to what is regarded as masculine or feminine regardless a person's biological sex, namely what people do when they attribute a meaning to female and male.

[13] This hypothesis argues that women are judged against hegemonic masculine business norms that are supposed to be imperative to entrepreneurial success. Thus, women feel as if they are underperforming against a whole range of measures.

concepts do not equate. In their study on former Spanish entrepreneurs, these authors found that women are more likely than men to exit voluntarily, mostly because of personal reasons. Thus, although the results are mixed, the underperformance hypothesis can be understood rather as a "myth" than as evidence (Marlow and McAdam, 2013).

Box 2: Entrepreneurship: concept and gender gaps

- Researchers have used different approaches to women entrepreneurship. On the one hand, some academics have focused on Schumpeter's narrow concept, focused on innovation. On the other, authors have also used a broad definition, including business owners and self-employment.
- Research on entrepreneurship gender gaps is a "multi-faced" polyhedron, where gaps have been studied from multiple angles.
- Previous research has also assumed that women entrepreneurs underperform relative to their male counterparts. However, research has found that this assumption is more a myth than a fact.

## 1.3. Exploring constraints on women entrepreneurship

While research has been insightful in providing evidence of various entrepreneurship gender gaps, an overview of challenges faced by women entrepreneurs is especially useful for providing policy makers with a simple framework to counteract barriers to promoting women entrepreneurship.

One of the most prominent frameworks to understand the challenges women entrepreneurs face is that of Brush et al. (2009). Based on established entrepreneurship constructs that have proven their value as drivers for entrepreneurship—namely, market, money and management—they added *motherhood* and *macro/meso factors* to build on their well-known 5M gender-aware framework (see Table 2). These additional factors illustrate the influence of family responsibilities and family embeddedness in business as well as the impact of sociocultural values both at a macro level (e.g., social attitudes) and macro/meso levels (e.g., institutions).

This conceptual model is useful for understanding the main challenges that women face when decide to go into business. Following this classification, research has deeply explored these constraints through different approaches such as sectors, countries, or stage of entrepreneurship, among others. For example, it is believed that women entrepreneurs find it more difficult to access financial resources; that they go into business out of necessity[14]; that women entrepreneurs also receive fewer organisational resources; that they suffer more from difficulties related to life domain and are excluded from business networks.

For the purpose of illustration, Table 2 summarises some of the more relevant factors that inhibit women entrepreneurship, according to relevant literature.

[14] Opportunity entrepreneurship refers to those individuals who decide to become entrepreneurs because of business opportunities, while necessity entrepreneurs do so because it is the best available option.

Table 2: Constraints for women entrepreneurship

| | Factors | Main findings | Scientific support (example) (*) |
|---|---|---|---|
| Market | Market access/opportunity entrepreneurship | ✓ Women have restricted access to markets<br>✓ Women go into business out of necessity rather than for opportunity<br>✓ Men report more favourable opportunities than women | Bates, 2002; Gupta et al., 2014; Luke and Munshi, 2010: Naser et al., 2009 |
| Money | Access to financial resources | ✓ Women have less access to financial resources<br>✓ Investors tend to prefer men entrepreneurs<br>✓ Women seek less capital than men<br>✓ Women are more reliant on personal rather than external resources<br>✓ Perceived capabilities play a role in women entrepreneurship | Becker-Blease and Sohl, 2007; Belluci et al., 2010; Brooks et al., 2014; Coleman and Robb, 2016; Eddelston et al., 2014; Fairlie and Robb, 2009; Kanze et al., 2018; Morris et al., 2006; Balachandra et al., 2019 |
| Management | Human and organisational capital | ✓ Women acquire fewer business-related competencies, including higher levels of management, resource management, and team building | Barnir, 2014; Brush et al., 2017; Junquera, 2011; McGowan et al., 2015; Rodríguez and Santos (2009) |
| Motherhood | Familiar responsibilities/household context | ✓ Family responsibilities limit the time devoted to business development and growth<br>✓ Women fulfil multiple roles and are entrapped between family responsibilities and business duties<br>✓ Women suffer from a lack of support from families<br>✓ Women often face work–family conflict, especially when their businesses experience high-growth paths | Ashe et al., 2011; Jennings and McDougald, 2007; Brush et al., 2014; Loscocco and Bird, 2012; Powell, 2013; Raghuvanshi et al. 2017; Shelton, 2006; Welsh and Kaciak, 2018 |
| Macro/meso level factors | National policies/environment/strategies; policy supporting processes. | ✓ Women entrepreneurs have limited access to enter business networks<br>✓ Mentorship arrangements are less available for women entrepreneurs<br>✓ Values and attitudes determine the individual and collective perception of entrepreneurial women | Bogren, 2013; Eden and Gupta, 2017; Elam and Terjesen, 2010; Estrin and Mickiewitz, 2011; Ettl and Welter, 2010; Griffiths et al., 2013; Hechevarría 2015; Brush et al., 2009; Noguera et al., 2013; Overbeke et al., 2013 |

Source: The author

(*) Note: due to limited space reasons, these references are included in Annex II

Combined with these factors, other research has identified several subjective perceptual variables that have a crucial influence on the lower women's entrepreneurial intention (e.g., Langowitz and Minniti, 2007; Welch et al., 2008). For example, women show lower levels of self-efficacy, self-confidence, independence and autonomy compared to men. Women are also seen as more emotional than men

and less able to make decisions processes. In addition, women consider themselves as lacking in entrepreneurial skills (Wilson et al., 2007; Kirkwood, 2009). These characteristics are found across countries, so they seem to be universal factors that influence women's entrepreneurial behaviour (Langowitz and Minniti, 2007).

Among these characteristics, women's supposed lower risk-taking attitude and greater fear of failure stand out (Dawson and Henley, 2015). Women are assumed to be risk averse and often question themselves. This is known as "imposter syndrome" and occurs when women are unable to internalise their successes, so they feel that they will be exposed as a fraud (Clance and Imes, 1978; Sanford et al., 2015). Thus, as a kind of self-fulfilling prophecy, it seems that the prejudicial gender stereotypes that women face in business (Hoyt and Murphy, 2016) are reproduced in women entrepreneurship.

In summary, research suggests that both extrinsic characteristics (e.g., financial resources, human capital, environment) and intrinsic (e.g., motherhood, self-concept, risk attitude) make entrepreneurship more challenging for women. However, it should be noted that most of these constraints are likely to be reversed through external actions, such as the case of public policies.

Box 3: Barriers for women entrepreneurship

- Researchers have identified several constraints on women entrepreneurship. Some of these constraints are similar to those that men face, but these challenges outweigh women.
- Women entrepreneurs also experience significantly more barriers compared to men.
- Barriers can be found at an individual, organisational and macro-level. Personality traits, exclusion from networks and masculine approach to business are examples of each group's barriers.
- Most barriers belong to external factors, such is the case of the availability of and access to resources. Thus, they can be reversed through external actions.

## 1.4. Discussing enhancers for women entrepreneurship

Research has found that women and men have different entrepreneurial motivations (Eddleston and Powell, 2012; Van der Zwan et al., 2012; Verheul et al.; 2012; 2006). This approach is important, since motivation influences behaviour (Carsrud et al., 2017; Collings et al, 2004; Sharafizad and Coetzer, 2016; 2017) and behaviour, in turn, can influence business strategies.

Research has been insightful in analysing entrepreneurial motivations, both from a general and a gender approach. Two extensive frameworks have been proposed:

a) One prominent framework identifies three groups of motivations, namely classic, forced and work–family (e.g., Hughes, 2006). When focusing on women, classic entrepreneurs' reasons for going into business are similar to men's motives, such as independence, autonomy, self-control or being their own boss. Forced entrepreneurs run businesses mainly for necessity reasons such as looking for a job or getting out of unemployment, and family or life-domain relates to the need of balancing family and work or flexibility arrangements (Hughes, 2006; Laure Humbert and Drew, 2010; Kirkwood, 2009; Hilbrecht 2016).
b) Another prominent framework reproduces the traditional classification of entrepreneurial motivations between *push* and *pull* factors[15] (e.g., Hakim, 1989; McClelland et al., 2005; Van der

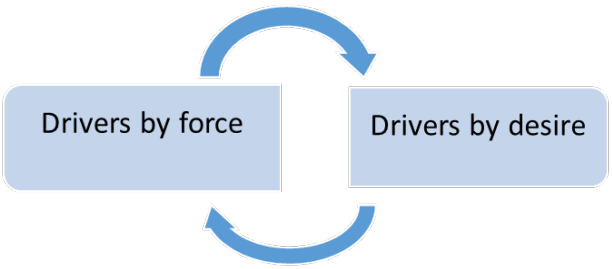
[15] For example, GEM reports have traditionally included a special survey question to address this issue: "Are you involved in this start-up to take advantage of a business opportunity or because you have no better choices for work?" In the 2019–2020

Zwan et al., 2016). Pull factors, which can be related to formerly identified 'classic' motives, are those that draw people to start a business, while push factors assume that entrepreneurship is driven by personal or external factors such as autonomy, independence, self-fulfilment, financial need, finding a work–life balance or family related factors (e.g., Kirkwood, 2009; Itani et al., 2011; Laure Humbert and Drew, 2010; McGowan et al., 2012; Sarri and Trihopoulou, 2005; Solesvik et al., 2019). Among these push factors, recent research has also stressed the importance of emancipation as a driver of women entrepreneurship (Rindova et al., 2009; Sutter et al., 2019). Emotional factors such as work engagement and need for social networking have also recently gamered interest among researchers (Choukir and Hentati, 2013). Finally, other authors have focused on the importance of empowerment as an output of women entrepreneurship (Digan et al., 2019).

Despite extensive research on the motives that encourage women's entrepreneurship, most of it has found conflicting or mixed results (Gill and Ganesh, 2007). Additionally, it is important to note that this push–pull theory has not be reviewed since its inception, while the global context has been continuously changing. For example, in the last decade some authors have claimed that the barriers women face in their professional career might push them into entrepreneurship (Winn, 2004; Knörr, 2011; Patterson and Mavin, 2009).

The literature review aims to re-classify these factors into two groups of drivers, namely drivers *by force* or drivers *by desire* (Figure 9). Drivers by force include factors driven by external forces—thus, they equate with forced entrepreneurs—while drivers by desires refer to factors related to individual incentives, such as the case of family-related issues, independence, financial motivations and/or business-related issues (Kirkwood and Walton, 2010). Hence, the first group includes women who find entrepreneurship is the best option for getting out of their current situation, whereas the second group is related to those women who pursue their personal interest.

Figure 9: Groups of factors driving women entrepreneurship




Source: The author

On the basis of this rationale lies the need to respond to two main questions: (a) Why *do I have* to become an entrepreneur? (b) Why *do I want* to become an entrepreneur? The answer to these questions can be decisive, not only in terms of identifying motives but also in terms of results. It is one thing *to have to* do something; it is quite another *to want to* do something. The difference between obligation and motivation can result in very different actions. Thus, in the same line that research has

report (p. 45), this question was substituted with several statements concerning motives for starting a business, namely (1) to make a difference in the world; (2) to build great wealth or very high income; (3) to continue a family tradition; (4) to earn a living because jobs are scarce.

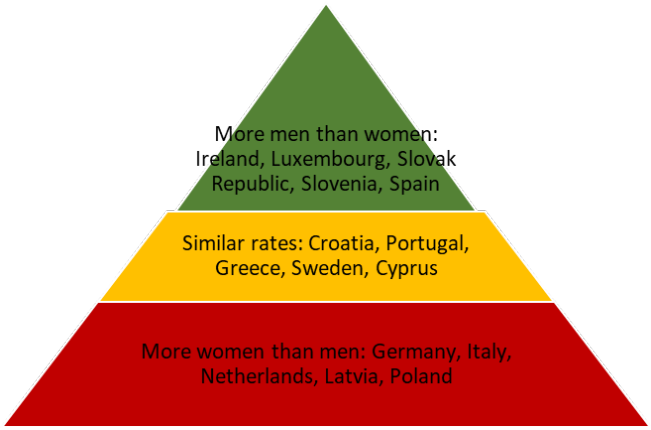
found that businesses started by entrepreneurs who experienced push motivations (e.g., necessity) are less successful than those built upon pull factors (e.g., Vivarelli, 2013; Block and Wagner, 2010), it can also be expected that businesses that rely on force drivers have different results than those relying on desires.

Examples of 'driven by force' motivations may arise from primary work-related factors, such job dissatisfaction, lack of opportunities for professional development, family pressure, and individuals' general dissatisfaction with their current situation (DeMartino and Barbato, 2003; Itaniet al., 2011; Kirkwood, 2009; Winn, 2004). Motivations 'driven by desire', on their part, arise for individual's expectations and preferences, such as self-steem, independence, self-fulfilment, family-related factors (Kirkwood and Tootell, 2008; Kirkwood, 2009; Powell and Baker, 2014).

Whilst some of these motives to enrol entrepreneurship activities are similar between women and men, factors driven by desires allows to stablish some differences depending on the gender of the entrepreneur, being these differences especially significant in the case of family-related factors. Albeit being important for both genders around the world (Verheul et al., 2006), they have also being recognised as critical to women's entrepreneurship (De Bruin et al., 2007). More specifically, women seem to be more motivated than men by these factors.

Regarding this point, the recent GEM (2019–2020) report based on the GEM-APS report shows that the proportion of men starting a business and agreeing with the main motives: "*to build great wealth or very high income*" or "*to continue a family tradition*" is higher than that of women, while the opposite occurs when agreeing with the main motives: "*to make a difference in the world*" or "*to earn a living because jobs are scarce*". As can be observed, both groups include what have been previously labelled as entrepreneurship by force and by desire, so it cannot be concluded that a group is more important to women than to men. Even more, when exploring a particular motive (namely, a desire-driven motive to start a business that makes a difference in the world), EU-27 countries' data are inconclusive. Figure 10 shows the gender differences of those who somewhat/strongly agree with this motive:

Figure 10: Gender differences in entrepreneurs that agree with the motive "To make a difference in the world" as the main driver for their entrepreneurial activity




Source: Author's own elaboration with data from GEM (2019–2020)

In summary, it can be expected that women and men can have similar entrepreneurial motivations, but the relative effect of the factors that pull/push them into entrepreneurship warrant further investigation.

# 2. ENABLING ENVIRONMENTS FOR WOMEN'S ENTREPRENEURSHIP. RESPONSIBLE GOVERNMENTS AND BUSINESSES

## 2.1. Entrepreneurship Ecosystems

Promoting entrepreneurship is a central concern of governments, under the assumption that support of entrepreneurial activity improves economic growth and employment. Consequently, governments support entrepreneurial activity through actions that deal with legal regulation, tax policies and budget allocation. To this end, governments worldwide develop programmes, policies and practices aimed at fostering entrepreneurship. Programmes are a set of activities sponsored by governments; a policy refers to ideas or principles that are used to make decisions; and practices are common behaviours and conventions in a particular context. When talking about entrepreneurship, examples of entrepreneurial training programmes are incubators or university courses; initiatives that support access to credit or activities which foster innovation are examples of policies, and societal recognition of entrepreneurship is an example of practices that incentivise entrepreneurial growth.

Interest in the measures which have focused on fostering entrepreneurship has increased over recent years, based on their supposed effect on economic growth and employment (Acs, 2008). However, their effectiveness as well as the way in which policies are implemented and even designed have also been questioned (e.g., Huggins and Williams 2009; Shane, 2008; 2009). This interest is recently derived from the conformation of entrepreneurial ecosystems (EES) that are interdependent factors which empower entrepreneurship within a specific context (Acs et al., 2017; Feld, 2012). In other words, entrepreneurial ecosystems focus on the role of context in allowing or restricting entrepreneurship (Stam and Spiegel, 2016). Seminal research has generally supported that a rich entrepreneurial ecosystem fosters entrepreneurship (e.g., Mack and Mayer, 2016; Spigel, 2015). The resources included in EES can be tangible (e.g., financial resources) or intangible (i.e., professional advice).

The exploration of the elements within an ecosystem aims to identify the main axis for fostering entrepreneurship. For example, Isenberg (2011) highlighted six pillars within an ecosystem: policy, finance, culture, support, human capital, and markets. For its part, the World Economic Forum (2013: 6–7) identifies eight ecosystem areas, namely human capital, finance, services, people involved in the ecosystem, formal and informal institutions (e.g., regulatory framework and culture), and access to customers both in domestic and foreign markets. Thus, it seems interesting the entrepreneurial ecosystem factors and, subsequently, the dynamics involved in the creation of entrepreneurship.

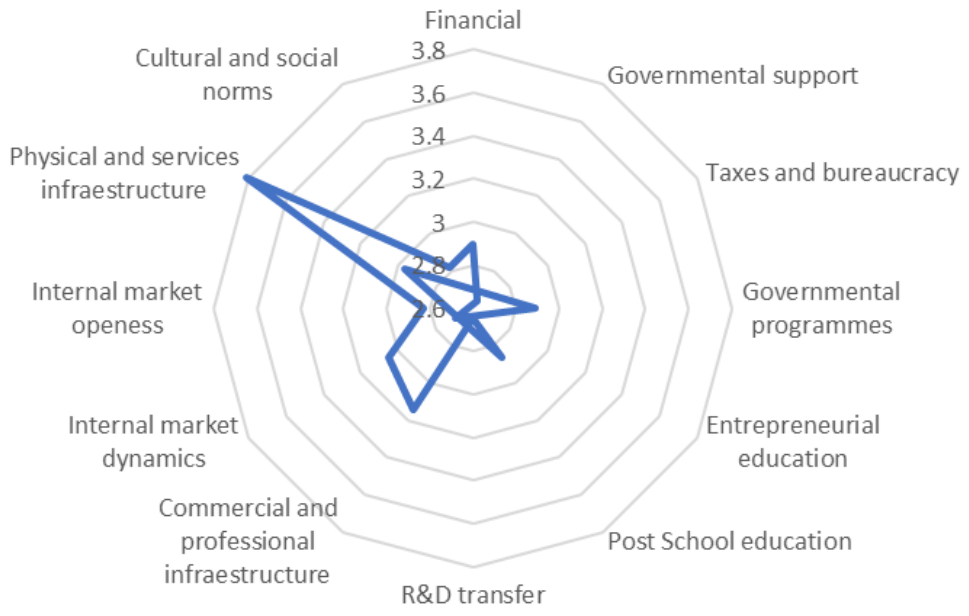
GEM reports (Reynolds et al., 2005) provide a useful framework to explore different ecosystems, simultaneously allowing comparisons across countries to be made. This model states the incentive structures that regulate entrepreneurship, measuring twelve groups of factors that interact to empower this activity.

- The first group of factors includes the structures necessary for entrepreneurship development. Physical and services infrastructure is pivotal to improving access to different resources. This factor includes transportation and communication, and commercial infrastructure which refers to the available activities that are linked with business creation and functioning (e.g., customers, advertising, or consulting services). The availability of this infrastructure facilitates entrepreneurial activity (Kruse et al., 2019).

- The second group includes factors related to education and specialised knowledge. On the one hand, entrepreneurial education (both business-focused programmes and post school education) provides the acquisition of capabilities and competencies that promote individuals' entrepreneurial predisposition (Deb and Bhatt, 2020; Spigel and Harrison, 2018). This seems to be especially important to women since access to specialised education acts as a hurdle to women's entrepreneurial careers (Hashmi, 2019). For example, GEM data note that women entrepreneurs are less likely than men to report having the knowledge needed to successfully manage their business (Kelley et al., 2017). On the other hand, research and development (R&D) transfer refers to the national research and development process' capacity to direct new business activities. Entrepreneurial activity increases as effective transference of knowledge is available the speed and cost of this transference is pivotal (Amorós et al., 2014; 2019).
- The third group includes elements related to governmental actions, such as regulatory arrangements, taxation adjustments, institutional activities in education and efforts to promote academic spin-offs (Parker, 2008; Patzelt and Shepherd, 2009). In this group, the role of entrepreneurial finance must be stressed. This refers to the availability of financial resources, which especially impact women entrepreneurs, both on the side of supply and demand (Ahl, 2004). It has thus been suggested that women are less likely to access financing and find more difficulties in getting loans, even from official financial institutions (Pergelova et al., 2019).

Finally, comprehensive research highlights the role of culture and social norms to motivate endeavours aimed at increasing entrepreneurial activity (Amorós and Bosma, 2014). The inclusion of these elements acts as a reminder that ecosystems are not gender-neutral landscapes because socio-cultural norms reflect stereotypical ideas about women and men's roles as entrepreneurs (Balachandra et al., 2019; Hughes, 2005; Malmström et al., 2017; Wynn and Correll, 2018). Hence, cultural roles establish the 'appropriate' women's behaviour in society, so they can undervalue women's roles in the business sphere. This can render entrepreneurship a less desirable career choice for women (Bullough et al., 2017). Moreover, social norms can also affect other groups of factors. For example, informal learning (e.g., through networks or family members) is also less available to women entrepreneurs (Brush et al., 2019).

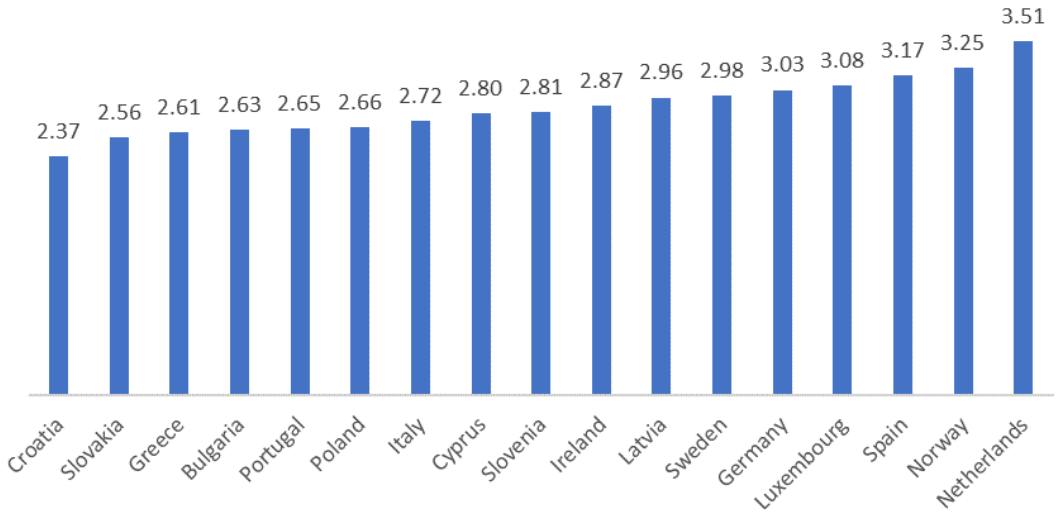
Figure 11: Average scores for the elements that support entrepreneurship ecosystems




Source: Author's own elaboration with data from GEM (2019–2020)

Additionally, it is possible to assess the GEM data on national ecosystems (Figure 12). Thus, the Netherlands has the most valued entrepreneurial ecosystem on average, while Croatia has the lowest score. However, it should be noted that individuals provide their scores on a scale ranging from 1 to 5, so the relative average is quite low in the best of the cases (namely, the Netherlands).

Figure 12: Average scores of national entrepreneurship ecosystems




Source: Author's own elaboration with data from GEM (2019–2020)

GEM reports include a specific chapter related to entrepreneurial systems, which allows individuals' perception of this ecosystem to be seen. For example, using data from 2019–2020, it can be seen (Figure 11) that physical and services infrastructure reaches the highest score on average, while governmental programmes are perceived as the least valued factor in national ecosystems[16].

According to these data, Netherlands shows the highest punctuation in most elements, regardless R&D transference, commercial and professional infrastructure, and internal market dynamics (Table 3). On the other end of the interval, the countries show more variability although Croatia seems to be relatively underscored.

Table 3: Most valued and less scored national entrepreneurship ecosystems

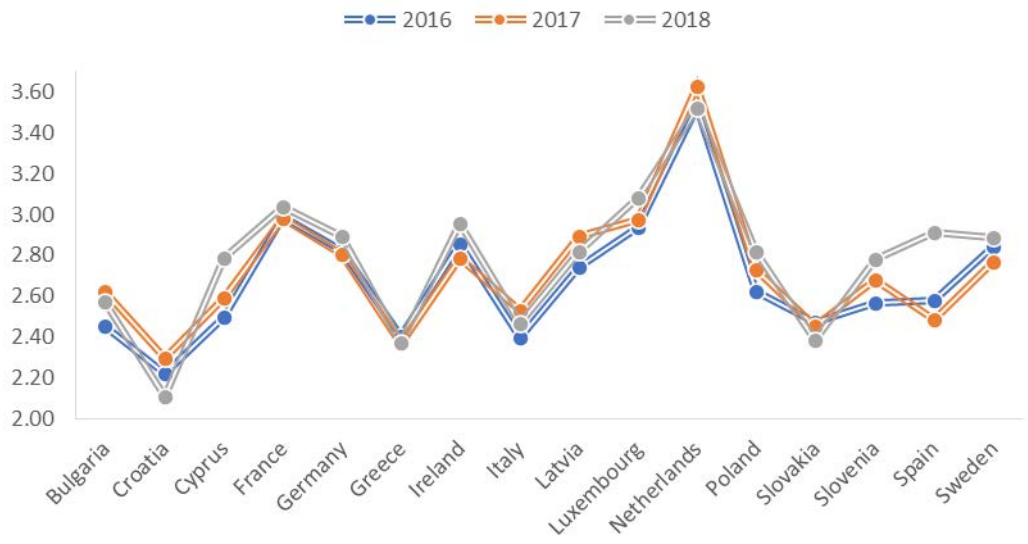
| Element | Lowest | Highest |
|---|---|---|
| Financial | Cyprus | Netherlands |
| Governmental support | Bulgaria | Netherlands |
| Taxes and bureaucracy | Greece | Netherlands |
| Governmental programmes | Bulgaria | Netherlands |
| Entrepreneurial education | Poland | Netherlands |
| Post school education | Croatia | Netherlands |
| R&D transfer | Croatia | Spain |
| Commercial and professional infrastructure | Croatia | Germany |
| Internal market dynamics | Luxembourg | Poland |
| Internal market openness | Croatia | Netherlands |
| Physical and services infrastructure | Ireland | Netherlands |
| Cultural and social norms | Croatia | Netherlands |

Source: Author's own elaboration with data from GEM (2019–2020)

The scores by country also seem to be quite stable in later years (Figure 13). Only Spain and Sweden show a big increase in punctuations since 2016, while the Netherlands maintains first position for the valuation of its entrepreneurial ecosystem.

[16] GEM also provides the Global Entrepreneurship Monitor's National Entrepreneurship Context Index (GEM NECI), which measures the entrepreneurial environment conditions that make up the national context in which entrepreneurial activity takes place. Data from recent GEM NECI (2020) shows that Indonesia, The Netherlands and Taiwan provide the most optimal conditions for starting business worldwide.

Figure 13: Evolution on the scores of national entrepreneurship ecosystems




Source: Author's own elaboration with data from GEM (2019–2020)

In an overview of national entrepreneurship systems aimed at promoting the emergence and growth of women entrepreneurs, several characteristics can be highlighted:

- Several initiatives promote the engagement of women that act as role models, which can be useful in encouraging women to consider entrepreneurship as a career. For example, Women's Entrepreneurship Ambassadors Program.
- Another group of initiatives help women to acquire entrepreneurship skills, notably through entrepreneurship training programmes.
- On the basis of long-standing evidence that women entrepreneurs have less access to entrepreneurial networks, several programmes address this issue providing spaces or events to make networks grow.
- Another popular approach is to provide business advice and women's entrepreneurship centres. These initiatives basically provide support and loan programmes geared to women entrepreneurs.
- EU Member States also provide access to finance for women entrepreneurs, for example through grants, loans, microcredit, and venture capital investment [e.g., Germany], although this measure is still very rare for women entrepreneurs.

Table 4: Examples of practices aimed at fostering women entrepreneurship in some EU countries

| Element \Country | Austria | Spain | Germany | Portugal | Poland |
|---|---|---|---|---|---|
| Education | Star-up supporting programmes | Start-up supporting programmes at University | | FAME (Programa de Formação e Consultadoria de Apoio à Criação de Empresas, destinado a apoiar mulheres emprendedoras) | |
| Direct Founds/Direct support | Female founders; Austrian Angel Investors' Association; *Frauenbonus*, programmes that have extra funding for women-led projects; Incubation projects for women | Targeted programmes for High-Tech business Aids for unemployed women to create business | Supporting start-up enterprises; *Berufswegplanung* (Business for immigrant women) | | Cross-EU women Business Angels |
| Mentoring | | Innovatia 8.3 project | | | |
| Networking | Women's Entrepreneurship Support Programme) | | Association of Young Entrepreneurs and Leaders | | Women's networks |

Source: Author's own elaboration

Additionally, the European Commission also provides some examples of good practices on promoting women's entrepreneurial activity[17].

[17] The Small Business Act- Database of good practices contains activities recognised as good practices to improve the business environment of small and medium-sized enterprises (SMEs). There is an specific section for good practices to promote women entrepreneurship [https://ec.europa.eu/growth/tools-databases/sme-best-practices/SBA/index.cfm?fuseaction=practice.detail&gp_pk=4090&].

Table 5: Examples of good practices to improve women entrepreneurs

| Year | Country | Practice | Main Topic |
|---|---|---|---|
| 2017 | | Garage48 Motivating Women to Start-up Community | Networking events |
| 2016 | Hungary | Encouraging business start-ups by mothers with young children | Training |
| 2011 | Portugal | DoNaEmpresa | Training, Support, Mentoring |
| 2010 | Belgium | Longer, more flexible and transferable maternity leave for the self-employed. | Maternity leaves |
| 2010 | Lithuania | 'Darom verslą 2009' (Let's do business 2009) - promoting entrepreneurship and employability among women in 10 Lithuanian districts in order to reduce social exclusion | Education |
| 2010 | Italy | "Imprenditoria Femminile e Giovanile nella Regione del Veneto" (enterpreneurship among women and young people in Veneto) | Network |
| 2010 | Belgium | Maternity assistance: issuing 105 home-help vouchers to self-employed women who have given birth. | Maternity assistance |
| 2010 | Norway | Micro credit to promote entrepreneurship amongst women | Founding |
| 2010 | Luxembourg | Informal coaching for women future entrepreneurs | Mentoring |
| 2009 | Italy | Regional programme for women's entrepreneurship | Innovation, credit, networks and information |
| 2009 | Sweden | Beautiful Business Award 2009 | Role model |
| 2009 | Sweden | IDA (Invested Dedicated Angels) | Network, founds |
| 2009 | Sweden | Women's Enterprise Ambassadors | Role model, mentoring |
| 2009 | Belgium | Réseau Diane: network for women entrepreneurs | Role model, mentoring |
| 2009 | Sweden | Believe in your ideas | Education |
| 2009 | Sweden | Buy a Business | Training |
| 2009 | Denmark | National agency for female start-ups: activities and services (bga) | Role model, mentoring |
| 2009 | Norway | Action plan to encourage women to become entrepreneurs | Plan to promote entrepreneurship among women |
| 2009 | Czech Republic | System of support for women entrepreneurship | Networking, consultancy |
| 2009 | Finland | Women in Business support growth - competitiveness "Archimed" | |
| 2009 | The Netherlands | Federation of Women Entrepreneurs | |

Source: Author's own elaboration

As can be seen from these examples, practices seem to follow a similar pattern, focusing on similar themes and tools. It should also be noted that most countries have national strategies (e.g., France, Spain) but also regional policies. Moreover, supporting organisations are both public and private

institutions. Therefore, it seems difficult to have an "overview" of each support system. Again, quantity and quality do not seem to go hand in hand.

Another concern is the extent to which these entrepreneurial ecosystems are gender-sensitive, as Hughes and Yang (2020) recently noted. Policies and programmes in many countries usually target women. However, big questions remain regarding how women entrepreneurs are supported in their specific context (Brush et al., 2009; Spigel and Harrison, 2018). It can be expected that women-focused programmes and policies addressing women's under-representation in entrepreneurship can have a positive effect on their success in leading business. Thus, it seems appropriate to adjust these measures to women's real needs and expectations, to better address the real constraints they face. These issues are addressed in the following part of this report.

## 2.2. Gendered Corporate Social Responsibility

Support for women's entrepreneurship does not come exclusively from governments. In recent decades, some companies have included actions to support women's entrepreneurship as part of their corporate social responsibility (CSR) strategies. As is well known, CSR is an activity that "*recognises the social imperatives of business success and addresses its social externalities*" (Grosser & Moon, 2005a: 328). Generally speaking, companies recognise that they have an impact [not always positive] on their environment, so CSR is the way companies address these externalities.

Although this idea is not new, since the beginning of the 21st century CSR has attracted renewed interest [see Agudelo et al., (2019) for a recent review on this topic]. Several factors contribute to explain this growing interest. Firstly, institutions such as the European Commission (EC)[18] have played a relevant role in promoting the implementation of CSR and have encouraged companies to engage with this issue. Through various documents, declarations and strategies, the EC has brought companies together with the aim of enhancing CSR in their organisations, promoted this approach and integrated CSR into the broader context of international initiatives such as the United Nations Global Compact[19] (UNGC). The EC has also led several campaigns to promote the European commitment to CSR, as well as holding forums and conferences to reinforce this outreach role. As a result, the EC has succeeded in disseminating a unified vision of CSR in European enterprises.

Secondly, the commitment to the 2030 Agenda involves all actors responsible for economic activity. This highlights the need to promote CSR, as companies' actions have an impact and must be guided by a responsibility that goes beyond strictly economic activity (Bastida et al., 2020). In this sense, CSR can be seen as the first step towards achieving sustainable development through economic and business activity.

Thirdly, interest in CSR has also been encouraged by international certifications designed to address social responsibility, such as ISO 26000. Fourthly, companies recognise that they can improve their competitiveness and achieve a competitive advantage through CSR, based on the shared value of

[18] EC has been particularly active in this topic. Several documents and declarations have reinforced and made explicit this commitment. For example, the `European Business Declaration against Social Ex Corporate Social Responsibility, Responsible Business Conduct, and Business and Human Rights: Overview of Progress'; the European Business Network for Social Cohesion (later renamed CSR Europe); the Green Paper called 'Promoting a European framework for Corporate Social Responsibility' (2001); the European Strategy on CSR (2002); the Plan of the General Direction of Business of the European Commission; the European Roadmap for Businesses – Towards a Competitive and Sustainable Enterprise.; the communication 'A renewed EU strategy 2011-14 for Corporate Social Responsibility; the 'Enterprise 2020 Manifesto' (2016) or the recent staff working document 'Corporate Social Responsibility, Responsible Business Conduct, and Business and Human Rights: Overview of Progress', launched in March 2019.

[19] UNGC is a voluntary initiative to implement sustainability principles and advance towards the accomplishment of UN goals.

benefits for society and for business (Porter and Kramer, 2006). Finally, citizens have become increasingly concerned about the activities of companies, demanding a more responsible attitude and a greater commitment to their environment. Companies have responded to this demand by reinforcing their CSR strategies.

During this evolution, companies have introduced gender equality into their CSR agendas. An important step on this gender perspective comes from the Calvert Women's Principles, the code of conduct to focus on "*business corporations as vehicles for addressing gender inequalities and advancing the global empowerment of women*" (Calvert 2004: 1). This code calls for corporations to 'promote and strive to attain gender equality in their operations and in their business', which means go beyond workplace (Grosser, 2009).

While this concern was initially limited to organisations from an internal focus, companies have recently turned attention to the external context, understanding that their relationships with stakeholders must also incorporate a gender perspective. In doing so, companies recognise that their actions to promote gender equality have an impact on their culture, but also on their stakeholders and, through them, on society at large.

In this regard, there is widespread recognition that the private sector will be instrumental in promoting the women's entrepreneurship agenda. In line with this approach, several companies have proactively introduced programmes aimed at supporting women-owned businesses and women entrepreneurs. Some of them are playing a leading role, expanding existing programmes and establishing new lines of support. Initiatives range from mentoring, networking, support for women entrepreneurs to projects to increase women's access to finance and technology. Some of them are reported in Table 6:

Table 6: CSR and women entrepreneurship: examples

| Country | Programme | Main Topic |
|---|---|---|
| The Coca-Cola Company | 5by20 | Provide business skills training, mentoring networks, financial services and other assets |
| Walmart | Walmart's Plan to Do More Business with Women Entrepreneurs | Mentoring, education |
| IBM | IBM Global Entrepreneur Program (GEP) | Mentoring; credits to use IBM services |
| Microsoft | Female founders competition | Direct support |
| Facebook | #SheMeansBusiness | Networking |
| Google | Google for Startups Accelerator for Women Founders | Mentorship, technical support |
| MasterCard | Growing Together in the Americas | Mentoring |
| Unilever | | Education (grants) |
| Amazon (Spain) | The e-commerce pathway | Education |
| Deloitte Central Europe | SheXO Club | Networking |
| UPS Europe | Women's Leadership Development (WLD | Internal/External Networking |
| Dell | Dell Women's Entrepreneurship Network (DWEN), | Networking |

| | | |
|---|---|---|
| Ernst & Young (EY) | | Mentoring, counselling, training |
| Pfizer | | Supplier programs for women-owned businesses |
| Goldman Sachs | 10,000 Women initiative | Networking, access to finance |
| Intel | She will connect | Networking, education |

As can be seen, many of these companies offer their own resources to support women in their entrepreneurship journey. They also facilitate access to networks and provide training, while others are more active in selecting women-led businesses as priority suppliers. These initiatives have significant reach and impact, not only because of their direct support to women-led businesses, but also because companies publicly declare their commitment to gender equality and women's business advancement.

Box 4: CSR. Some lessons from supportive actions

- Incentivise new businesses
- Provide access to experienced mentors
- Promote virtual/physical platforms and meetings, to access networks
- Leverage entrepreneurial skills
- Support established women-led start-ups
- Increase access to markets
- Designing programmes that combine personal and professional development
- Facilitate access to technology

In addition, other projects should be highlighted. For example, some initiatives also provide access to funding, such as Microsoft's venture fund, M12, which partners with Mayfield and Pivotal Ventures for innovative female founders. The International Finance Corporation (IFC), a member of the World Bank Group, has recently announced an investment of up to $200 million, in privately-placed gender and green bonds in Indonesia. Similar initiatives can be found in other financial institutions, e.g., Bank of America. Special mention should be made of the Investing in women code, launched in July 2019, a joint commitment to support women's entrepreneurship in the UK by improving women's access to the advice, resources and funding needed to start a business.

Companies have also implemented conjoint actions. For example, Coca-Cola collaborates with UN Women, IFC, TechnoServe, the Bill & Melinda Gates Foundation, the IDB and Mercy Corps, among many other NGOs on company programmes. Wallmart is engaged in a collaborative effort to promote more women-owned businesses with Campbell Soup, Coca-Cola, ExxonMobil, General Mills, Johnson & Johnson, Mondelēz, PepsiCo and Procter & Gamble. Also in 2018, the Inter-American Development Bank (IDB) launched the #100kChallenge initiative to create opportunities to support women entrepreneurs in the region. This project, which includes several companies such as Google, IBM, Microsoft, Facebook, PepsiCo and Mastecard, has recently been reinforced as a specific action to contribute to the recovery of Latin America and the Caribbean, following COVID-19.

In addition to the intrinsic value of these initiatives, two interesting lessons can be drawn: the potential for synergistic action of collaborative actions, and the usefulness of joint public-private actions.

# 3. HOW DO WOMEN PERCIEVE ENTREPRENEURSHIP?

This part of the study aims to explore the perceptions of women entrepreneurship—namely the motives, difficulties and factors that can favour women entrepreneurial activity.

In their comprehensive review of research on women entrepreneurship, Foss and Ahl (2016) underlined that quantitative methods designed to platform male–female differences predominate; they highlighted that demonstrating how entrepreneurial experiences can differ depending on gender is not enough. Following their recommendations, a qualitative and a quantitative study were designed. The participants were women entrepreneurs and politicians who were responsible for making public policy decisions aimed at improving women's entrepreneurial opportunities.

The research method involved semi-structured interviews with 7 women entrepreneurs and 3 politicians who were responsible for policy design and implementation. Additionally, a Delphi study was conducted in order to conform the questionnaire. This method has been previously used in entrepreneurship studies, such as social entrepreneurship as well as in conceptual issues. Moreover, the Delphi technique has proven its value as an appropriate tool when the objective is to gather consensus (Kavoura and Andersson, 2016; Flostrand et al., 2020; McPherson, et al., 2018). When constituting the panel of experts, the mandatory guidelines for Delphi's application were followed. Accordingly, ten individuals (six women and four men) interested in women entrepreneurship, namely academic researchers, public policy decision-makers and women entrepreneurs, were included. To provide a more decentralised view, the interviewees and the Delphi panellists were of different nationalities. Finally, after reviewing the interview and Delphi panel results, a questionnaire was designed to further explore not only the perceptions of women's motives to become entrepreneurs but also the challenges women face and the factors that could improve their intention to lead a business.

The three methods (Table 7) were conducted both in Spanish and English. The participants were ensured that their participation was voluntary and anonymous. The interviews and the Delphi panel were conducted in April 2021 (from 20th to 22nd). After processing the data and obtaining the results, the questionnaire was e-mailed to the participants and was available from 18th to 28th of April.

Table 7: Research Methods Summary

| | Participants | Women | Men | Nationalities |
|---|---|---|---|---|
| Semi-structured interviews | 10 | 9 | 1 | 5* |
| Delphi study | 10 | 6 | 4 | 3** |
| Questionnaire | 170 | 139 | 31 | 6*** |

Source: The author
(*): Spain, France, UK, Germany, and Poland; (**) Spain, UK, Italy; (***) Spain, Italy, France, Portugal, Germany and The Netherlands

## 3.1. Semi-structured interviews

Following the literature review analysis, interviews were conducted with entrepreneurs to establish (1) the main constraints they had suffered on their journey to entrepreneurship; (2) the main factors that boosted their interest in becoming entrepreneurs; and (3) how they believed that policy design and implementation could support women's entrepreneurship participation and success. The interviews were transcribed and analysed by the study's author.

The participants were mainly women ranging in age from 37 to 57 years old (Table 8). All participants owned small business. As for the decision-maker participants, only one was currently in that role (they had previously performed these making-decisions tasks)[20]. The participants came from various business sectors, including construction, services, social services, and commerce.

Table 8: Interview participants

| Interviewed | Nationality | Age | Gender | Role |
|---|---|---|---|---|
| Participant 1 to 6 | Spain (2)<br>France (1)<br>UK (1)<br>Germany (1)<br>Poland (1) | 47<br>45<br>39<br>37<br>53<br>57 | Female | Entrepreneurs |
| Participants 4 to 10 | Spain (3)<br>UK (1) | 49<br>51<br>50<br>46 | Female/ one man | Decision-makers |

Source: The author

Note: Participant identity is not provided to maintain confidentiality

### Motives for starting a business

When asked for the motives for starting a business, both opportunity and necessity appeared. For example, one participant said that she was aware of a business opportunity because people in her previous job needed the service she now provides through her business (kindergarten). Previous work difficulties also appeared as a motive for another participant, who acknowledged that she was uncomfortable, so she decided to become her own boss. Another participant reported that she was always interested in business, and this was precisely the reason for studying business at university. Interestingly, one participant also stressed the importance of tradition in running business:

*"My family has always been interested in business. I have grown amid balance sheets, projects and challenges, so I guess I never thought of being anything other than what I am".*

Autonomy, self-control and freedom also appeared to be a big motivator for running a business. One participant stated that she values her time "*even to continue working [in] her free time".*

Another driver that one participant highlighted was the desire to progress in professional development:

"*The way forward can only come through entrepreneurship, understood as the assumption of responsibility for one's own career path*".

On the other hand, quite surprisingly none of the interviewees reported being motivated by earning money (as in the case of ambitious entrepreneurs) or to increase their purchasing power.

### Constraints

The participants reported several difficulties and challenges during their entrepreneurship journey. Overall, they felt that entrepreneurship was—and even actually still is—a tough experience. Family

[20] Participants were selected according to their availability. To better capture the views from different cultures, individuals in various countries were approached. In this case, author's personal contacts provided the participant' contact.

problems seem to be a big problem, since all participants reported that the situation was harder when they had young children. A French participant acknowledged that she was "*delaying the decision to start a family until the business gets off the ground for good*". Two participants recognised the importance of family support because small business requires many working hours. Another participant claimed that it is critical to provide "*tax aid in the form of quota reductions where the procurement of domestic help is needed. Most […] women reject the idea of being entrepreneurs when having children because of costs and lack of tax advantages, and there is no chance to have the work–family balance*".

In general, the participants highlighted that they had access to business networks, but they were not interested in them. Two participants reported that they had no "*time to spend in small talks*" when they were concerned about finding new clients, while another said that she ran her business alone so she could not attend meetings.

The participants also reported several factors related to access to resources, such as difficulties in accessing credit. However, they did not think that this was exclusively a woman's problem: they felt it is a common challenge for all potential entrepreneurs. Nevertheless, it should also be noted that three participants showed conservative behaviour since they highlighted that they were not interested in having a large amount of credit. More precisely, they prefer to manage and settle their current loans before applying for new ones.

Additionally, fear was a central concern among interviewees. This feeling was revealed after using a different approach, for example, through uncertainty about how to start a business, lack of confidence about business opportunities, or how to make their "passion" a real project when negotiating with credit institutions. They also recognised that they usually think about the risk of failure, noting that they usually think about what could happen to their families if their business were to fail.

The participants also felt that barriers are higher for women. For example, one said that "*women have a double challenge to overcome: their own fears of entrepreneurship and the gender barriers that we continue to see, incredible as it may seem, every day – in the 21st century*".

Moreover, regarding the lines of support aimed at favouring entrepreneurship, there is consensus that the support is too formal and bureaucratic. One participant claimed that "*whenever [she] has asked for a subsidy, [she] has been more concerned [about] the requirements, time periods and documental requirements than in working for [her] business*". Surprisingly, three participants started this part of the interview by labelling public aids as a "*nightmare*".

Unsurprisingly, all participants were most worried about the current pandemic's effects on their business. They acknowledged being concerned about the future viability of their ventures while having undertaken an extra effort in recent months to remain open "*however we think this openness to be understood*".

### Enhancers

The experts that were contacted as decision-makers revealed that they see women entrepreneurship as general entrepreneurship, so they look for lines of support which are available to everyone. They hence focus on financial resources, counselling, and lines of support that facilitate the initial steps to start a business. However, they acknowledged that women need extra support, although this could be implemented through reserving some of the lines of support for women.

The participants in this semi-structured panel also acknowledged that it is quite difficult to be innovative regarding lines of support since they are widely implemented and hard to adjust year on year. More surprisingly, they also reported that the effectiveness of the lines of support is not measured. They also recognised that formal requirements are a big problem, but they are powerless regarding

this issue due to legal requirements and transparency concerns. One female participant highlighted that more information is needed on support for entrepreneurship. In her view, this information creates a "*big puzzle to the extent that potential entrepreneurs need a full-time employee to explore these possibilities*". Otherwise, a consultant must be hired, adding cost to the business. This service usually should meet with formal requirements. This feeling was generally shared by the participants, who stated the need for *obtaining micro loans, or grants without "being overwhelmed by [paperwork]*".

Finally, they also reported a great concern regarding nowadays context, not only for women but for entrepreneurship in general. As all four participants were formerly involved in designing lines of support, they are "*grateful not to be currently working in these tasks*".

On the part of women entrepreneurs, there is a considerable consensus that lines of support must be simplified. One participant stressed the need for adding new lines of support, which are more focused on the profitability of business: "*Fortunately, entrepreneurship has little to do with gender and offers more opportunities. So, we must bet on boosting it through the promotion of a system that supports and encourages a meritocratic way of doing things, based on trust and relational maturity – far from presenteeism*". Some other ideas were added, such as "*tax payment on invoice*", and "*to equate entrepreneurs as wage earners from the point of view of work history and social security, being able to access medical or maternity [leave] if necessary*".

Box 5: Practitioners view on women entrepreneurship

- Participants reported several factors that act as barriers to entrepreneurship. In general, these factors concord with those identified in the research, although with different labels. Family concerns, fear, and difficulties regarding access to resources stand out as the main barriers to entrepreneurship.
- Participants also acknowledged several motivations to start a business, combining opportunities, necessities, and individual drivers such as autonomy and independence.
- Participants viewed official lines of support as a problem rather than an aid.
- Decision makers recognised that lines of support are difficult to adjust to special targets or temporal contexts.

## 3.2. Delphi panel

The experts (Table 9) were asked which factors could be critical to women's entrepreneurship. The Delphi's results allowed a first approach to the relative importance of each motivating/constraining factor. The Delphi's results allowed a first approach to the relative importance of each motivating/constraining factor.

Table 9: Members of the panel

| | Nationality | Age | Gender | Role |
|---|---|---|---|---|
| Participants 1 to 6 | Spain (5)<br><br>UK (1) | 63<br>65<br>57<br>59<br>43<br>38 | Women | Academics<br>Researchers<br>Entrepreneurs |
| Participants 4 to 10 | Spain (3)<br>Italy (1) | 46<br>52<br>39 | Men | Academics<br>Researchers<br>Politicians |

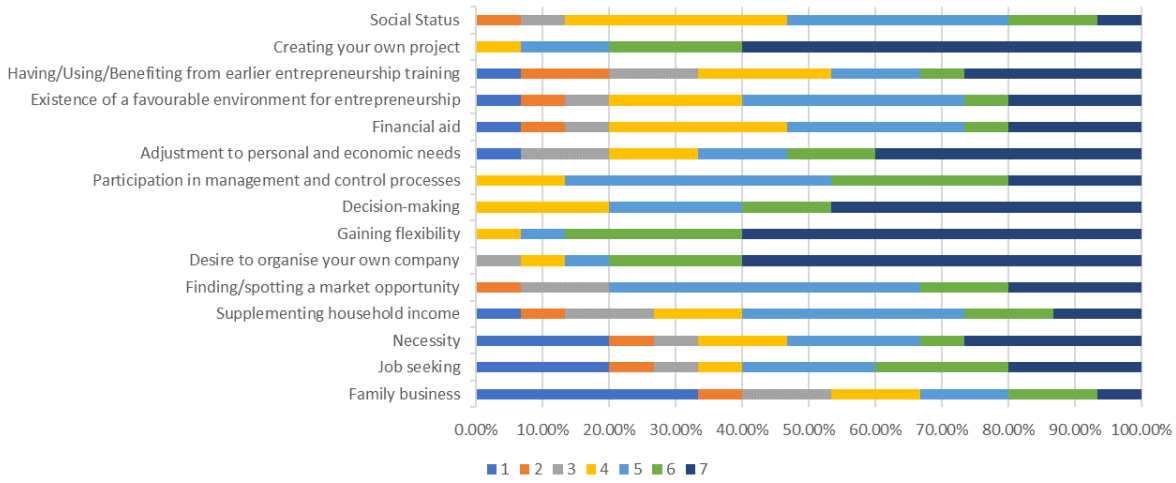
| | | | | |
|---|---|---|---|---|
| | | 27<br>50<br>46 | | |

Source: The author

Note: Participant identity is not provided to maintain confidentiality

Four groups of factors were identified following the former literature review. The first group gathered the factors related to motives to start a business; the second deals with the more relevant perceived barriers for entrepreneurship; the third group included factors that have been traditionally considered as drivers to undertake entrepreneurship, and the fourth group was related to lines of support aimed at favouring entrepreneurship. The participants were explicitly asked to focus on women entrepreneurs when answering the questions. Figure 14 shows the results of the first group of factors, namely those identified as motives for entrepreneurship. All the items were scored on a 7-point Likert scale, ranging from 1 (least important) to 7 (most important). Gaining flexibility and autonomy (both to create an own project and organise an own company) are considered as the main drivers for entrepreneurial activity, while social status or having the opportunity to continue family business are labelled as the less influential motives to became entrepreneurs.

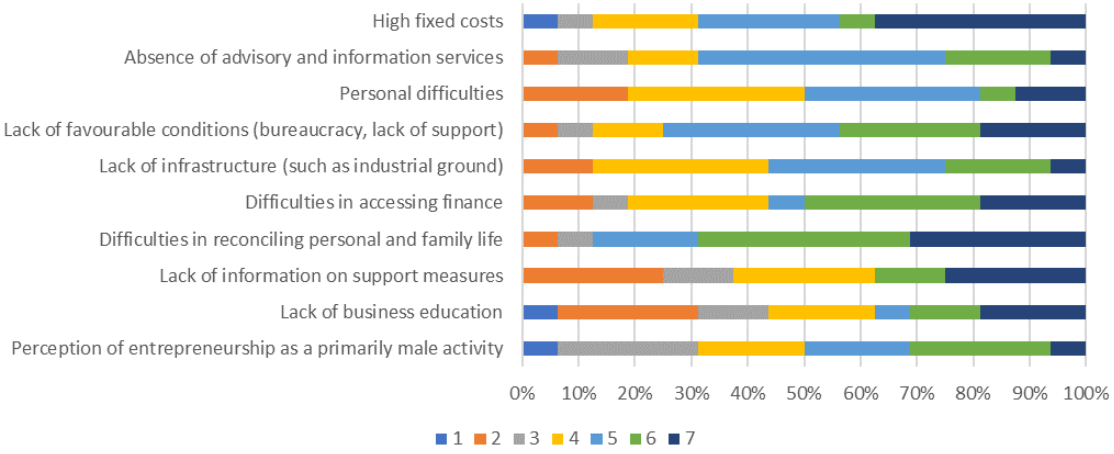
Figure 14: Delphi panel: Motives.




Source: The author

As for the main obstacles to start business, almost all the factors were identified to some extent as having a negative influence on women entrepreneurship (Figure 15). On average, fixed costs, difficulties in reconciling personal and family life, and a lack of infrastructure stand out among these constraints, according to the panelists' views. On the side of less influential factors, both the perception of entrepreneurship as a primarily male activity and a lack of infrastructure are seen as minor obstacles to becoming entrepreneurs.

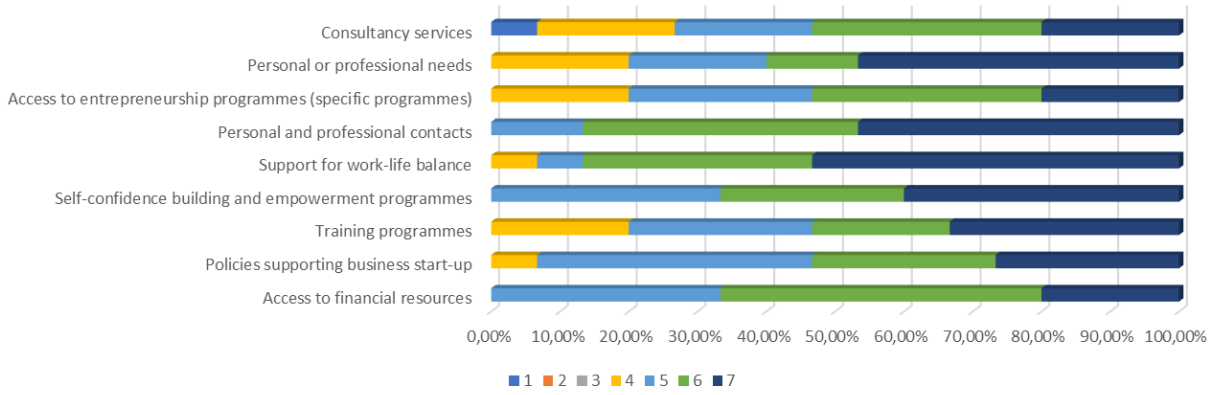
Figure 15: Delphi panel: Obstacles.




Source: The author

Regarding female entrepreneurship enhancers, panelists were in line to the conclusions of research on this topic (Figure 16). Consultancy services and entrepreneurship training programmes are seen as relatively less important as drivers for women's entrepreneurship, while support for work–life balance and having access to personal and professional resources are believed to have a major influence on starting a business.

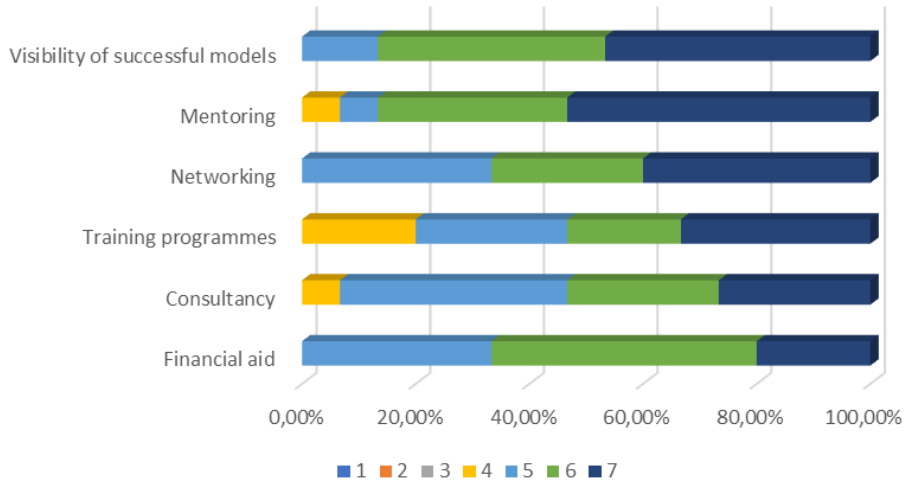
Figure 16: Delphi panel: Enhancers




Source: The author

Finally, all the topics proposed as issues to be addressed through lines of support (Figure 17) are considered important in the view of the experts included in the panel. Mentoring, networking and promoting the visibility of successful models are viewed as major topics to be considered.

Figure 17: Delphi panel: Lines of support




Source: The author

To summarise, the Delphi panel results show consensus both with previous research and the view of formerly interviewed participants. However, the panellists also suggested the convenience of including a separate section in the questionnaire to better capture individual motives to becoming an entrepreneur.

Box 6: Experts' views on women entrepreneurship

- Panelists showed a high agreement to factors identified by researchers as obstacles and enhancers to women entrepreneurship.
- On the one hand, difficulties on reconciling professional and family life appeared as major obstacles to women entrepreneurs. On the other, semi-informal arrangements, such as networking and mentoring, are viewed as major topics to be addressed through lines of support aimed at favouring entrepreneurship.
- Experts also advised that individual motivations to undertake business should be considered.

Source: The author

## 3.3. Survey

Drawing upon previous results, a first version of the questionnaire was designed and pre-tested with a subsample of potential respondents to test its comprehensibility and adequacy. The final version of the questionnaire was then completed. In this final design, the imperative guidelines and recommendations were followed in order to avoid dysfunctions, with attention being paid to the questionnaire's length; the estimated completion time; the clarity of the concepts; and the comparability of results among potential participants. Moreover, the items were randomly sorted to avoid anticipating answers.

The final survey included 21 questions, including demographic data (age, gender, geographical location, educational level) and control variables (business sector, kind of entrepreneurship, current situation). 15 items pertaining to the individual motives to becoming an entrepreneur, 10 regarding factors that can be considered as major obstacles to female entrepreneurship and 9 related to enhancers were also included. Additionally, a question concerned with main issues to be addressed by

institutional aid (9 items) was also considered. Two versions of the questionnaire—in Spanish and English—were used and e-mailed to potential respondents[21].

The complete survey can be consulted in Annex 3. As can be seen, the main questions can be grouped into the following research questions:

RQ1: What are the main individual motives to become an entrepreneur?

RQ2: What are the major obstacles to entrepreneurship?

RQ3: What are the main enhancers to entrepreneurship?

RQ4: Which lines of institutional support are more relevant to entrepreneurs?

RQ5: What are the main antecedents/predictors for the intentions to be an entrepreneur?

Next, an empirical study is carried out to test the research hypotheses

Box 7: Questions of research

RQ1: What are the main individual motives to become an entrepreneur?

RQ2: What are the major obstacles to entrepreneurship?

RQ3: What are the main enhancers to entrepreneurship?

RQ4: Which lines of institutional support are more relevant to entrepreneurs?

RQ5: What are the main antecedents/predictors for the intentions to be an entrepreneur?

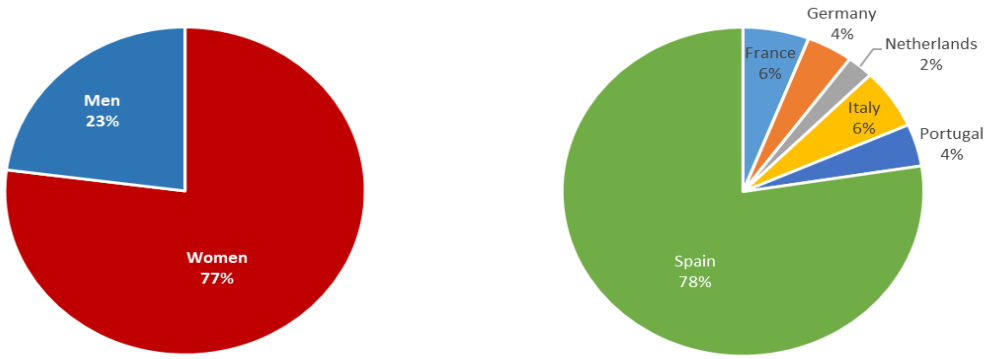
### 3.3.1. Sample and data collection

Entrepreneurs and non-entrepreneurs shape the sample for this research, although the main focus is entrepreneurship intention. An online survey was used to collect the data. On total 180 responses were received. Following Hair et al.'s (2017) guidelines, 5 were drop for uncompletedness and 4 responses were removed for not corresponding to the sampling criteria[22] (unemployed). The final sample is formed by 170 complete replies, 131 from women (77 %) and 39 from men (22,9 %).

[21] Electronic questionnaires are considered a suitable method for collecting data (Dillman, 2011). The process runs some risk of "snowballing sample", i.e., the possibility that individuals receiving the survey may recruit other participants from among their acquaintances. However, its use is accepted when the target population is difficult to reach, when the number of participants is unknown, or when the topics under study are sensitive. In these circumstances, these questionnaires allow data to be collected at a reasonable cost (Gosling et al., 2004).

[22] It should be noted that also some respondents from UK were removed, because the study was limited to EU countries.

Figure 18: Survey participants




Source: The author

Figure 18 summarises the main characteristics of survey' participants. Respondents were predominantly from different Spain (131), but other European countries were represented: Italy and France (10), Portugal (8), Germany (7), and The Netherlands (4). Almost all participants had university education (88.23 %), and the average age was about 42 years old. 120 individuals were entrepreneurs (93 women and 27 men) and the remaining 50 were students at different University degrees (76 % female students). As for entrepreneurs, they were involved in several activities such as services (18.3 %), marketing (8.3 %), non-governmental organizations (NGO, 8.3 %), Information and Communication Technology (ICT, 5.8 %), health (5 %), consulting (4.1 %), and finance (4.1 %).

### 3.3.2. Measures

The variables included in the study were modelled as *constructs*[23], and have been measured using a seven-point Likert scale, except for the control variables. In this case, variables were mainly assessed with a single item. For example, gender was nominal and dichotomic (0 = female, 1 = male), activity sector was nominal, and age was computed in years.

### 3.3.3. Data analysis

Based on the characteristics of the constructs included in the model, Partial Least Squares (PLS) was selected to depict a path the model. PLS is a variance-based structural equation modelling approach especially suitable for testing composite measurement models, were PLS path modelling estimates are consistent and non-biased (Rigdom, 2016; Sardstedt et al., 2016).

Following Felipe et al. (2017), Mode A (reflective) was selected for testing barriers and enhancers of entrepreneurship because this mode uses correlation weights which are appropriate for the estimation of standardized regression coefficients when the indicators are correlated. As for reasons for entrepreneurship, the existence of correlated items was not assumed, so the construct is estimated in Mode B (regression weights). [66]. Finally, SmartPLS 3.2.7 software was used (Ringle et al., 2015).

[23] Constructs can be described as variables that are compound by elementary components. They are considered latent variables because they cannot be directly observable or measured. Each construct is formed as linear combinations of its indicators. Moreover, correlations are common among indicators although not required (Henseler et al., 2014; 2016; 2017).

### 3.3.4. Measurement model

Table 10 reports the measurement model results. For the barriers and enhancers, traditional measures of internal consistency, reliability and validity have been reported since these variables are estimated as reflective constructs. As can be seen, most indicators have loadings above 0.7, what can be considered satisfactory. Additionally, the constructs reached an adequate composite reliability (CR), with figures greater than 0.7. Moreover, the constructs also satisfied the requirement of the convergent validity since their average variance extracted (AVE) exceeds the threshold of 0.05 level.

Table 10: Measurement model: results.

| Construct/Dimension/Indicator | Weight | Loading | CR | AVE |
|---|---|---|---|---|
| **MOTIVES FOR ENTREPRENEURSHIP** | | | **n.a.** | **n.a.** |
| ***Force motives*** | | | | |
| FR1. Job seeking | 0.120 | | | |
| FR2. Necessity | 0.148* | | | |
| FR3. Supplementing household income | 0.079 | | | |
| ***Desire motives*** | | | | |
| DR1. Finding/spotting a market opportunity | 0.210* | | | |
| DR2. Desire to organise your own company | 0.043 | | | |
| DR3. Gaining flexibility | 0.148* | | | |
| DR.4 Decision-making | 0.118 | | | |
| DR5. Participation in management and control processes | 0.201* | | | |
| DR6. Adjustment to personal and economic needs | 0.178* | | | |
| DR7. Creating your own project | 0.142 | | | |
| DR8. Social Status | 0.110 | | | |
| ***Drivers' availability*** | | | | |
| DA1. Financial aid | 0.226* | | | |
| *DA2. Existence of a favourable environment for entrepreneurship* | | | | |
| DA3. Having/Using/Benefiting from earlier entrepreneurship training | 0.141* | | | |
| DA4. Family business | 0.097 | | | |
| **PERCEIVED BARRIERS FOR ENTREPRENEURSHIP** | | | **0.990** | **0.915** |
| ***Social barriers*** | | | | |
| SO1. Perception of entrepreneurship as a primarily male activity | | 0.961* | | |
| ***Human capital barriers*** | | | | |
| HC1. Lack of business education | | 0.975* | | |
| HC2. Absence of advisory and information services | | 0.961* | | |
| ***Contextual barriers*** | | | | |
| EO1. Lack of information on support measures | | 0.964* | | |
| EO2. Lack of infrastructure (such as industrial ground) | | 0.957* | | |
| EO3. Lack of favourable conditions (bureaucracy, lack of support) | | 0.966* | | |

| | | | | |
|---|---|---|---|---|
| ***Personal barriers*** | | | | |
| PO1. Difficulties in reconciling personal and family life | | 0.924* | | |
| PO2. Personal difficulties | | 0.942* | | |
| ***Financial resources*** | | | | |
| FO1. Difficulties in accessing finance | | 0.950* | | |
| FO2. High fixed costs | | 0.966* | | |
| **PERCEIVED ENHANCERS FOR ENTREPRENEURSHIP** | | | **0.931** | **0.746** |
| ***Direct resources*** | | | | |
| *RE1. Access to financial resources* | | | | |
| RE2. Policies supporting business start-up | | 0.905* | | |
| RE3. Training programmes | | 0.904* | | |
| RE4. Consultancy services | | 0.846* | | |
| ***Personal resources*** | | | | |
| PE1. Access to entrepreneurship programmes (specific programmes) | | 0.921* | | |
| PE2. Self-confidence building and empowerment programmes | | 0.833* | | |
| PE3. Support for work-life balance | | 0.762* | | |
| *PE4. Personal and professional contacts* | | | | |
| *PE5. Personal or professional needs* | | | | |

Notes: CR: Composite reliability. AVE: Average variance extracted. n.a.: non-applicable. *: significant at $p < 0.05$ (two-tailed). In italics are the items removed for multicollinearity reasons (motives construct) or because the loadings were below 0.7.

Table 10 offers a first explanation on three of the research questions. First, the availability of financial aid is the item with the highest weight. Also, four items related to the desire reasons to become an entrepreneur (i.e., finding or spotting a market opportunity, participation in management and control processes, adjustment to personal and economic needs, and gaining flexibility) show high weights. Moreover, this group of motives attained the highest number of high-weighted indicators. On their part, starting a business to follow a family tradition, to supplement household income or to fulfil the desire to organise one's own project, seem to be the less influential reasons to undertake an entrepreneurial activity. As expected, the items with high weights were all statistically significant, which means that they are relevant for the measuring of the construct of *motives for entrepreneurship*. Consequently, it can be suggested that desire motives are on average the most influential motives for starting business, while force motives or the availability of drivers such us having the opportunity to continue family business are less powerful drivers for became entrepreneurs.

Second, all the considered items for *barriers* are statistically significant and have high loads, over 0.9 on average. In particular, lack of business education and favourable entrepreneurship conditions, as well as the perception of fixed costs and the lack of information on support measures are perceived as major obstacles for entrepreneurship.

Third, the access to entrepreneurship programmes is the most valued enhancer to become an entrepreneur. Also, policies supporting business start-up and training programmes show a high load. All the items in this group of factors are statistically significant.

Once the relative importance of each item is tested, the next step is to explore the relationships between the constructs. This exploration implies to analyse if perceived barriers, enhancers, and

motives have an impact on entrepreneurial intention. However, before testing these relationships the discriminant validity of each construct must be ensured, to guarantee that constructs measure different things. Table 11 shows that both the barriers and the enhancers constructs attain discriminant validity, since they accomplish the Fornell-Larcker criterion (Henseler et al., 2015). Hence, it can be confirmed that these constructs differ from each other.

Table 11: Measurement model: discriminant validity.

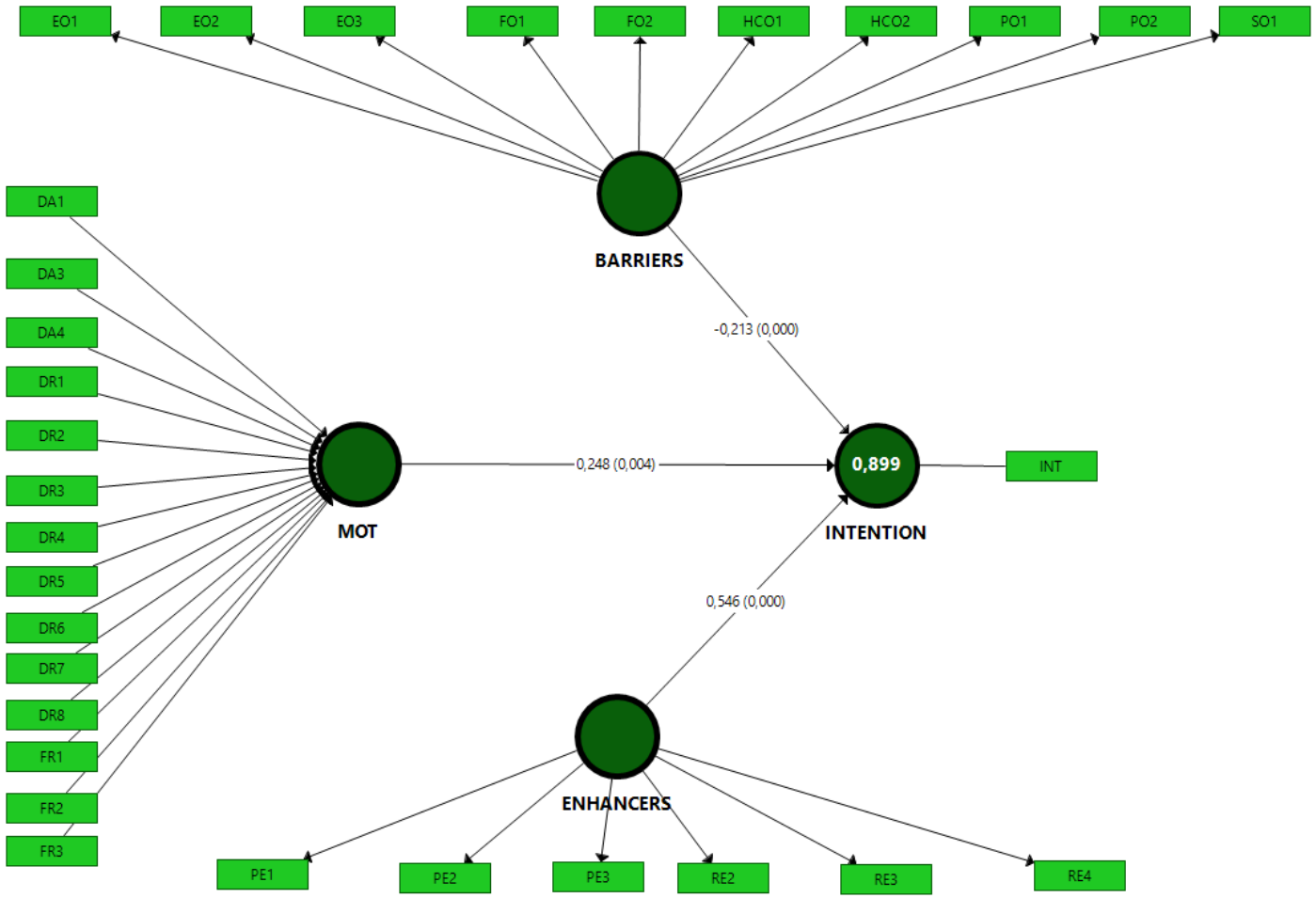
| Construct | BARRIERS | ENHANCERS | INTENTION | MOT |
|---|---|---|---|---|
| **BARRIERS** | **0.957** | | | |
| **ENHANCERS** | -0.736 | **0.963** | | |
| **INTENTION** | -0.783 | 0.933 | **1.000** | |
| **MOTIVATION** | -0.679 | 0.927 | 0.899 | **n.a.** |

Note: Diagonal elements (bold) are the square root of the variance shared between the constructs and their measures (AVE). Off-diagonal elements are the correlations between constructs. For discriminant validity, diagonal elements should be larger than off-diagonal elements. n.a.: Non-applicable.

To this point, the compulsory analyses to check the quality and quality of the measures used have been verified. These analyses have supported that all the measures satisfy the requirements to be included in a model. Consequently, they have been arranged according to their expected impact on the intention to undertake an entrepreneurial activity.

Figure 19 shows the proposed model. Hence, it can be expected that both motives and enhancers have a positive influence on entrepreneurial intention, while the impact of barriers is expected to be negative.

Figure 19: Proposed model




Source: The author

### 3.3.5. Structural model

Before testing the expected relationships among motives, enhancers and barriers, the global fit of the model is analysed[24]. This test allows to explore if the constructs act within a nomological net (i.e. the model) rather than as individual variables. Table 12 shows the results of this analysis, which confirms the good fit of the proposed model.

Table 12: Structural model (I): model fit

| SATURATED MODEL | | | | |
|---|---|---|---|---|
| **TEST** | Mean | Sample Mean | 95.0% | 99.0% |
| **SRMR** | 0.048 | 0.037 | 0.046 | 0.051 |
| **$D_{ULS}$** | 1.127 | 0.680 | 1.057 | 1.302 |
| **$D_G$** | 1.070 | 0.688 | 0.682 | 1.304 |

Next, the relationships among variables are tested (Table 13). According to these results, motivations and enhancers positively influence entrepreneurial intention, while the impact of barriers is negative. Thus, motives to become an entrepreneur can partially explain entrepreneurial intention. Factors perceived as enhancers to entrepreneurship fosters this intention, while those elements that are considered as barriers impair the intention to start business.

Table 13: Structural model (I): significant relationships

| RELATIONSHIP | β | 5.0% | 95.0% | SIGNIFICANT |
|---|---|---|---|---|
| BARRIERS -> INTENTION | -0.213 | -0.289 | -0.134 | Yes |
| ENHANCERS -> INTENTION | 0.546 | 0.358 | 0.639 | Yes |
| MOTIVES -> INTENTION | 0.248 | 0.142 | 0.463 | Yes |

Next, the relative importance of each group of elements can also be explored. To do this, Table 14 shows the explained variance ($R^2$) in the intention of entrepreneurship and the direct effects included in the research model. Bootstrapping (5000 samples) provides t-values and confidence intervals that enable the assessment of the statistical significance of the relationship (Roldán et al., 2017). As can be seen, both perceived enhancers and motivations have a positive and significant effect on entrepreneurial intention, whereas perceived barriers significant and negatively impact entrepreneurship.

[24] According to Henseler et al. (2016), the major point for assessing composite measurement models should be the tests of model fit for the saturated model, which allows testing the external validity of the constructs (Henseler, 2017a). As Table 9 depicts, the three tests of model fit do not surpass the 99%-percentile so it can be inferred that constructs act within a nomological net rather than as individual manifest variables (Henseler, 2017). It should be noted that this step is not necessary when testing exploratory models, which is the case for the proposed model in this study. However, this good fit adds stringency to this proposal.

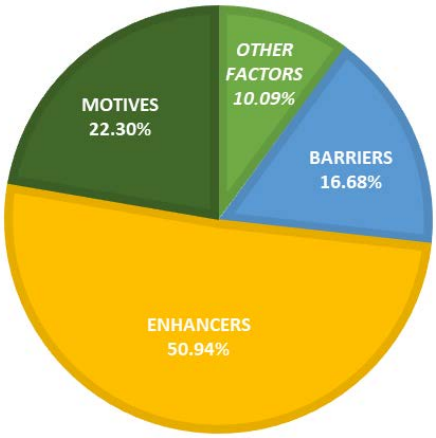
Table 14: Structural model (II): explained variance

| Relationship | Direct Effect | ρ- value | *t*-Value | CI | Explained variance | $f^2$ |
|---|---|---|---|---|---|---|
| BARRIERS -> INTENTION | -0.213 | 0.000* | 4.529 | [-0.289; -0.134] | 16.68% | 0.205 |
| ENHANCERS -> INTENTION | 0.546 | 0.000* | 6.355 | [0.358; 0.639] | 50.94% | 0.354 |
| MOTIVES -> INTENTION | 0.248 | 0.004* | 2.545 | [0.142; 0.463] | 22.30% | 0.086 |

Notes: CI: Percentile confidence interval. Bootstrapping based on n = 5000 subsamples. Hypothesized effects are assessed by applying a one-tailed test for a *t* Student distribution (CI 90%). Effects from control variables are assessed by applying a two-tailed test (CI 95%).

The analysis of the coefficient of determination ($R^2$) allows to assess the predictive power (in-sample prediction) for entrepreneurial intention. Thus, 89.9% of this intention can be related to entrepreneurship motives, to the perceived enhancers for entrepreneurship and to those factors that are considered as barriers to entrepreneurial activity. Figure 20 shows the detailed results from this analysis.

Figure 20: Explained variance per construct




According to this model, the perception of enhancers of entrepreneurship achieves the highest influence, while motives to become entrepreneurs account for less than half of the enhancer effect. Quite surprisingly, those elements considered as barriers only impact about 17% of this intention. The model has also been evaluated by analysing the cross-validated redundancy index ($Q^2$)[25] for entrepreneurial intention. A positive $Q^2$ implies that the model shows predictive relevance. As can be seen on table 15, the analysis has found enough evidence to support the predictive validity (out-of-sample prediction) of the model, to predict new cases of entrepreneurial intention.

[25] Shmueli and Koppius (2011) defined the predictive power of a model as its ability to accurately predict the outcome variable when using new observations. In the case of this study, the predictive power means to what extent the intention of entrepreneurship can be anticipated by motives, barriers, and enhancers if new observations are considered (out-of-sample prediction). A cross-validation process with holdout samples has been used to assess this predictive power, which is implemented in the PLS predict algorithm in the SmartPLS software version 3.2.7.

Table 15: Prediction assessment

| | | PLS | | LM | | PLS-LM | |
|---|---|---|---|---|---|---|---|
| | $Q^2$ | RMSE | MAE | RMSE | LM | RMSE | MAE |
| INTENTION | 0.876 | 0.423 | 0.303 | 0.44 | 0.337 | -0.017 | -0.034 |

Notes: RMSE: Root mean squared error. MAE: Mean absolute error. PLS: Partial least squares path model; LM: Linear regression model

These findings enable a fuller understanding of the underlying effects of entrepreneurial activity. An important finding deals with the positive effect found between enhancers and entrepreneurship, which confirms that the provision of the right package of measures aimed at favouring entrepreneurs has a positive effect on individuals' intention to start a business. Also, the influence of enhancers doubles that of motives to become entrepreneurs, entailing a prevalence of external focus to enrol business.

The model also suggests that perceived barriers to entrepreneurship have a negative effect on the intention to start a business, though this influence is not as strong as expected. This finding is unexpected and suggests that certain entrepreneurship drivers can counteract the negative effect of the perceived barriers. In this sense, it could be suggested that linking aids to perceived barriers can be a good strategy to balance positive and negative effects when considering starting a business. Finally, the model shows an adequate predictive power both for the sample used in the study and for future samples as it has an adequate predictive validity (out-of-sample).

To further explore the results, a new model was tested. Using the same indicators and dimensions as well as the same sample, the model groups indicators per affinity[26]. Hence, three different categories for motives have been distinguished (i) force, (ii) desire, and (iii) drivers for entrepreneurship such as family tradition or financial aids. Enhancers were distributed into two categories: (i) personal resources and (ii) direct aids. Finally, barriers were collapsed into one single category by using a dummy variable that allows to measure perceived barriers in a Likert scale ranging from 1 (low perception) to 7 (high perception). Figure 21 shows this new model.

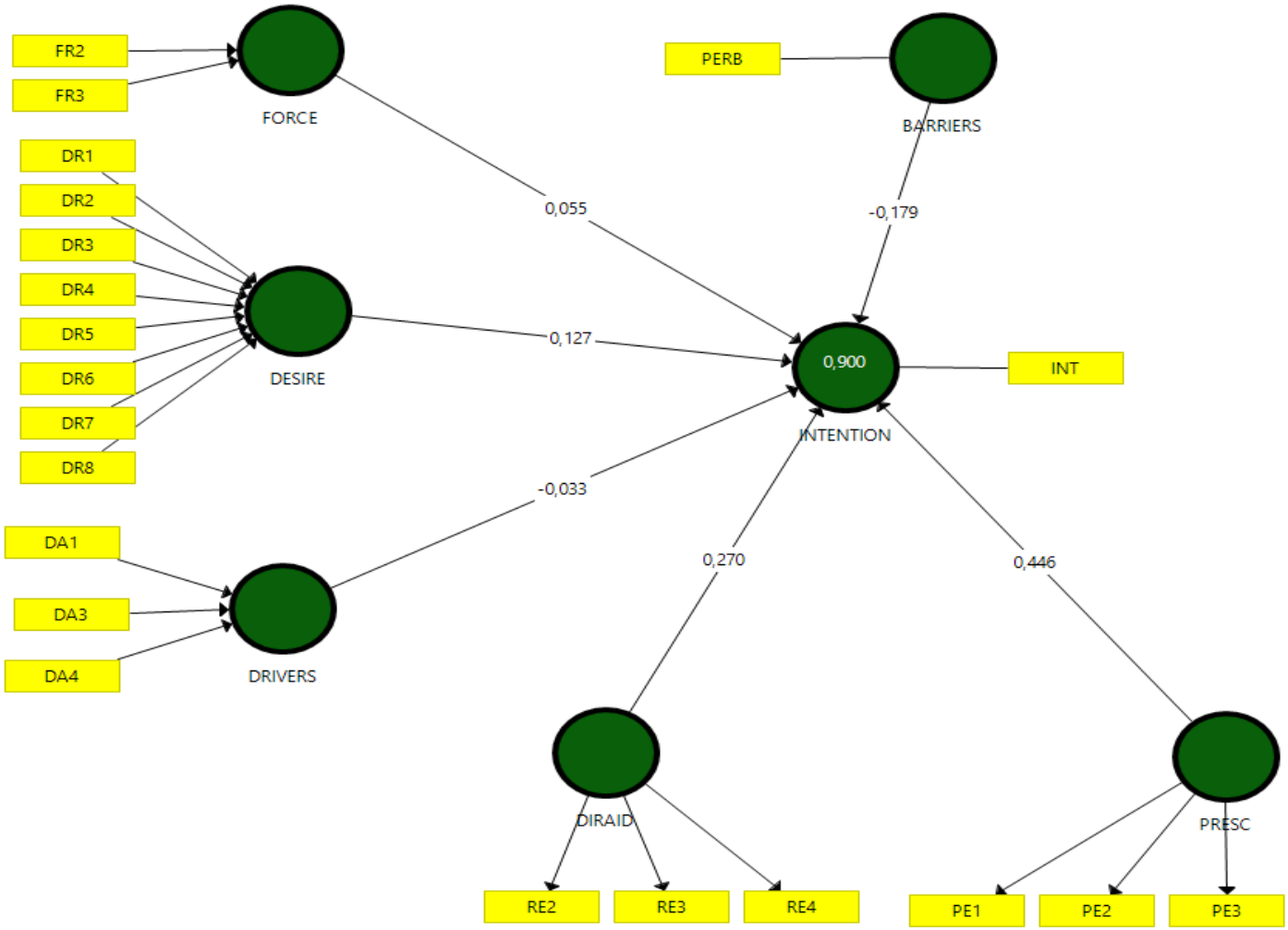
The analysis of this new model provides interesting results. Firstly, desire motives have the strongest influence on entrepreneurial intention, while direct drivers (e.g., financial aid, favourable environment, and earlier entrepreneurial training) seem to be the less influential group of motivators, even with some negative effect although statistically not significant. Secondly, enhancers related to the improvement of personal resources (e.g., training programmes, self-confidence building and support for work-life balance) have an effect on entrepreneurial intention that doubles that of direct aids. Finally, perceived barriers to entrepreneurship negatively affect entrepreneurial intention.

[26] These groups follow the distribution that can be seen on Table 9.

Table 16: Structural model (II). Significant relationships

| RELATIONSHIP | β | SIGNIFICANT |
|---|---|---|
| FORCE MOTIVES -> INTENTION | 0.055 | Yes |
| DESIRE MOTIVES -> INTENTION | 0.127 | Yes |
| DRIVERS AVAILABILITY -> INTENTION | -0.033 | No |
| DIRECT AID -> INTENTION | 0.270 | Yes |
| PERSONAL RESOURCES -> INTENTION | 0.446 | Yes |
| BARRIERS -> INTENTION | -0.179 | Yes |

Figure 21: Model 2



To further explore this second model, a moderation effect of barriers on motives and enhancers was also tested. Table 17 shows the results of this analysis. Perceived barriers moderate the relationship between the motives to become an entrepreneur and the intention to do so, although only for desire motives. Barriers also moderate the effect of enhancers on entrepreneurial intention. As can be seen, when considering this moderating effect, the negative relationship between barriers and entrepreneurial intention diminishes. More interestingly, barriers also have a moderate effect on enhancers when considering these measures aimed at favouring individuals' personal resources (Figure 18). Thus, this effect is partially impaired when there is a high perception of barriers to entrepreneurship.

Table 17: Moderation effects

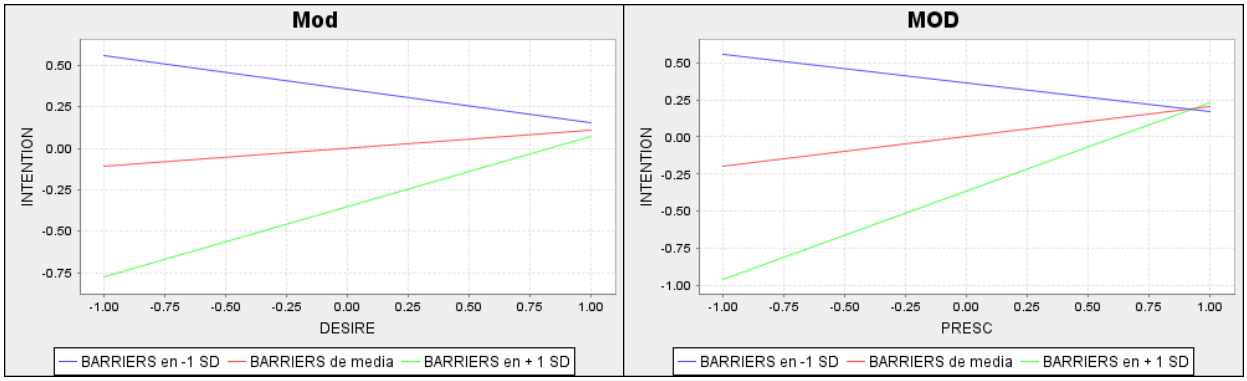
| | MODERATION EFFECT | | |
|---|---|---|---|
| | EFFECT | DESIRE MOTIVES | PERSONAL RESOURCES |
| BARRIERS -> INTENTION | -0.179* | -0.355* | -0.363* |
| DESIRE MOTIVES -> INTENTION | 0.127* | 0,114* | 0.159* |
| DIRECT AID -> INTENTION | 0.270* | 0,135* | 0.112* |
| DRIVERS AVAILABILITY -> INTENTION | -0.033 | 0,022 | 0.029 |
| FORCE MOTIVES -> INTENTION | 0.055* | 0,048* | 0.4* |
| PERSONAL RESOURCES -> INTENTION | 0.446* | 0.315* | 0.395* |
| Mod -> INTENTION | | **0,295*** | **0.201*** |

Note: *: significant at $p < 0.05$ (2 tails).

This significant effect means that barriers negatively moderate the relationship between desire motives to entrepreneurship and the intention to start an entrepreneurial activity (Figure 22). In other words, as the perception of barriers increases, the relationship between desire motives to start business and entrepreneurial intention decreases. It can also be seen that the negative effect of barriers on entrepreneurial intention becomes more negative [i.e., it has a stronger negative effect]. Additionally, the positive effect of lines of support aimed at improving individual's personal resources is jeopardized by the impact of perceived barriers.

This finding on the moderation role of barriers is of particular importance. As stated before, perceived barriers have a negative impact on entrepreneurial intention. However, this negative influence is even worse when negative effects on desire motives and supportive aid is considered. Summarizing, this role means that perceived barriers must be deeply explored not only for their negative effect on entrepreneurship but because of their indirect effect on motives and enhancers. As seen, these positive proxies can be seriously impaired by barriers.

Figure 22: Moderation role of perceived barriers on motives to became entrepreneur




In an incremental step to analyse the performance of the proposed model, gender differences were controlled to explore if results were different depending on the gender of the entrepreneur. First, unique effects for women are men were calculated (Table 18). As can be seen, the effects seem to be higher for women respondents than for men. Additionally, it should also be noted that the relationships among constructs became statistically non-significant in the case of male participants.

Table 18: Gender effects

| | β | Women | Men |
|---|---|---|---|
| BARRIERS -> INTENTION | -0.179* | -0.182* | -0.083 |
| DESIRE MOTIVES -> INTENTION | 0.127* | 0.141* | 0.234 |
| DIRECT AID -> INTENTION | 0.270* | 0.303* | 0.247 |
| DRIVERS AVAILABILITY -> INTENTION | -0.033 | -0.029 | -0.084 |
| FORCE MOTIVES -> INTENTION | 0.055* | 0.013* | 0.226* |
| PERSONAL RESOURCES -> INTENTION | 0.446* | 0.425* | 0.35 |

Note: *: significant at $p < 0.05$ (2 tails).

A multigroup analysis was conducted to analyse if these differences can be gendered explained, splitting the sample into two subgroups (women and men). However, before comparing the path estimates across these groups, it was necessary to use the three-step procedure to analyse the measurement invariance of composite models (MICOMs[27]).

Since partial measurement invariance was found, it was possible to proceed with comparing the sub-samples. To analyse if differences related to gender were significant, a permutation-based procedure[28] developed by Chin and Dibbern (2010) was applied. The results of this analysis showed that only the effect on *force motives* (higher for men than for women) were significant.

[27] MICOM has three stages (Henseler et al., 2016): (i) configural invariance, (ii) compositional invariance, and (iii) an assessment of equal means and variances. When the steps are accomplished under the requirements of the model (Henseler et al., 2016) the measurement invariance of both groups is achieved, so it is possible to compare the groups. In the case of the model, partial measurement invariance was found.

[28] This method represents a nonparametric approach to conduct multigroup analyses. The technique is based on an approximate randomization test where a subset of all possible data permutations between groups is made.

On the view of this result, we further explore potential gendered differences on individual items. However, it should be noted that the number of Spanish respondents largely exceeds that of participants from other countries. On the one hand, this relative cultural homogeneity allows to mitigate possible differences in the impact of national culture on the emotional processes of individuals, that could affect their responses (Elfenbein and Ambady, 2002). On the other, this could hinder statistical inferences. To address this issue, the same number of observations for different countries were selected to achieve equal representation by country.

To this end, a simple random sample (SRS) was selected. This sample fulfils two properties, namely that all individuals in the population have the same probability of being selected and all samples of the same size have the same probability. Through simple random sampling (without replacement) it is considered that all individuals are selected independently, so that no bias is considered when distinguishing one individual from another. Thus, the selection of each individual is based on a completely random draw.

For this purpose, a number was associated with each record and random numbers were generated using the *random number generation function* of the Excel programme. Only people who were entrepreneurs were considered, so that the situation of men and women in terms of entrepreneurship was analysed. The randomness of the sampling guarantees the representativeness of the population under study, so inferential statistics can be carried out and the results obtained are extrapolated to the entire population.

After obtaining the SRS, a Test for Equality of Means[29] was performed using several methods to test statistically significant differences across women's and men's responses. Table 19 reports the results of this analysis. As can be seen, women score on average higher than men in almost all the questions.

Table 19: Gender differences on individual items

| Dimension/Indicator | Women | Men | Significance |
|---|---|---|---|
| FR1. Job seeking | 5.370 | 5.875 | No |
| FR2. Necessity | 5.370 | 5.125 | No |
| FR3. Supplementing household income | 4.555 | 5.000 | No |
| DR1. Finding/spotting a market opportunity | 5.593 | 5.500 | No |
| **DR2. Desire to organise your own company** | **5.889** | **4.625*** | **Yes** |
| DR3. Gaining flexibility | 5.889 | 5.625 | No |
| DR.4 Decision-making | 5.889 | 5.500 | No |
| DR5. Participation in management and control processes | 5.444 | 4.625 | No |
| DR6. Adjustment to personal and economic needs | 5.815 | 5.000 | No |
| DR7. Creating your own project | 6.259 | 5.625 | No |
| DR8. Social Status | 3.596 | 3.250 | No |
| DA1. Financial aid | 4.148 | 3.625 | No |
| DA2. Existence of a favourable environment for entrepreneurship | 4.185 | 4.250 | No |
| **DA3. Having/Using/Benefiting from earlier entrepreneurship training** | **5.185** | **4.215*** | **Yes** |
| DA4. Family business | 2.704 | 3.500 | No |
| SO1. Perception of entrepreneurship as a primarily male activity | 4.074 | 3.125 | No |

[29] Namely, t-test; Satterthwaite-Welch t-test; Anova and Welch F-test*.

| | | | |
|---|---|---|---|
| HC1. Lack of business education | 4.519 | 3.875 | No |
| HC2. Absence of advisory and information services | 4.889 | 5.000 | No |
| EO1. Lack of information on support measures | 5.407 | 4.625 | No |
| EO2. Lack of infrastructure (such as industrial ground) | 4.370 | 4.875 | No |
| **EO3. Lack of favourable conditions (bureaucracy, lack of support)** | **4.963** | **5.750*** | **Yes** |
| PO1. Difficulties in reconciling personal and family life | 6.000 | 5.500 | No |
| PO2. Personal difficulties | 4.889 | 4.875 | No |
| FO1. Difficulties in accessing finance | 5.852 | 6.000 | No |
| **FO2. High fixed costs** | **5.185** | **6.625*** | **Yes** |
| RE1. Access to financial resources | 5.037 | 5.125 | No |
| RE2. Policies supporting business start-up | 5.444 | 4.750 | No |
| RE3. Training programmes | 5.593 | 5.000 | No |
| RE4. Consultancy services | 5.444 | 5.125 | No |
| PE1. Access to entrepreneurship programmes (specific programmes) | 5.481 | 4.875 | No |
| **PE2. Self-confidence building and empowerment programmes** | **5.667** | **4.750*** | **Yes** |
| **PE3. Support for work-life balance** | **6.074** | **4.750*** | **Yes** |
| PE4. Personal and professional contacts | 6.296 | 6.375 | No |
| PE5. Personal or professional needs | 5.815 | 5.750 | No |

A closer look at these scores allows for the following observations to be made:

- Force motives to entrepreneurship seem to be more important for men than for women, regardless the decision related to necessity (for example, as alternative to unemployment). This finding concords with the aforementioned multigroup analysis, although it is not statistically significant.
- Women acknowledge more importance to desire motives to foster entrepreneurial activity than men. However, only in one case (the desire to organise an own company) this difference is significant.
- As for direct drivers for entrepreneurship, the influence of earlier entrepreneurship training is higher for women than for men. Also, this difference is statistically significant. Moreover, men seem to be more influenced for external proxies (e.g., a favourable environment for entrepreneurship or family business).
- Women find more difficulties in personal barriers for entrepreneurship than men. On their part, male entrepreneurs give more importance to contextual barriers such as lack of support and bureaucracy. The perception of difficulties in supportive measures to entrepreneurial activity and the existence of high fixed costs is significantly higher across men.
- Women put more emphasis than men on those enhancers related to promote personal resources that favour entrepreneurship. Self-confidence building and empowerment programmes and support for work-life balance are specially valued measures for women, being this higher valuation statistically significant.

Summarizing, the results of these studies allow to add some conclusions:

1. Regarding the motives to became entrepreneur, desire reasons such as spotting a market opportunity, participation in management and control processes, adjustment to personal and economic needs and gaining flexibility seem to be especially important for women, while force motives are considered more influential by men.

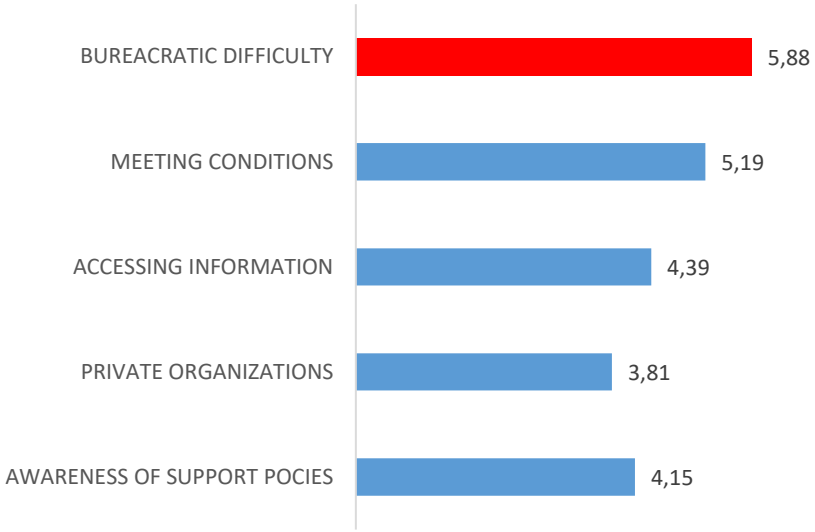
2. Perceived enhancers and motivations have a positive and significant effect on entrepreneurial intention, whereas perceived barriers significant and negatively impact entrepreneurship. Additionally, the positive influence of enhancers doubles that of motives to became entrepreneurs, entailing a prevalence of external focus to enrol business.
3. Barriers to entrepreneurship have a negative effect on the intention to start business. A deeper analysis of this influence confirms that perceived barriers moderate the relationship between the motives to become an entrepreneur and the intention to do so, as well as the effect of enhancers on entrepreneurial intention. This finding suggests that certain entrepreneurship drivers can counteract for the negative effect of the perceived barriers and, indeed, the effect is particularly important when considering measures aimed at favouring individuals' personal resources. This mean that the positive effect of these enhancers can be partially annulated when there is a high perception of barriers for entrepreneurship, but also that a good package of measures might reduce the perception of barriers to entrepreneurship.
4. Although the size of the sample undermines the possibilities to deeply explore gendered differences on entrepreneurship, several assumptions can be made. Thus, men are more likely to respond to force motives to become entrepreneur than women, who are more influenced by desires motives. Also, women seem to be more receptive to internal proxies to entrepreneurship, while the importance of external support is more valued by men. Additionally, this internal-externa focus is also perceived in barriers, since men put more attention to external difficulties (e.g., bureaucracy or absence of advisory services) than women.

# 4. PROMOTING ENTREPRENEURSHIP

Governments, institutions, and private organizations implement programs aimed at fostering entrepreneurship, on the basis of its expected results in economic growth and development. The perception on the disposal and usefulness of these programs across real and potential entrepreneurs was also included in the study.

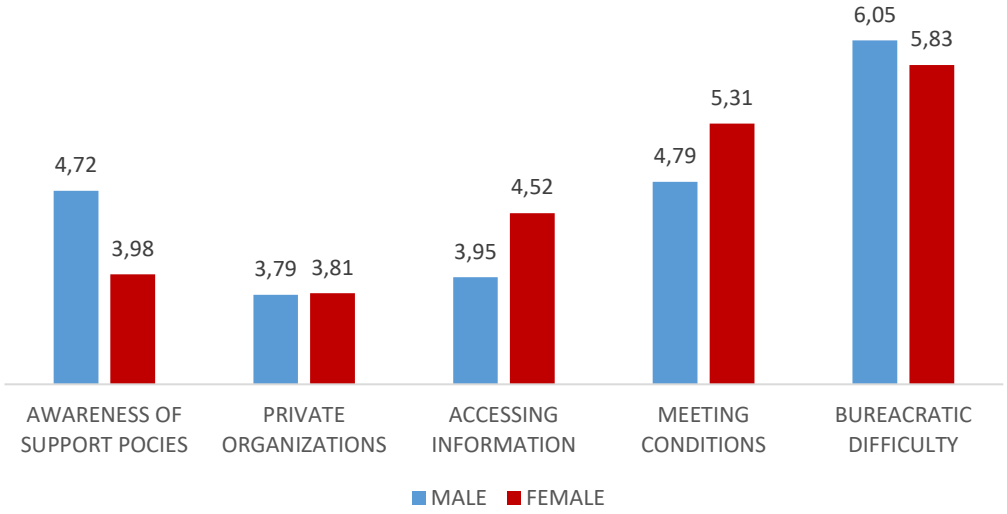
The first question asks participants to measure the main difficulties they face when looking for entrepreneurship support policies in their country. On average, individuals perceive measures as bureaucratic and time-consuming. Moreover, they also find difficulties in meeting the conditions required by these support measures (for example, for legal requirements).

Figure 23: Difficulties on entrepreneurship support policies (average)



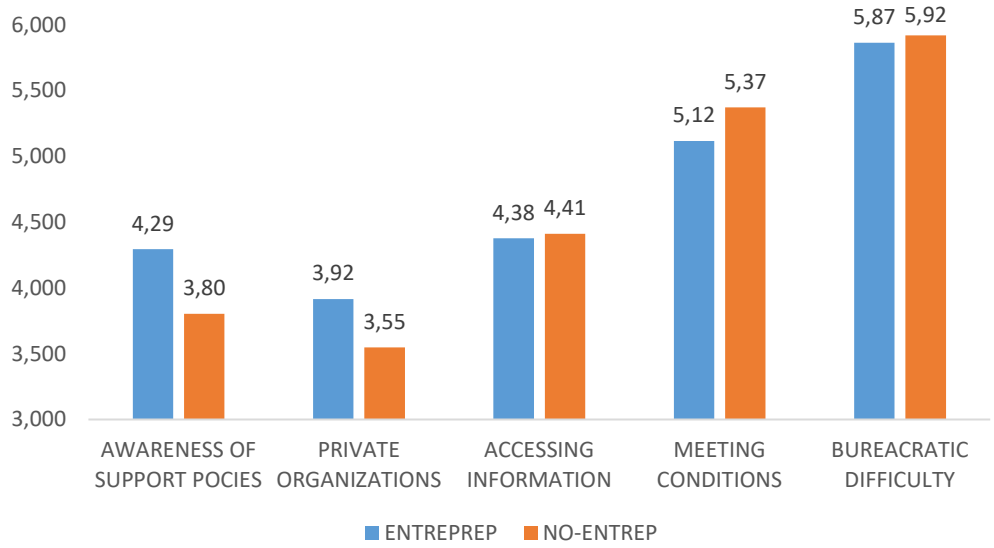

Women and men acknowledge similar difficulties on accessing policies aimed at favouring entrepreneurship, but with different intensity (Figure 23). Thus, men find more difficult to address the bureaucratic requirements that are inherent to these measures, while women perceive more problems to meet the conditions to receive the supportive aid. One of the scores is particularly interesting, namely the one that asks about the level of awareness of support policies. As can be seen in Figure 24, men say that they are clearly more aware than women on these measures. Moreover, women find more difficult to access the information related to entrepreneurship support. Hence, a possible explanation for such a difference is that men usually have a more active networking activity, and these formal/informal contacts allow them to acquire a better knowledge of possible aids (or even a direct contact with organizations that provide a set of measures).

Figure 24: Difficulties on entrepreneurship support policies (Men *vs* Women)




The perceptions on these difficulties are shared by those that are not current entrepreneurs but have some intention to start business when finishing their studies. As Figure 25 depicts, slight differences can be found in each element. As could be expected, non-entrepreneurs acknowledge a lower level of awareness on supportive measures than entrepreneurs.

Figure 25: Difficulties on entrepreneurship support policies (Entrepreneurs *vs* non-entrepreneurs)




When answering about the importance of different support measures according to their effect on female entrepreneurship, the results show important differences. Mentoring is ranked as the most useful measure on average, followed by networking and consultancy. However, men and women show different response pattern (Figure 26).

Figure 26: Lines of entrepreneurship support policies (Men *vs* Women)

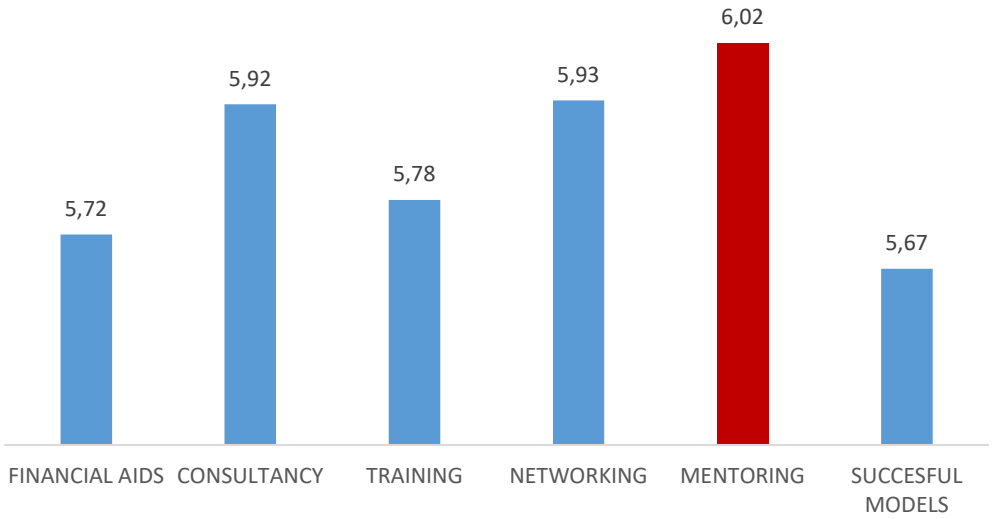
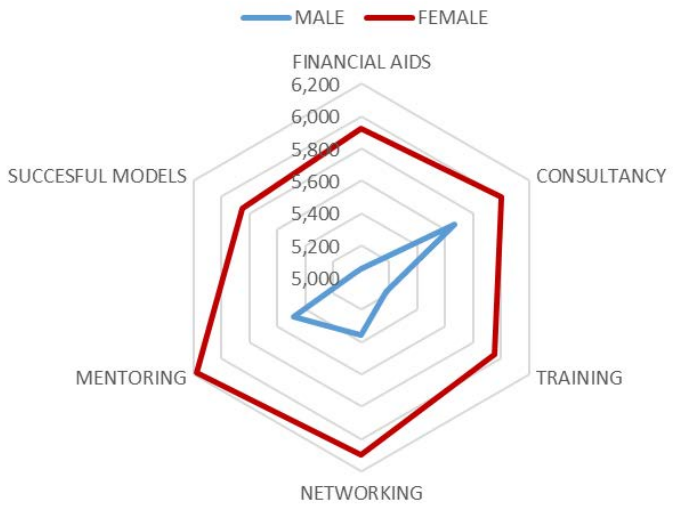



Figure 27 shows the main differences on the perception of the importance of lines of support aimed at fostering female entrepreneurial activity among women and men. As can be seen, men score on average support lower than women. A closer look to these scores shows that men seem to underestimate the importance of providing examples of successful models of entrepreneurship and mentoring compared to women.

Figure 27: Gap in perception of priority of lines of entrepreneurship support policies (Men *vs* Women))




Additionally, results on this valuation between entrepreneurs and not entrepreneurs reveal important differences on the perceptions of these supportive measures. As Figure 28 shows, consultancy seems to be the most valued measure for not entrepreneurs, while the effectiveness of mentoring, networking and the visibility of successful models is clearly underscored.

Figure 28: Gap in perception of priority of lines of entrepreneurship support policies (Entrepreneurs vs non-entrepreneurs)

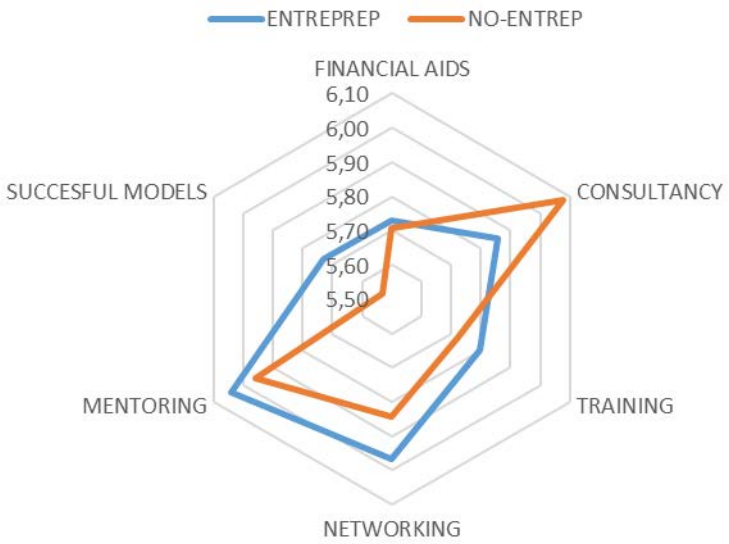
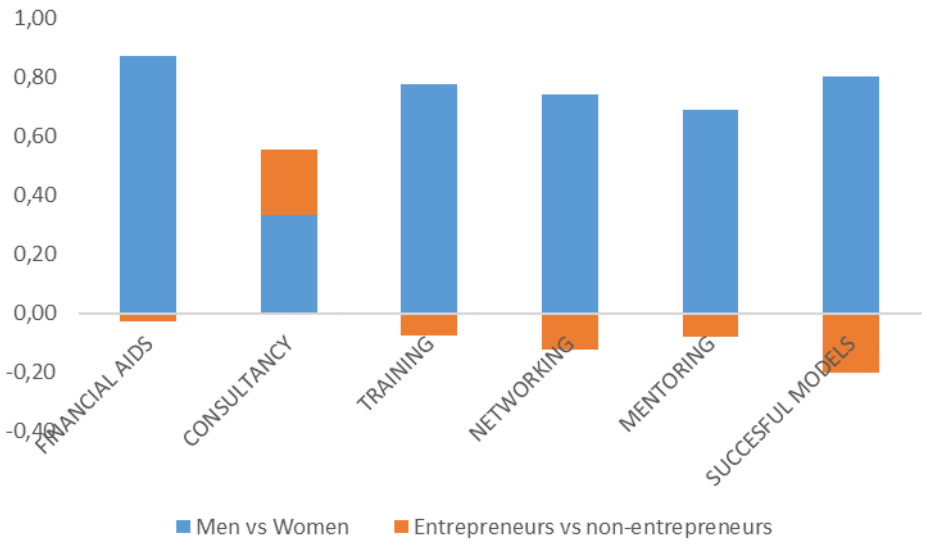



Figure 29 summarizes differences on entrepreneurship support policies among aforementioned groups. Thus, scores between men and women differ, as well as perceptions between entrepreneurs and not entrepreneurs do. This result is of particular importance, since it states that men feel supportive policies (both the issues to be addressed and their priority) different than women do, and that not entrepreneurs have, on average, a different view on these measures. Overall, the realisation of these differences means focusing on the figure of the decision-maker as a key element for the effectiveness of entrepreneurship policies.

Figure 29: General gap in entrepreneurship support policies



# 5. A GENDERED VIEW ON PROMOTING ENTREPRENEURSHIP

Entrepreneurship has traditionally been considered an important driver of development and economic growth, as well as an engine for social welfare and employment. Thus, governments worldwide include actions aimed at promoting this activity in their agendas. Financial aids, technological support, and consultancy services to better deal with inherent challenges of entrepreneurial activity are some of the support policies that governments implement to promote the setting up and growth of business.

Both governments and institutions have recently set their sights on women as a potential source of entrepreneurship, because women have entered entrepreneurship in the last decades and they conform to one of the fastest growing entrepreneurial populations worldwide (Brush and Cooper, 2012). Hence, ignoring this fact implies overlooking a valuable and unexploited source of economic development. Under these circumstances, governments usually target women when designing entrepreneurship support policies.

Despite this special recognition, women entrepreneurial activities remain quite underrepresented. The analysis carried out in this study may help to shed light on the reasons for the apparent lack of effectiveness of these measures. Perhaps the most relevant conclusion from this study is that to think *about women* is different from *considering women*, and this difference seems to be the breakpoint to better design and implement gendered lines of support aimed at fostering entrepreneurship.

Entrepreneurship starts out with entrepreneurs, those who may want to get into business. Thus, the same way that companies specifically adjust their products of services to the needs and preferences of their consumers, governments must adapt their initiatives to the features of the target they aim to achieve with their public policies. This is specifically about understanding how, when, and why women want to start businesses, what specific barriers they encounter, and what kind of support they especially value when facing entrepreneurial activity. In other words, recognizing that entrepreneurship requires turning attention to the unique needs of women at different points in the entrepreneurial process.

Along these lines, women enter business out of similar reasons than men, but women seem to be more motivated by desire than for necessity reasons such as a source of income. Also, women remain hampered by barriers and constraints, just as men do. However, the barriers faced by women entrepreneurs seem to respond more to internal needs (i.e., lack of business education or difficulties in reconciling personal and family life) than to external difficulties such as financial constraints. Accordingly, the usefulness of the lines of support aimed at facing these barriers are perceived as different depending on the gender of the potential beneficiary. Thus, women especially value measures aimed at improving their competences and capabilities, while men perceive direct aids (i.e., financial aid) as particularly valued.

Overall, a general view on these results suggests that women entrepreneurs are internal-driven, whereas men entrepreneurship is out-ward oriented. Consequently, this decisive difference must specifically be addressed in all the phases of the process of planning supportive policies aimed at fostering entrepreneurship.

Figure 30: A proposal of gender-aware system of support

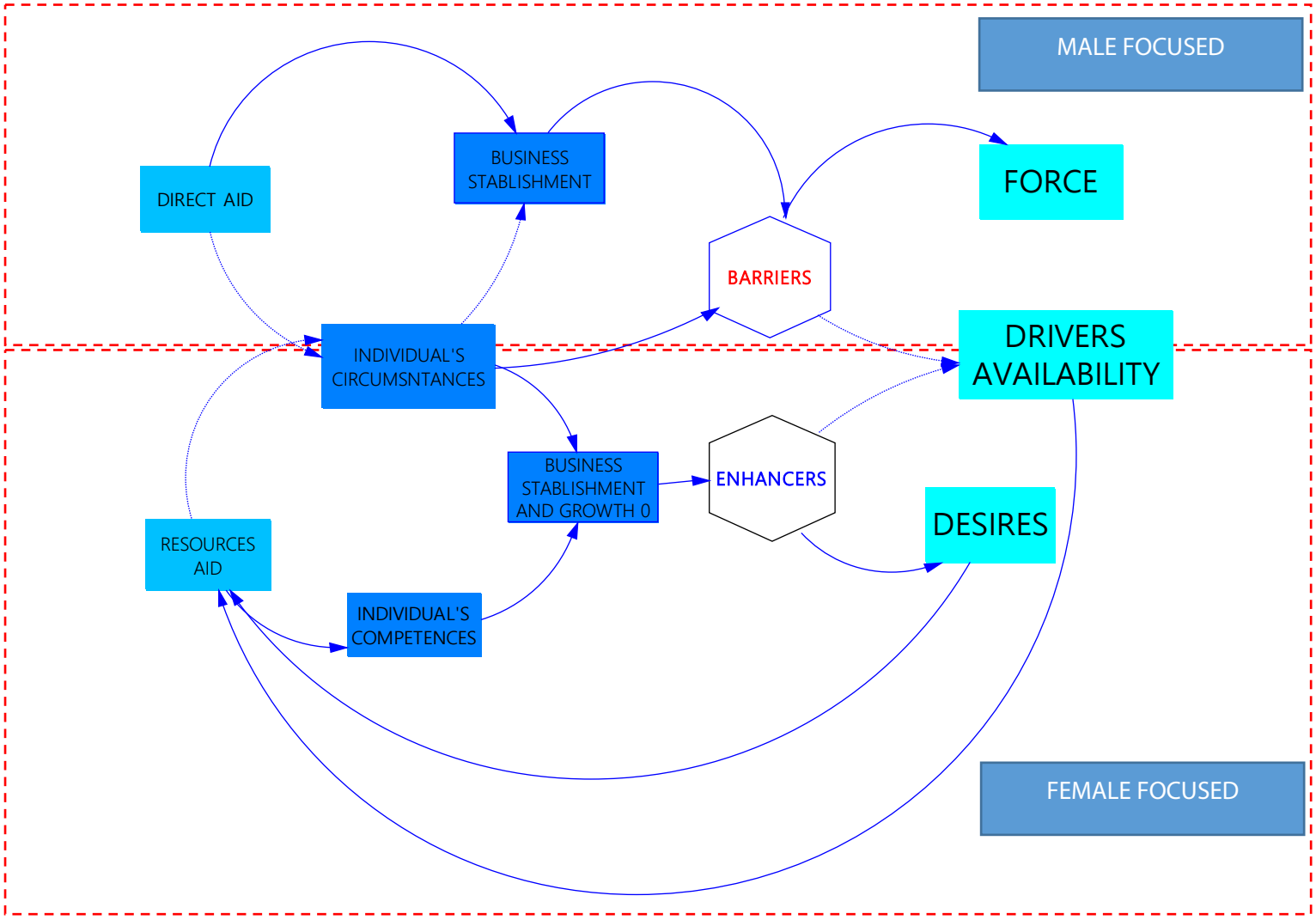


Figure 30 depicts a proposal for a gendered-aware framework aimed at improving entrepreneurship. As can be seen, gender awareness mainstreams all the phases of the entrepreneurship support system, on an explicit recognition that there are significant differences between male and female motivations, perceived barriers, and useful enhancers regarding entrepreneurship.

Therefore, a *male focused framework* should include a set of direct measures aimed at addressing external barriers, such as providing access to financial resources or consultancy services. These measures can help to avoid external perceived barriers to starting business and consequently affect the business creation process. This is particularly important when thinking about starting business due to force motives, such as the need to find an alternative to unemployment. In this process, barriers to business start-up may increase the opportunity cost of foregoing other types of support (e.g., unemployment benefits).

In contrast, a *women-centred framework* should follow an internal approach. Consequently, lines of support should include actions aimed at enhancing women's personal resources as entrepreneurs, such as entrepreneurship programmes, through actions promoting the development of self-confidence and empowerment or by favouring access to personal and professional contacts. Most interestingly, a greater perception of personal competences and capabilities should influence not only the creation of business, but also their future development and growth. This expected effect is particularly important when entrepreneurship is primarily driven by desire, e.g., when one aspires to set up and organise one's own business and to participate in management and control processes. Moreover, this process can have a self-reinforcing side effect. Thus, as the number of women entrepreneurs increases, so do the number of potential role models. In turn, these successful role models can help to visualise women's capabilities, act as mentors for potential women entrepreneurs and create and facilitate access to social and professional networks. All these effects can, in turn, be useful enablers for future women entrepreneurs.

On the sides of both frameworks a third set of actions can also be applied. Since individual circumstances seem to influence both female and male entrepreneurs [e.g., difficulties in managing work-life domain or personal needs], actions aimed at addressing these concerns could benefit both types of entrepreneurship. Accordingly, a set of measures focused on easing personal constraints can minimise perceived barriers such as difficulties in balancing family responsibilities and maximise enablers, for example the opportunity to devote time and effort to the business. This could be particularly useful if the opportunity to start a business is taken, e.g., out of family tradition.

Last but not least, an important question still remains: who should drive this process? As noted above, men's views on entrepreneurship are clearly different from women's. Similarly, entrepreneurs and non-entrepreneurs have different approaches to the priority of barriers to be avoided and, above all, the importance of measures to be implemented. Therefore, it can be argued that a co-production approach is more appropriate when designing actions to enhance entrepreneurship. Moreover, in this context, the role of decision-makers, private organisations and entrepreneurs appears to be crucial in pooling knowledge and resources to ensure a shared vision of entrepreneurship. In particular, the first-hand knowledge of women entrepreneurs can clearly contribute to implementing a better designed and more likely to be successful bottom-up model of support measures than other models designed in a top-down manner, mainly for male decision makers, and for inexperienced actors.

# 6. CONCLUSIONS

This study analysed the reasons why women are less likely to engage in entrepreneurship than men. One of the classic explanations for this difference argues that women and men have different motivations for becoming entrepreneurs. Research on this issue has found that women's motives for entrepreneurship are similar to those of men, such as independence, autonomy, self-control or being their own boss. Moreover, when exploring the differences, research has found mixed results. In contrast to these trends, this study found that women enter entrepreneurship out of desire reasons such as creating and managing their own project or participating in management processes, while men enter entrepreneurship mainly out of force reasons such as looking for a job or getting out of unemployment.

Another traditional explanation is that women face different barriers than men when they consider starting a business. This study confirms this long-held belief, as women seem to be more influenced by internal constraints than by external ones. Thus, women are more concerned about their skills and circumstances [i.e., education, lack of information, difficulties in accessing networks or life-related issues] than men, who identify external barriers as the main concern [i.e., financial difficulties, lack of consultancy services or bureaucracy]. As women face different barriers than men, they also perceive the usefulness of supportive measures differently. Indeed, women prefer measures aimed at improving their personal skills and capabilities, while men are more interested in direct support. This study therefore suggests the existence of a third explanation for the tendency of women to participate less in entrepreneurship: different perceptions of the adequacy of support measures suggests that their effectiveness can be improved.

Based on this assumption, the results of this study yield some important conclusions that enable a fuller understanding of the underlying effects of entrepreneurial activity:

- Motivations, barriers, and enhancers are intrinsically related and have a conjoint effect on entrepreneurial intention. While perceived enhancers and motivations have a positive and effect, perceived barriers negatively impact entrepreneurship.
- Enhancers of entrepreneurship have a great influence on entrepreneurial intention, while motives to become entrepreneurs account for less than a half of the enhancer effect. The negative effect of barriers on the intention to start a business is not as strong as could be expected.
- The positive effect found between entrepreneurship enablers and entrepreneurial intention confirms that the provision of support measures aimed at favouring entrepreneurs has a positive effect on individuals' intention to start a business. However, the perception of barriers to entrepreneurship may diminish this positive effect and undermine the role of supportive measures as a booster for entrepreneurs.
- Desire motives have the strongest influence on entrepreneurial intention, and enablers related to improving personal resources [e.g., training programmes, boosting self-confidence and support for work-life balance] have twice the influence on entrepreneurial intention than direct support. This major influence of personal enhancers is more important for women entrepreneurs than for men.
- An important result of this study is that perceived barriers moderate the positive relationship between motivations, enhancers, and entrepreneurial intention. The negative impact of barriers on entrepreneurial intention is exacerbated when the negative effects on desire motives and supportive measures are considered. This result highlights the need to better identify and explore the role of perceived barriers on entrepreneurship.

An overview of the results of the study shows that women entrepreneurs are mainly attracted by different desires to become entrepreneurs, a professional activity in which they expect to fulfil their

expectations. Women particularly value the acquisition of skills and competences to better manage their business, as well as access to professional networks where they can find advice and learn about successful role models of women entrepreneurs. In contrast, male entrepreneurs are driven to entrepreneurship as an alternative to unemployment or because they need to find a source of income. Consequently, men are mainly interested in support measures that can facilitate the creation of a business. In summary, women's entrepreneurship seems to be internally driven, whereas men's is mainly externally driven.

**Policy makers need to recognise these differences between male and female entrepreneurs when designing their policies** aimed at fostering entrepreneurship. Gender must therefore be mainstreamed at all stages of the design process of support measures, from the beginning to the end: from exploring alternatives to offering a package of support measures. In view of our results, by adapting all elements of the entrepreneurship support framework [i.e., motives, barriers and enablers] it is possible to achieve a higher level of effectiveness, as well as to better match women's expectations and preferences.

**To this end, several recommendations can be added:**

### Think proactive

Public policies should be proactive and not reactive. Reactive actions are designed to solve problems, proactive actions are designed to prevent problems from arising. It is true that entrepreneurs face great difficulties in setting up businesses, but it is equally true that the difficulties increase as businesses grow. The possession of entrepreneurial skills is key to effectively managing these problems. Consequently, support actions should prioritise measures to improve the resources and skills of entrepreneurs as a way of ensuring the sustainability of business.

### Think positive

Direct support is aimed at solving problems such as financial difficulties. While these actions can be useful, they also contribute to visualising the negative facets of entrepreneurship. Publicising a catalogue of problem-solving measures is tantamount to making a catalogue of all the difficulties of being an entrepreneur. Moreover, according to our model, the perception of barriers has a clear detrimental effect not only on entrepreneurial intention, but also on the perceived usefulness of support.

Therefore, a more ambitious set of measures including training, mentoring and dissemination of successful models can promote a more positive view of entrepreneurship. Entrepreneurship should be seen as a great opportunity for career advancement, not as a hard and costly profession. This positive approach seems to be especially important for women, as female entrepreneurs are particularly attracted by the potential benefits of becoming entrepreneurs. Therefore, enhancing effects such as self-fulfilment through creation, management, decision-making and control of one's own project, autonomy and freedom of self-organisation of work may be more fruitful than providing direct support to solve specific problems [e.g., a limited loan to start the business].

In addition, this positive approach could be particularly useful in disseminating entrepreneurial intentions to potential new entrepreneurs. This suggestion is important for training programmes aimed at younger people, as a relevant pull factor for the new generation of female entrepreneurs.

### Well-adjusted policies

Several countries use entrepreneurship as an alternative to unemployment. While this may make political sense, it seems less economically sound. Under these conditions, direct support is likely to

support enterprises that are destined to fail, with limited impact and uncertain employment generation potential. It is therefore advisable to target self-employment, unemployment and entrepreneurship separately, and to design support measures differently for women who see business as their last chance to be employed and for women who really want to start a business.

### Targeted policies

Women are often the specific target of support actions to promote entrepreneurship. This pattern has at least two limitations: firstly, support for women entrepreneurs may be reduced to reserving a part of the measures for women to benefit from (e.g., a quota) and, secondly, some women with entrepreneurial aspirations may not benefit from the measures. For example, while disadvantaged women are often a priority target for support, women who aspire to develop large projects seem to be omitted from these targets. Moreover, the former practice involves the application of general policies to women, so that support actions are likely to be misaligned. Therefore, it is advisable to carefully review this practice of targeting potential beneficiaries, as well as to broaden the recipients of the measures.

In addition, it is important to improve the democratisation of measures. For example, while it is important to support university students in promoting their entrepreneurial intentions, as well as to foster interest in STEM among women, the world does not end with ICT and higher education. Therefore, it could be interesting to broaden the horizon of entrepreneurship to include more sectors and to promote various types of entrepreneurship. In other words, to improve the diversification of entrepreneurship. For example, by exploring specific measures for social and collective entrepreneurship.

### Focus on long term

Public policies should concentrate their efforts on the long term. The key should not only be the creation of enterprises, but it is important to encourage their successful development and sustainable growth. If measures are concentrated around "palliatives", for example by facilitating foundations for business start-ups, it is likely that what happens to these businesses in the medium term will be forgotten. The effectiveness of measures will be measured, at best, in terms of how many businesses are created, not how many survive in the medium term.

This shift of focus to the long-term means taking on board the old saying "*not only give fish to the hungry, but also teach them how to fish*". In other words, it re-emphasises the need to strengthen the entrepreneur's personal resources. In the case of women, it seems particularly important to develop programmes aimed at improving self-confidence. Moreover, this practice can have positive side effects, such as the reversal of traditional risk-averse and conservative female behaviours. It is traditionally assumed that women are more risk-averse, which may translate into a certain reluctance to apply for loans, for example, which could be determinant for business growth. If women are more self-confident, the effects of this behaviour are likely to be mitigated.

### Decision-makers on the spotlight

One of the main findings of this study is that women and men clearly differ in their views on entrepreneurship, as do entrepreneurs and non-entrepreneurs. As a result, a co-production approach to policy design seems to be more appropriate for pooling knowledge and resources to ensure a more diverse and comprehensive view of entrepreneurship. Furthermore, this co-production implies adopting a bottom-up design model that is more likely to fit the needs and expectations of women entrepreneurs.

### Simplify and promote active communication

Quantity is not always synonymous with quality. In some countries, the heterogeneity of the type and source of measures jeopardises their effectiveness. The process of seeking information and support can be very slow and tedious, to the extent that potential recipients may be discouraged from applying for support by the proliferation of information sources, the multiple requirements or the need to hire an assistant to fulfil bureaucratic obligations. Therefore, a clearer, more active and comprehensive picture of the system of support measures is clearly desirable.

In this respect, the design of a centralised website where information on support is broken down by category would be desirable. In this way, users would be able to access quickly and intuitively those aids that might be particularly appropriate for their case.

It would also be advisable to establish a direct communication channel with applicants. This would allow decision-makers to obtain first-hand information on the unmet needs of potential entrepreneurs. This would reinforce the practice of bottom-up co-construction of support measures suggested above.

### Be creative

The current economic situation introduces uncertainty in business context and economic perspectives. Under these circumstances, it might be advisable to further elaborate on alternative instruments for promoting women entrepreneurship.

The EU's commitment to financial instruments provides an optimal roadmap to inspire these new developments. For example, two of the most common financial instruments are funded risk sharing loan instrument and guarantee instruments. These instruments aimed at facilitating financing to the final benefits, usually in more favourable conditions in terms (e.g., reduced interest rate, or longer maturity). Most interesting, recent development on financial instruments authorises the combination of these elements with grant supports, which implies to complement and diversify supporting options to entrepreneurs.

Therefore, further research is needed to explore the options that these instruments bring for women entrepreneurs as a way to improve the lines of support for their ventures. Moreover, the *NextGenerationEU* recovery instrument could be the ideal scenario to test these new stimulus measures.

### Be collaborative

Private companies send a strong message through their actions in support of women entrepreneurs. These collaborative measures suggest that there may be an untapped opportunity for governments to strengthen synergies with business through different actions focused on women-led enterprises. Joint efforts, for example, can support projects to identify and support women entrepreneurs who have potential but lack the capacity to start a business. Likewise, public-private collaboration can develop partnerships in which companies with relevant skills can act as advisors to potential women entrepreneurs, as well as provide them with cost-effective products and services.

### Be effective, but don't forget to be efficient

One of the biggest surprises of this work was that the results of the implementation of support measures are often not measured. In this sense, establishing measurement and control mechanisms is essential not only to monitor the effectiveness of these measures, but also as a control tool and a mechanism to identify possible improvements. Therefore, it is not enough to allocate resources to support measures, but it is also essential to verify their correct use. To this end, it is key to differentiate between *quality* and *quantity* of entrepreneurship.

As a final recommendation, addressed especially to EU policy makers, it should be noted that there are significant problems in measuring entrepreneurship effectively. Researchers typically use two data sources in economic analysis to approximate entrepreneurial activity: (i) labour force surveys and (ii) the Global Entrepreneurship Monitor, a survey of entrepreneurship conducted by a consortium of academic institutions and consulting firms from around the world. However, both sources are only approximations of entrepreneurial activity. In the case of the former, the data on self-employment do not fully capture entrepreneurial activity, as they include, for example, the self-employed, while they exclude hybrid entrepreneurs (i.e., persons who have another main occupation). As regards the latter source, differences between participating countries, for example, make it difficult to compare data and trends. In addition, some other sources could be useful (e.g., the OECD-Eurostat Enterprise Indicators Programme). However, they often need to be updated. It is well known that what is not measured cannot be monitored. Better monitoring of entrepreneurial activity is therefore advisable to understand the extent of entrepreneurship better also in the EU.

Overcoming these measurement problems could help to answer new questions that may arise from this work. For example, are we creating gendered entrepreneurial biases? Do women tend to engage in certain businesses, reproducing patterns of horizontal segregation in the labour market? Does the promotion of seemingly simple activities create problems of entrepreneurial survival? Is women's entrepreneurship not visible? Should female entrepreneurship be redirected towards more profitable sectors? Should public resources be directed towards unprofitable activities? Are women entrepreneurs not innovative enough? Does risk discourage women entrepreneurs?

All these questions imply that the revolution has only just begun. There are fewer women entrepreneurs, and they tend to undertake less ground-breaking activities. Perhaps because of this, there is a certain ostracism towards female entrepreneurship. But this attitude must definitely change.

For the first step towards this new mindset, the suggested actions are simple and do not require a great deal of effort. The obstacles faced by women entrepreneurs are well known, as is the role of policy makers in addressing them. Therefore, the cornerstone is not that we need more measures, what we definitely need is other kind of supportive measures. Again, it is not about quantity, it is about quality. What this study argues is that a new approach to tackling these problems can increase the effectiveness of measures to overcome them.

In this way, governments send a positive message to women who are willing to enter and benefit from business, both for themselves and for their countries. Otherwise, they may run the risk of the "out of sight, out of mind" syndrome. The quickest way to squander priceless talent and endless possibilities: women's talent.

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# ANNEX I. DETAILED DATA ON SYSTEMATIC RESEARCH

Table 20: List of publications with papers on women entrepreneurship

| JOURNAL | Number of papers |
|---|---|
| INTERNATIONAL JOURNAL OF GENDER AND ENTREPRENEURSHIP | 96 |
| SMALL BUSINESS ECONOMICS | 82 |
| JOURNAL OF SMALL BUSINESS MANAGEMENT | 49 |
| GENDER IN MANAGEMENT | 44 |
| GENDER WORK AND ORGANIZATION | 43 |
| JOURNAL OF BUSINESS VENTURING | 43 |
| INTERNATIONAL ENTREPRENEURSHIP AND MANAGEMENT JOURNAL | 41 |
| ENTREPRENEURSHIP THEORY AND PRACTICE | 39 |
| ENTREPRENEURSHIP AND REGIONAL DEVELOPMENT | 38 |
| INTERNATIONAL JOURNAL OF ENTREPRENEURIAL BEHAVIOR & RESEARCH | 38 |
| INTERNATIONAL SMALL BUSINESS JOURNAL-RESEARCHING ENTREPRENEURSHIP | |
| SUSTAINABILITY | 37 |
| JOURNAL OF BUSINESS ETHICS | |
| JOURNAL OF DEVELOPMENTAL ENTREPRENEURSHIP | 27 |
| JOURNAL OF ENTERPRISING COMMUNITIES-PEOPLE AND PLACES IN THE GLOBAL ECONOMY | 27 |
| JOURNAL OF SMALL BUSINESS AND ENTERPRISE DEVELOPMENT | 27 |
| JOURNAL OF ENTREPRENEURSHIP IN EMERGING ECONOMIES | 27 |
| WORLD DEVELOPMENT | |
| WOMENS STUDIES INTERNATIONAL FORUM | 25 |
| JOURNAL OF BUSINESS RESEARCH | 25 |
| MANAGEMENT DECISION | 23 |
| JOURNAL OF GLOBAL ENTREPRENEURSHIP RESEARCH | 22 |
| FEMINIST ECONOMICS | 17 |
| GENDER PLACE AND CULTURE | 17 |
| ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES | 14 |
| PACIFIC BUSINESS REVIEW INTERNATIONAL | 12 |
| JOURNAL OF RURAL STUDIES | 12 |
| FRONTIERS IN PSYCHOLOGY | 11 |
| GENDER & SOCIETY | 11 |
| INTERNATIONAL REVIEW OF ENTREPRENEURSHIP | 11 |
| EUROPEAN JOURNAL OF DEVELOPMENT RESEARCH | 10 |
| JOURNAL OF AGRICULTURAL EXTENSION | 10 |
| ADVANCES IN DEVELOPING HUMAN RESOURCES | 10 |
| ASIAN WOMEN | 10 |
| SUMA DE NEGOCIOS | 10 |
| INTERNATIONAL JOURNAL OF SOCIAL ECONOMICS | 9 |
| AFRICAN JOURNAL OF BUSINESS MANAGEMENT | 9 |
| JIMS8M-THE JOURNAL OF INDIAN MANAGEMENT & STRATEGY | 9 |
| RESEARCH POLICY | 9 |
| JOURNAL OF TECHNOLOGY TRANSFER | 9 |
| INTERNATIONAL JOURNAL OF ENTREPRENEURSHIP AND INNOVATION | 9 |
| INTERNATIONAL MIGRATION | 8 |
| INTERNATIONAL JOURNAL OF ENTREPRENEURIAL BEHAVIOUR & RESEARCH | 8 |
| HUMAN RELATIONS | 8 |
| HUMAN ORGANIZATION | 8 |
| ADMINISTRATIVE SCIENCES | 8 |
| EDUCATION AND TRAINING | |
| Polish Journal of Management Studies | 8 |
| DEVELOPMENT IN PRACTICE | 8 |
| TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE | 8 |

| | |
|---|---|
| ENVIRONMENT AND PLANNING C-GOVERNMENT AND POLICY | 8 |
| JOURNAL OF ETHNIC AND MIGRATION STUDIES | 7 |
| GENDER AND EDUCATION | 7 |
| VENTURE CAPITAL | 7 |
| | 7 |
| | 7 |
| | 7 |
| | 7 |

# ANNEX II. REFERENCES ON BARRIERS FOR WOMEN ENTREPRENEURSHIP


**MARKET**

Bates, T. (2002). Restricted access to markets characterizes women-owned businesses. *Journal of Business Venturing, 17*(4), 313-324.

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**MONEY**

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**MANAGEMENT**

Barnir, A. (2014). Gender differentials in antecedents of habitual entrepreneurship: impetus factors andhuman capital. *Journal of Developmental Entrepreneurship, 9*, 1,

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**MOTHERHOOD**

Ashe, F., Treanor, L., & Leung, A. (2011). Motherhood and entrepreneurship: gender role identity as a resource. *International Journal of Gender and Entrepreneurship*.

Brush, C. G., de Bruin, A., & Welter, F. (2014). Advancing theory development in venture creation: signposts for understanding gender. In Women's Entrepreneurship in the 21st Century. Edward Elgar Publishing.

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**MACRO/MESO LEVELS**

Bogren, M.A. (2013). Networking women entrepreneurs: fruitful for business growth? *International Journal of Gender and Entrepreneurship, 5*, 1, 60-77

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# ANNEX III. QUESTIONNAIRE

### Women's Entrepreneurship

This survey is aimed at identifying the factors than can improve women's entrepreneurship. With this questionnaire we would like your opinion on the factors that may hinder and encourage entrepreneurship among women. The questionnaire is anonymous, and participation is voluntary. Thank you very much for your participation.

1. Gender
   - Female
   - Male
   - Prefer not to say

2. Age (years)
3. Educational level
   - Elementary/Primary
   - Vocational/Professional Training
   - High School/Secondary
   - University/Tertiary Education

4. Home country
5. Business Sector/Industry (e.g., transportation/logistics, manufacturing, education, services)
6. Kind of entrepreneurship
   - Individual
   - Collective (i.e., cooperative)
   - I am not an entrepreneur
7. Are you currently an entrepreneur?
   - Yes
   - No

8. Please rate your interest in undertaking an entrepreneurial activity (1: not interested at all; 7=most interested)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Interest in entrepreneurship | | | | | | | |

9. Please rate the following factors according to their importance as reasons for entrepreneurship ("1": not very important to "7": very important)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Interest in entrepreneurship | | | | | | | |
| Family business | | | | | | | |
| Job seeking | | | | | | | |
| Necessity | | | | | | | |
| Supplementing household income | | | | | | | |
| Finding/spotting a market opportunity | | | | | | | |
| Desire to organise your own company | | | | | | | |
| Gaining flexibility | | | | | | | |

| |
|---|
| Decision-making |
| Participation in management and control processes |
| Adjustment to personal and economic needs |
| Financial aid |
| Existence of a favourable environment for entrepreneurship |
| Having/Using/Benefiting from earlier entrepreneurship training |
| Creating your own project |
| Social Status |

10. Please rate the following factors according to their importance as obstacles to female entrepreneurship ("1": not very important to "7": very important)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Perception of entrepreneurship as a primarily male activity | | | | | | | |
| Lack of business education | | | | | | | |
| Lack of information on support measures | | | | | | | |
| Difficulties in reconciling personal and family life | | | | | | | |
| Difficulties in accessing finance | | | | | | | |
| Lack of infrastructure (such as industrial ground) | | | | | | | |
| Lack of favourable conditions (bureaucracy, lack of support) | | | | | | | |
| Personal difficulties | | | | | | | |
| Absence of advisory and information services | | | | | | | |
| High fixed costs | | | | | | | |

11. Please rate the following factors according to their importance as enhancers to female entrepreneurship ("1": not very important to "7": very important)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Access to financial resources | | | | | | | |
| Policies supporting business start-up | | | | | | | |
| Training programmes | | | | | | | |
| Self-confidence building and empowerment programmes | | | | | | | |
| Support for work-life balance | | | | | | | |
| Personal and professional contacts | | | | | | | |
| Access to entrepreneurship programmes (specific programmes) | | | | | | | |
| Personal or professional needs | | | | | | | |
| Consultancy services | | | | | | | |

12. If you were to start a new entrepreneurial project, in which sector would you do it?

13. What is your level of awareness of entrepreneurship support policies in your country? Please rate from "1" (very low) to "7" (very high).

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Level of awareness of entrepreneurship support policies | | | | | | | |

14. How aware are you of the support provided by private entrepreneurship support organisations (e.g., business associations) in your country? Please rate from "1" (not aware) to "7" (very aware)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Level of awareness of support provided by private entrepreneurship support organisations | | | | | | | |

15. Please rate the difficulty in accessing information on entrepreneurship support policies in your country. Please rate from "1" (not difficult) to "7" (very difficult).

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Difficulty in accessing information on entrepreneurship support policies | | | | | | | |

16. Please rate the difficulty in meeting the conditions required by entrepreneurship support policies (e.g. endorsements or legal requirements) . Please rate from "1" (not difficult) to "7" (very difficult)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Difficulty in meeting the conditions required by entrepreneurship support policies | | | | | | | |

17. Please rate the bureaucratic difficulty in accessing entrepreneurial support policies. Please rate from "1" (not difficult) to "7" (very difficult).

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Bureaucratic difficulty in accessing entrepreneurship support policies | | | | | | | |

18. Please rate the following support measures according to their importance in promoting female entrepreneurship. Please rate from "1" (not very important) to "7" (very important).

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Financial aid | | | | | | | |
| Consultancy | | | | | | | |
| Training programmes | | | | | | | |
| Networking | | | | | | | |
| Mentoring | | | | | | | |
| Visibility of successful models | | | | | | | |

19.Do you know of any outstanding programmes to support women entrepreneurs in your country?

20.Thank you very much for your time. If you would like to comment, please feel free to do so below.

21. If you have any questions or would like to receive the results of this study, please enter your email address below.

# ANNEX IV. STATISTICAL REFERENCES

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This study was commissioned by the European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs at the request of the FEMM Committee. It highlights that despite the increasing number of public policies and institutional resources designed to promote women-led business, the entrepreneurship gender gap persists. This study aims to analyse this apparent contradiction, focusing on three main questions: What are the constraints that women face when deciding to become entrepreneurs? What factors attract women's interest and motivate them to start their own business? And which policies may benefit women's entrepreneurship?

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