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Female Education and Entrepreneurship as Drivers of Economic Development

How the Right to Education Can Enhance Female Entrepreneurship and Contribute to Economic Growth

Master Thesis

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Chapter 1. Introduction

Female entrepreneurship and education have traditionally been a largely neglected topic in the examination of business and economic development in both legal and economic literature, as well as by policy makers.¹ Thus, the debate of whether and to what extent the right to education can influence the rates of entrepreneurship and of economic growth has, for the most part, ignored a gender-based distinction in studying the business sphere, but has instead focused on entrepreneurship in its most general terms. Indeed, it is increasingly accepted in academia that, until recently, the study of entrepreneurship, and the factors influencing the entrepreneurial culture, had been mostly confined to an examination of the entrepreneurial experience of ‘*white, able-bodied men*’, while other groups within the sphere, in particular women entrepreneurs, have been ignored to a large extent.² However, in recent years the importance of female entrepreneurship as an unexploited source of economic wealth and the particular needs of women entrepreneurs have been increasingly addressed in academia and in political agenda.³ Today, female entrepreneurship is increasingly recognized as one of the critical drivers of economic growth, innovation⁴ and poverty reduction.⁵ In addition, female entrepreneurship is largely recognized as a crucial factor within the modern entrepreneurial culture that shapes to a large extent the position entrepreneurship occupies in society and economic growth.⁶ Nevertheless, due to social attitudes and a universally present culture of gender discrimination, women entrepreneurs face unique gender-specific obstacles which constrain them from realizing their full potential in contributing to economic growth; thus, female entrepreneurs remain a minority and a particularly vulnerable group in the business world.⁷ A most prominent hurdle to female entrepreneurship relates to education, as stipulated in Article 26 of the Universal Declaration of Human Rights (hereafter, UDHR),⁸ i.e., the extent to which girls and women are able to exercise their right to education on an equal basis to their male peers.

As a result, the present study seeks to assess whether providing women with educational opportunities equivalent to those of their male counterparts can create a more efficient, profitable and growth-driven

¹Dima Jamali, ‘Constraints and Opportunities Facing Women Entrepreneurs in Developing Countries: A Relational Perspective’ (2009) 24 GM 232, 233; Organization for Economic Cooperation and Development, ‘Women’s Entrepreneurship: Issues and Policies’ (Report) (2004) <http://www.oecd.org/cfe/smes/31919215.pdf> accessed 21 March 2016, 5.

²Chartered Institute of Personnel and Development, ‘Entrepreneurs: What Can We Learn from Them? Inspiring Female Entrepreneurs’ (Report) (August 2013) CIPD Research Report 2, 3.

³Jamali (n 1) 232; OECD (n 1) 5.

⁴Brookings Institute, ‘Women Entrepreneurship and the Opportunity to Promote Development and Business’ (Policy brief) (September 2013) <http://www.brookings.edu/~media/research/files/reports/2013/09/private-sector-global-poverty-blum-roundtable/2013-bbr-women-entrepreneurship.pdf>, accessed 23 March 2016, 31.

⁵World Bank, ‘Female Entrepreneurship: Program Guidelines and Case Studies’ (2015) <http://siteresources.worldbank.org/EXTGENDER/Resources/FemaleEntrepreneurshipResourcePoint041113.pdf> accessed 21 March 2016, 3.

⁶OECD (n 1) 6.

⁷Ibid, 1.

⁸Universal Declaration of Human Rights (adopted 10 December 1948 UNGA Res 217 A(III) (UDHR) art 26.

culture of female entrepreneurship, thus leading to increased economic growth. The analysis will compare developed to developing countries in assessing the national rates of female entrepreneurship and the recent trends in the sphere, as well as the extent to which girls and women have access to education. The study will, therefore, aim to prove that constraining females from exercising their right to education and limiting their educational opportunities lead to sub-optimal performance levels of female entrepreneurship. In turn, these deficiencies in the performance of women-operated businesses create a major constraint to economic development on both national and international level. The analysis of these issues will be carried out in the following manner. Chapter 2 of the study will briefly describe entrepreneurship in general terms, and, more importantly, define female entrepreneurship as a separate sub-culture within the entrepreneurial world and identify the unique characteristics which set it apart from general entrepreneurship. In this context, special attention will be paid to the universal impediments women entrepreneurs face in establishing and growing businesses, as such hurdles shape to a significant extent the culture in both developed and developing countries. The right to education and the extent to which this right is enforceable in practice will be examined in Chapter 3. This chapter will assess the educational opportunities available to girls and women in comparison to the formal training available to their male peers. A further comparison will be carried out between the developed and the developing world in view of identifying the trends in female education which have an influence on the rates of female entrepreneurship, such as the industry choice of women entrepreneurs, and other features which distinguish women entrepreneurs from their male counterparts. Finally, the chapter will examine the extent to which education can influence the rates and quality of female entrepreneurship. An assessment of the performance of educated and of uneducated (or poorly educated) female entrepreneurs will be carried out in view of proving that educational constraints deprive women of realizing their full potential as entrepreneurs. Chapter 4 will build on this examination of the relationship between female education and entrepreneurship and will aim to demonstrate that enhanced educational opportunities for girls and women can bring about significant social and economic benefits in relation to GDP growth, job creation and poverty reduction. In addition, the chapter will consider the importance of female entrepreneurship in economic growth and the extent to which constraints on female entrepreneurship, specifically in the form of limited educational opportunities, represent obstacles to economic development. An examination of the current impact women entrepreneurs have on economic growth will be carried out, as well as an estimation of what the influence of female entrepreneurship on economic growth could be in conditions of gender equality in education. However, due to the limited data on the topic of female entrepreneurship and its impact on economic development, this estimation will be modest. Chapter 5 will conclude this study by examining a variety of policies which can be implemented in both the developed and the developing world in order to promote female education and thus, by creating a stronger and more efficient culture of female entrepreneurship, contribute to overall economic development.

Chapter 2. Female entrepreneurship

2.1. Entrepreneurship: definition

Before analyzing the notion of female entrepreneurship, it is useful to first define entrepreneurship in general terms and then identify what particular factors set the culture of female entrepreneurship apart from the entrepreneurial world as a whole. One possible definition of entrepreneurship includes '*the shared values and preferences (...) that affect the chances of an individual to become an entrepreneur*'.⁹ This description points to the importance of networking as a building block within the structure of entrepreneurship. Networks assist entrepreneurs in establishing contact with other entrepreneurs, and thus create a learning process; moreover, networking enhances the ability of entrepreneurs to identify profitable business opportunities and access financing, as well as to find business partners, suppliers, employees and clients¹⁰ - these are vital relationships which increase the chances of establishing and operating a business successfully. The capacity to form business relationships thus appears crucial to entrepreneurs in establishing business ventures, as it allows them to establish contact with like-minded individuals, to form business relationships, as well as enhances their ability to identify advantageous opportunities which would allow them to develop and grow their business ventures. However, this first definition is deficient in providing a complete image of the entrepreneurial culture. While it focuses on the values prevalent in the fabric of the business world and the important these principles have in terms of the processes of networking, opportunity recognition and relationship-building, the definition does not directly address one of the crucial features of entrepreneurship, i.e. the impact of general social norms on the entrepreneurial culture.

As any other cultural group, entrepreneurship is influenced by social perceptions and cultural values:¹¹ for instance, such perceptions may establish that individuals belonging to certain social groups are more apt to engage in entrepreneurial activity successfully than others. In this context, society plays a particularly important role in the entrepreneurial culture by establishing specific gender roles and stereotypes, such as the extent to which women are considered equal to men in their capacities to become entrepreneurs.¹² Therefore, the social position women and men occupy respectively has an important impact on the rates of entrepreneurship (and of female entrepreneurship in particular).¹³ Countries where gender roles are strictly divided, whereby there is a clear separation between activities suitable for men and occupations appropriate for women, are likely to exhibit high levels of gender-based discrimination in the form of restricting women's access to certain activities, for

⁹James Foreman-Peck, Peng Zhou, 'Cultures of Female Entrepreneurship' (Working paper) (2014) Cardiff Business School, http://business.cardiff.ac.uk/sites/default/files/working-papers/e2014_1.pdf accessed 1 March 2016, 2.

¹⁰World Bank (n 5) 6.

¹¹Foreman-Peck, Zhou (n 9) 5.

¹²Ibid 3.

¹³OECD (n 1) 8.

example, the pursuit of a career in the context of entrepreneurship.¹⁴ In these societies it is likely that, due to negative and restrictive gender stereotypes, the entrepreneurial culture will be dominated by male entrepreneurs, or, at the very least, that men entrepreneurs will face more relaxed barriers to entry on some markets compared to women. In contrast, countries where social norms place men and women on a relatively equal basis are more likely to afford fairly equivalent opportunities to both genders in connection to accessing the entrepreneurial culture. In consequence, it could be expected that there will not be a stark difference in the participation rates of men and women in entrepreneurship. Therefore, cultural norms can have an important impact on the rates at which individuals (and women in particular) enter the entrepreneurial sphere, as well as their performance in operating businesses. This study will aim to identify unfavorable gender-related social norms as a major constraint on the level and quality of female entrepreneurship, as well as on the educational opportunities open to girls and women.

Another manner in which entrepreneurial activity can be viewed is as *'a calculated risk-taking and continuing process of innovational activities that embodies discovery, evaluation and exploitation of opportunities, judgment of the possibilities and making decision in an identified uncertainty within a rapidly changing environment by using the spillover of knowledge and creating value out of this knowledge'*.¹⁵ This definition, similarly to the first one, stresses the importance of opportunity exploitation in creating and operating businesses, and identifies other essential features of entrepreneurship, namely, efficiency of decision-making, innovation, and adaptability to the ever-changing socio-economic context in which entrepreneurs operate. A central point in this context appears to be the training entrepreneurs have received prior to their engaging in entrepreneurial endeavor and the knowledge they have of the business world and the environment in which they operate. In fact, this definition implies that, without a sufficient degree of knowledge, an individual would be unlikely to successfully fit within the complex structure of the entrepreneurial culture: an entrepreneur who is not sufficiently knowledgeable would be less likely to identify and exploit valuable business opportunities, to innovate, to engage in efficient decision-making, while remaining sufficiently flexible and adaptable in operating businesses. As a result, the level and quality of education entrepreneurs have prior to their engaging in business activities, as well the availability of opportunities to acquire additional training, appear to be crucial to the quality of entrepreneurship.¹⁶ In this respect, the present study will seek to prove that entrepreneurs, specifically women, who are more highly educated, and who have the benefit of additional training and professional qualification, conduct more efficient businesses, provide a higher quality of goods and services, and, as a result of

¹⁴Foreman-Peck, Zhou (n 9) 3, 7.

¹⁵Jacques Ascher, 'Female Entrepreneurship- An Appropriate Response to Gender Discrimination' (2012) 8 JEMI 97, 97.

¹⁶Foreman-Peck, Zhou (n 9) 12.

their enhanced performance, the quality of entrepreneurship as a whole increases which, in its turn, leads to economic growth.

Table 1. Defining factors of entrepreneurship

shared values and preferences	management process
<ul style="list-style-type: none"> ● networking 	<ul style="list-style-type: none"> ● calculated risk-taking
<ul style="list-style-type: none"> ● business relationships 	<ul style="list-style-type: none"> ● innovation
<ul style="list-style-type: none"> ● opportunity identification 	<ul style="list-style-type: none"> ● opportunity exploitation
<ul style="list-style-type: none"> ● cultural views 	<ul style="list-style-type: none"> ● rationality of decision-making
<ul style="list-style-type: none"> ● social norms 	<ul style="list-style-type: none"> ● management flexibility
<ul style="list-style-type: none"> ● gender stereotypes 	<ul style="list-style-type: none"> ● training and education

2.2. Female entrepreneurship: definition

The concept of female entrepreneurship in its most basic terms concerns the total of women-owned and -operated companies, i.e., how many firms in an economy are ‘*owned and managed by women*’¹⁷, or, alternatively how many firms there are in which a woman holds more than 50 per cent ownership stakes.¹⁸ Another possible definition of female entrepreneurship focuses on the role women play in establishing business ventures as single founders or as co-founders, and their active engagement in the day-to-day management of businesses. Accordingly, a woman entrepreneur is someone who ‘*has started a business alone or with other women, or is someone who is a principal in a family or partnership, or is shareholder and manager in a publicly-held company*’.¹⁹ The combination of these two definitions outlines the foundational characteristics of the female entrepreneurial culture. Female entrepreneurship in any given country comprises of two basic aspects: firstly, the rate at which women form start-ups, and, secondly, the number of businesses in the economy which are actively operated by women. The present study adopts this classification as a starting point in examining female entrepreneurship. However, in order to fully understand the dynamics of female entrepreneurship and the reasons why women entrepreneurs may perform differently in comparison to their male peers, it is necessary to uncover the factors which influence specifically the levels of female entrepreneurship. While the classification outlined above provides a valuable guideline in distilling women entrepreneurs as a separate group within the general structure of entrepreneurship, it focuses primarily on the ownership stakes women hold in companies and the extent to which they appear to be involved in the day-to-day management of a business. What is lacking, therefore, is a comparison between the

¹⁷OECD (n 1) 13.
¹⁸ibid 26.
¹⁹ibid 27.

rates and performance of male and female entrepreneurship and an understanding of the underlying factors which may influence any difference therein.

The aim of this study is not the investigation of whether or not there are internal differences in the manner in which men and women operate their businesses, i.e. whether the decision-making process of entrepreneurs and their capacities in conducting business activities are affected by their gender. In fact, it is increasingly accepted in academia that any differences in the management style of women and men entrepreneurs are not so significant as to represent a critical factor in the success and growth prospects of the businesses operated by each respective group.²⁰ Instead, the investigation focuses on external causes which influence the rates of male and female entrepreneurship, for instance, social norms regarding gender roles and institutional factors. The reason for singling out women as a special group within the overall entrepreneurial culture is the fact that women entrepreneurs face specific external obstacles in establishing and running businesses compared to their male peers, for instance, gender-related social attitudes, discriminatory legislation and reduced access to financing, and, most notably, fewer and less diversified educational opportunities. In this respect, female entrepreneurs often find themselves on an unequal footing compared to their male peers. Examples of gender-related discrimination persist in both developed and developing countries. In fact, as of 2015, even the ten countries which provided the most favorable climate for female entrepreneurship were criticized as requiring improvement.²¹ Thus, the female entrepreneurial culture is to large extent shaped by the constraints women face in establishing, operating and growing businesses; as a result, female entrepreneurs need to be distinguished as a unique and vulnerable group under the umbrella of general entrepreneurship.²² In separating them from men entrepreneurs, policy makers will be able to identify their special needs as business owners and, as a result, will be in a position to design more efficient policies for the promotion of female entrepreneurship. As will be discussed below, such measures will in their turn boost the general rates of entrepreneurship and will bring about significant economic benefits.

2.3. Female entrepreneurship: determining factors

2.3.1. Social position

Social norms regarding gender and gender roles are a decisive factor within the culture of female entrepreneurship. It is hardly possible to imagine a society where gender stereotypes do not exist and,

²⁰OECD (n 1) 35; Ascher (n 15) 99.

²¹Siri Terjesen, Ainsley Lloyd, *The 2015 Female Entrepreneurship Index (FEI): Analyzing the Conditions that Foster High-Potential Female Entrepreneurship in 77 Countries* (Global Entrepreneurship and Development Institute 2014) 2, 10, 12: the ten countries with most favorable conditions for female entrepreneurship as of 2015 are as follows: the USA, Australia, the UK, Denmark, the Netherlands, France, Iceland, Sweden, Finland and Norway.

²²Ascher (n 15) 106, 108-109.

although not all aspects of the gender belief system have a negative impact on the social position occupied by women, certain perceptions can create a culture of gender-based discrimination which undermines the career prospects of women. For instance, women are still perceived as carrying the main responsibility for family and children in both the developed and the developing world.²³ Thus, women are traditionally ascribed a social function in the context of household- and family-related activities, and are less likely to be perceived as bread-earners, as opposed to men. This gender-based division of socially acceptable functions can often create impediments for females who wish to pursue interests outside of their prescribed sphere (such as a career in entrepreneurship), especially in countries which exhibit high rates of gender inequalities in terms of the legal treatment of females and of the educational and labor opportunities open to girls and women. While overt gender-based discrimination is much less perceivable today, women still occupy an inferior social position compared to men in all economies worldwide.²⁴ Female entrepreneurs are particularly vulnerable to social norms in terms of the ability to access the entrepreneurial world, since the gender belief system may perceive women as having lower propensities to engage in entrepreneurship than men. Thus, gender norms can have an important impact on female entrepreneurship by creating barriers to entry on the entrepreneurial culture for women.

The perception that women are less capable of operating businesses is reflected at the institutional level, i.e. the legal position of female entrepreneurs and the extent to which they have access to capital, and it has a direct influence on the levels of female entrepreneurship. Although the number of businesses owned and run by women internationally has increased significantly in recent years, the number of female-operated ventures is significantly smaller than that of businesses operated by men.²⁵ In consequence, women entrepreneurs represent a minority within the whole of the entrepreneurial culture in all economies worldwide²⁶ and female entrepreneurship grows at a significantly slower pace compared to the general growth of entrepreneurship. Thus, for instance, in the USA, women owned and managed only 28 per cent of all companies in 2004, and in Europe, female entrepreneurs operated only 18 per cent of all European-based businesses for the same year.²⁷ Despite the fact that the gap between male and female entrepreneurial activity appears to be shrinking, the number of women-operated enterprises internationally remains low.²⁸ The lowest rates of female entrepreneurship in the

²³ Ibid 35; Foreman-Peck, Zhou (n 9) 7; Terjesen, Lloyd (n 21) 235.

²⁴ UNESCO, 'Women, Education and Empowerment: Pathways towards Autonomy' (Report) (27 January- 2 February 1993) UIE Studies 5-1995, 6, 14; OECD (n 1) 44.

²⁵ Jamali (n 1) 232; OECD (n 1) 5, 7, 20;

²⁶ OECD (n 1) 15.

²⁷ Ibid 13, 14.

²⁸ Ibid 14, 15.

world are observed in Pakistan,²⁹ where women entrepreneurs amount to barely 1 per cent of the country's female population.³⁰

Moreover, women tend to be more reluctant to engage in entrepreneurial activities compared to men.³¹ For example, according to a 2011 study carried out by the Global Entrepreneurship Monitor, men in the UK are two times more likely to engage in entrepreneurial activity than women.³² Furthermore, in almost every economy worldwide the number of women operating established businesses (i.e., more mature businesses which have moved away from the start-up stage) remains significantly lower than the number of men managing companies at the same stage of business development.³³ The lowest percentages of female entrepreneurs running established ventures are observed in Egypt, Palestine, Turkey and Iran where for every 10 men entrepreneurs there are less than 2 women operating mature businesses.³⁴ In addition, female-owned businesses remain '*smaller, slower growing and less profitable than those of men*'.³⁵ The lower rates of entrepreneurial activity among women and the slower growth of female-operated enterprises can be partially explained by a general perception that females have a '*lower propensity than males to become an entrepreneur*'³⁶ and a view that women have lower chances of success as entrepreneurs than men³⁷. In short, social perceptions in both developed and emerging economies tend to view women as less suitable to operate businesses than men. Although examples of gender-based discrimination are more prevalent in the developing world,³⁸ developed countries also require additional effort in improving the social position of women in general, as well as in allocating more resources to the promotion of female entrepreneurship.³⁹

Additionally, the gender belief system can have a significant impact on the industry choice of women entrepreneurs. Social attitudes towards women may dictate that some industries are more appropriate for female entrepreneurs than others.⁴⁰ Such industry segregation may be rooted in educational segregation, i.e. a difference between the level and quality of formal training received by men and

²⁹ Saskia Vossenbergh, 'Women Entrepreneurship Promotion in Developing Countries: What Explains the Gender Gap in Entrepreneurship and How to Close It' (Working Paper No 2013/08, Maastricht School of Management 2013) 9.

³⁰ Global Entrepreneurship Monitor, '2012 Women's Report' (2013) <http://www.babson.edu/Academics/centers/blank-center/global-research/gem/Documents/GEM%202012%20Womens%20Report.pdf> accessed 23 March 2016 8.

³¹ Ascher (n 15) 99; European Commission, 'Evaluation on Policy: Promotion of Women Innovators and Entrepreneurship' (Report) (25 July 2008) ENTR/04/093-FC-Lot-1, 1.

³² CIPD (n 2) 3.

³³ GEM (n 30) 17, 18: the only economies where there is an equal number of women and men entrepreneurs operating established businesses are Angola, Ethiopia, Nigeria, Zambia, South Africa, Russia, Costa Rica and Thailand.

³⁴ Ibid 17.

³⁵ Jamali (n 1) 234;

³⁶ Foreman-Peck, Zhou (n 9) 17.

³⁷ Ibid 15.

³⁸ World Bank (n 5) 7.

³⁹ Ibid 6; GEDI (n 21) 7, 9.

⁴⁰ OECD (n 1) 33.

women respectively, as well as in a negative perception of the gender belief system with regard to women's capacities to operate on certain markets. The result of such attitudes is that specific sectors are over-saturated with female-operated ventures, while access to other markets is limited to women entrepreneurs and thus female entrepreneurial activity in those spheres remains modest. Thus, industries such as retail and the consumer sector are fields traditionally viewed as 'appropriate' for female entrepreneurs, while technology-intensive markets (for instance, manufacturing and the construction industry) remain primarily reserved for men.⁴¹ The most severe gender gap in entrepreneurship is noticeable in Sub-Saharan Africa, Latin America and the Caribbean region where above 75 per cent of women entrepreneurs operate in retail.⁴² Thus, in 2012, approximately 80 per cent of all women entrepreneurs in Sub-Saharan Africa operated in the field of consumer services, and in Uganda and Ethiopia this rate reached almost 90 per cent.⁴³ Although developed economies exhibit a smaller degree of entrepreneurship segregation, women tend to gravitate towards the humanities and the service sector and remain underrepresented in innovation- and technology-intensive sectors. As of 2012, female entrepreneurs in Europe and Developed Asia were 50 per cent more likely than their male peers to enter the consumer sector.⁴⁴ In the EU, women entrepreneurs operating in the technology sector still tend to be viewed with some skepticism by clients, suppliers and business partners due to the persistence of traditional gender-based stereotypes,⁴⁵ although there is no evidence indicating that women would be less efficient and successful compared to men if they enter the science and technology markets.⁴⁶ This massive over-representation of female entrepreneurs on a limited number of markets and their almost complete absence in other fields speaks of the existence of substantial barriers to entry women have to face when establishing businesses, such as legal impediments, insufficient financing and lack of time and resources.

2.3.2. Legal recognition

An important aspect of female entrepreneurship is the legal treatment women receive. The participation rates of women in the entrepreneurial culture are largely determined by the legal position women occupy and the extent to which women entrepreneurs are afforded equal legal recognition and equivalent rights to men.⁴⁷ There is a major difference between the legal position women and men entrepreneurs occupy in developing countries. Emerging economies and countries where the national legal order has a strong religious basis demonstrate notable examples of *de jure* discrimination against

⁴¹Ibid 33; European Commission (n 31) 1, 3-4, 22; Vossenbergh (n 29) 3, 4.

⁴²Vossenbergh (n 29) 3, 4.

⁴³GEM (n 30) 19.

⁴⁴Ibid 19.

⁴⁵EU Commission (n 31) 3-4.

⁴⁶OECD (n 1) 40.

⁴⁷Terjersen, Lloyd (n 21) 5.

women.⁴⁸ The most prevalent examples relate to diminished property and inheritance rights for women,⁴⁹ stricter rules in relation to opening bank accounts,⁵⁰ and mandatory requirements for females to obtain the explicit consent of a male relative in order to enter the labor market.⁵¹ For example, women in Pakistan face formal restrictions in connection to holding property, have significantly weaker inheritance rights compared to male relatives and are legally prohibited from establishing businesses in certain industries.⁵² In a similar vein to Pakistan, the laws of Mali, Bangladesh and Senegal stipulate that the accumulated capital of a woman entrepreneur can at any time be confiscated by a male relative.⁵³ Women entrepreneurs who remain most exposed to such discriminatory laws are located in Sub-Saharan Africa and Developing Asia.⁵⁴ Such gender-based legal impediments represent a substantial barrier to entry on entrepreneurship and, as a result, both potential women entrepreneurs and active ones are disincentivized to engage in entrepreneurial activity at all or for a prolonged period of time.

Potential female entrepreneurs may find it impossible to enter the business world because they do not meet the stringent requirements in order to establish a business. For instance, where the approval of a male relation is necessary, women are often dependent on the good will of a husband or a father. However, such consent will not be granted in many cases if the local gender belief system presents an unfavorable view to entrepreneurship as a suitable occupation for women. In addition, many potential female entrepreneurs will be discouraged from attempting to establish a business due to a fear of failure: the inferior legal position of women indicates that even where a business is established, sustaining it might be disproportionately difficult. For example, discriminatory laws relating to inheritance, property rights and land ownership create a barrier for female entrepreneurs in obtaining external financing because such rules prevent women from accessing assets which can be used as collateral when obtaining a loan.⁵⁵ Furthermore, restrictions related to land ownership and barriers to entering into contractual obligations are likely to undermine significantly the performance of women in operating businesses, as well as prevent female entrepreneurs from establishing formal businesses, i.e. enterprises which are officially recognized and regulated by law. Thus, women entrepreneurs find themselves in a less favorable position compared to their male competitors, whereby they are forced to compete at sub-efficient levels with already established businesses and cannot enter the formal entrepreneurial culture, but, instead, have to operate informal, small and unprofitable businesses with doubtful growth prospects. If women have a perception that the discriminatory legal framework will

⁴⁸OECD (n 1) 6, 36.

⁴⁹Ibid 6;

⁵⁰World Bank (n 5) 8.

⁵¹Ibid 8.

⁵²Ascher (n 15) 9.

⁵³OECD (n 1) 41.

⁵⁴Ibid 36.

⁵⁵World Bank (n 5) 9.

hinder their performance as entrepreneurs and will prevent them from competing successfully with other businesses, it is likely that many of them will not even attempt to establish a start-up due to lower self-perception and an increased fear of failure.

The negative effect of gender-based discriminatory laws is also reflected in the significantly lower levels of business starts among female entrepreneurs in comparison to their male peers. Even countries which have formally abolished such restrictions continue to pose constraints to female entrepreneurship via an informal culture of gender-based discrimination. For instance, while the Land and Village Land Act of 1999 in Tanzania provides for a *de jure* equal treatment of men and women with respect to property rights, the persistent use of local customary rules undermines the position of female entrepreneurs and their ability to inherit land and freely dispose of their property. As a result, even in those developing economies where formal legal constraints to female entrepreneurship are removed, additional political effort is necessary in order to ameliorate the position of women entrepreneurs and boost the rate of business starts among female entrepreneurs. The relatively small number of start-ups among women in these countries can be explained by an imbalance between the potential profits and income their business may generate and the disproportionately high hurdles the legal system places before female entrepreneurs in terms of obtaining capital, competing on an equal basis with already existing businesses and operating at efficient levels. The legal constraints women face entail high costs related to starting a company and managing a business over an extended period of time; such costs are unlikely to be neutralized by the moderate profits women-owned businesses on average generate in emerging markets, especially where female entrepreneurs operate in the informal entrepreneurial sphere and do not have access to additional financing in order to expand their business activities. As a result, women entrepreneurs face greater costs in establishing start-ups compared to men, which leads many potential female entrepreneurs to decide against entering the business sphere due to an increased fear of failure.

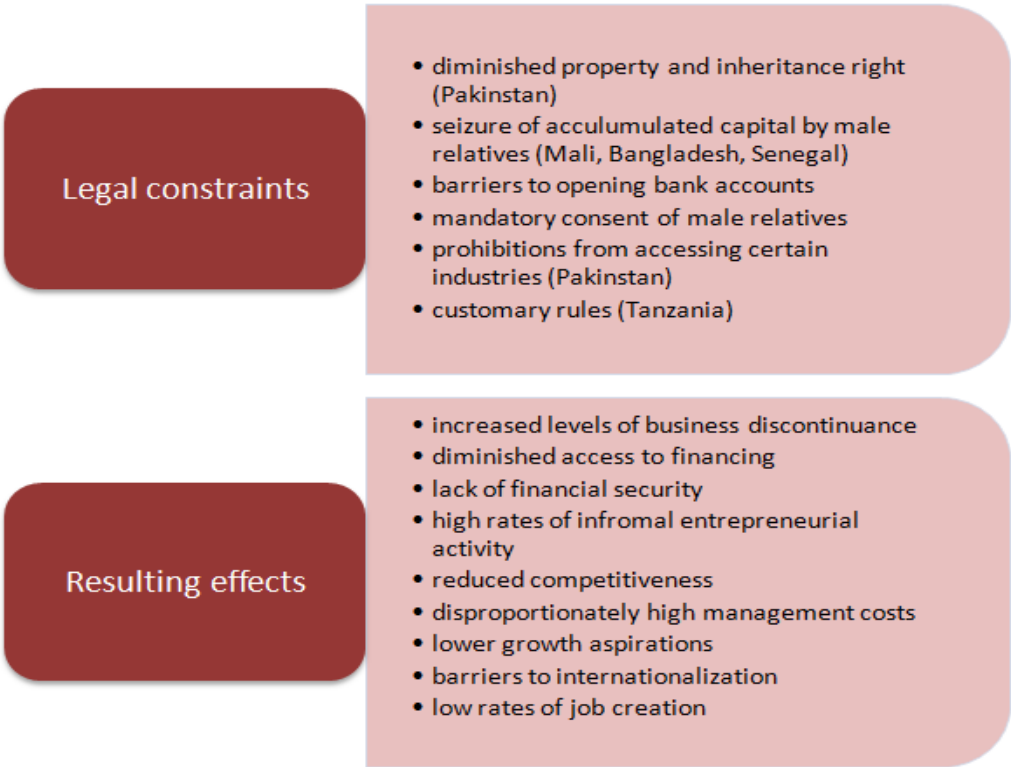
In addition, women entrepreneurs who are already active in the business world may be prevented from sustaining a business over a prolonged period of time due to lack of legal equality and protection. This observation is reflected in the higher rates of business discontinuance exhibited among women entrepreneurs in the developing world compared to men:⁵⁶ restrictions connected to opening bank accounts, inheriting property and entering freely into contractual relationships prevent women entrepreneurs from operating on an equally efficient levels to the levels at which male entrepreneurs operate. Moreover, female entrepreneurs demonstrate significantly lower aspirations in terms of growth compared to their male counterparts.⁵⁷ Women in the developing world are much less likely to hire additional employees, or to pursue internationalization of their businesses. As of 2012, the general

⁵⁶GEM (n 30) 8: the highest rates of business discontinuance among female entrepreneurs can be observed in Sub-Saharan Africa.

⁵⁷Ibid 10.

trend among female entrepreneurs in the developing world was to operate as single founders, with no intention of hiring employees.⁵⁸ In Developing Asia and Sub-Saharan Africa approximately 10 per cent of all female entrepreneurs expected to hire more than 5 employees for a projected period of 5 years.⁵⁹ This trend is consistent with the disproportionately high legal barriers female entrepreneurs face in operating businesses: the mere entrance in the entrepreneurial culture and the setting up of a business involve more costs to women than to men. Additionally, diminished legal rights place women in a less efficient position compared to men in terms of productivity and creates a highly uncertain business environment for female entrepreneurs. As a result of discriminatory legislation, operating businesses on a day-to-day basis is more costly to female entrepreneurs than to men, which means that women entrepreneurs are unlikely to be able to establish formal businesses, grow their enterprises and break free from the small-to-medium size business frame. Indeed, female entrepreneurs consistently demonstrate substantially lower growth projections compared to their male counterparts.⁶⁰ Consequently, women have an incentive not to hire additional employees or to devote capital to develop and internationalize their businesses, in view of reducing their costs and maximizing profits.

Figure 1. Gender-specific legal barriers in emerging markets and their effects on female entrepreneurship



⁵⁸ Ibid 10.

⁵⁹ Ibid 10.

⁶⁰ Ibid 10.

In contrast to emerging markets, developed economies have removed explicit gender-related legal barriers to entrepreneurship from the national legal order. Some jurisdictions have also established a firm body of legislation providing enhanced protection for women against gender-based discrimination. The EU is a prime example in terms of eliminating *de jure* hurdles to female entrepreneurship and of implementing several coherent legislative instruments aimed at eradicating *de facto* impediments women entrepreneurs may face. Thus, EU legislation provides for equal treatment of men and women in employment,⁶¹ as well as for gender equality in the treatment of self-employed persons.⁶² In addition, the legislative framework offers comprehensive legal redress against both direct and indirect instances of gender-discrimination.⁶³ The USA also provides extensive legislation aimed at barring gender-rated discrimination. Although the national framework does not explicitly secure gender equality in entrepreneurship (in contrast to the EU), there is a general body of anti-discriminatory laws and mechanisms making legal redress to victims of gender-related discrimination available. Most notably, Title 42, Chapter 21 of the US Code stipulates that gender-based discrimination in terms of education and employment opportunities is prohibited,⁶⁴ and Subchapter 4 establishes equality in credit opportunities, prohibiting creditors from refusing loans on the (sole) basis of gender,⁶⁵ while Section 206 of the Equal Pay Act provides for equal remuneration of men and women employed under similar working conditions.⁶⁶ Although none of these documents explicitly addresses entrepreneurship, the overall legislative framework in which women entrepreneurs in the US operate affords them *de jure* equality to men entrepreneurs. Furthermore, by securing a general environment of gender equality, US legislation provides favorable conditions for the operation of female entrepreneurs where the possibility of *de facto* discrimination is significantly diminished (compared to economies where the national legal system does not provide extensive support for gender equality). As a result, it can be deduced that women entrepreneurs operate in more favorable conditions in developed economies due to increased legal protection. Thus, women entrepreneurs in the developed world are more likely to perform at superior rates compared to female entrepreneurs in developing countries. Indeed, the USA, Europe and developed Asia have significantly lower rates of stops among women entrepreneurs in comparison to Africa and Developing Asia.⁶⁷ Furthermore, in 2012 approximately 80 per cent of female entrepreneurs in the developed world had moved away from managing businesses alone and instead operated with employees; in addition, the highest rates of

⁶¹Council Directive 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment in employment and occupation [2000] OJ L 303/16.

⁶²Directive 2010/41/EU of the European Parliament and of the Council of 7 July 2010 on the application of the principle of equal treatment between men and women engaged in an activity in a self-employed capacity and repealing Council Directive 86/613/EEC [2010] OJ L 180/1.

⁶³ Susanne Burri, Sacha Prechal, 'EU Gender Equality Law' (Report) (2008) http://ec.europa.eu/justice/gender-equality/files/your_rights/genderequalitylaw2008_en.pdf accessed 10 May 2016, 18-21.

⁶⁴United States Code, Title 42, Chapter 21.

⁶⁵United States Code, Subchapter 4.

⁶⁶Equal Pay Act of 1963, Section 206.

⁶⁷GEM (n 30) 8.

internationalization among women entrepreneurs in the world for the same time period were observed in Developing Europe and Israel.⁶⁸

Table 2. Examples of enhanced legal protection afforded to women in developed countries and its effects on female entrepreneurship (in comparison to developing economies)

European Union	<ul style="list-style-type: none"> • prohibition of de jure gender-based discrimination • equal treatment of self-employed persons • equal employment conditions • broad legal redress
USA	<ul style="list-style-type: none"> • gender equality in education • gender equality in employment • equal credit opportunities for men and women • equal remuneration for men and women under similar employment conditions
Effects	<ul style="list-style-type: none"> • superior performance • lower levels of business stops • high rates of job creation • highest levels of internationalization

2.3.3. Access to finance

Access to capital is essential for establishing a business venture. Sufficient financing has a decisive impact not only during the start-up stage of a company, but can also influence significantly the growth prospects of the business and the extent to which the enterprise can be sustained over a prolonged period of time. Entrepreneurs who encounter difficulties in financing their companies have fewer resources to develop and expand their businesses, but are instead more likely to discontinue their operations. Therefore, the extent to which women entrepreneurs have access to capital is critical not only to the rates at which they are able to establish start-ups, but also to the general level of female entrepreneurial activity. This section considers two sources of capital: self-funding, whereby entrepreneurs establish a start-ups with their own capital (for instance, they invest their savings in the venture) and external finance, i.e. capital obtained from lending institutions, such as banks. In this respect, external financing is particularly important to start-ups, since many entrepreneurs lack the capacity to self-fund their businesses. Women entrepreneurs have a disadvantage in relation to access to finance compared to men in both the developed and the developing world. As far as own capital is concerned, women in the developed world have a significant advantage over their peers in developing

⁶⁸Ibid 10.

economies. Although women in developed countries on average control less wealth than men,⁶⁹ they retain control over their personal finances. In contrast, women in developing economies control less capital than men and often encounter social and legal barriers in retaining their income.⁷⁰ Notable examples to this end are found in Mali, Bangladesh and Senegal where the law stipulates that male relatives of women entrepreneurs can at any time seize their assets and accumulated profits and dispose of these freely, without the consent of the entrepreneur herself, while legal redress is not available.⁷¹

Thus, female entrepreneurs suffer from a regulatory framework whereby their establishing businesses is not only constrained by discriminatory laws, for example in relation to property rights, but also by a lack of security of investment. It is highly unlikely that entrepreneurs operating in an environment where their profits remain unprotected will perform in an efficient manner or will be induced to enter the entrepreneurial culture at significant rates. Instead, it can be inferred that a large number of women entrepreneurs in developing economies function in a below-efficient level due to fear of failure in case their assets and capital are seized. Although gender-based obstacles to obtaining and retaining capital are declining worldwide,⁷² the current restrictive environment in the developing world acts as a deterrent for female entrepreneurs to establish and grow businesses, and creates a large number of business discontinuances among women. As a result of the lack of financial security and the overwhelmingly high barriers to entry in the entrepreneurial culture, potential women entrepreneurs in developing economies are dis-incentivized to establish new businesses, while women already operating their own businesses are constrained in achieving stable, long-term growth by an objective lack of legal protection and a subjective perception of failure.

Moreover, women entrepreneurs in developing countries face greater difficulties in obtaining external financing compared to men. Given the fact that women entrepreneurs in general control less wealth compared to their male peers, access to external financing is crucial for them in order to establish start-ups and to be able to grow their businesses. Women in many developing economies are prohibited from seeking external funding themselves, but instead have to rely on a male relative to do so in their place,⁷³ or, at the very least, are required to provide a male co-signer when obtaining a bank loan.⁷⁴ This presents an important constraint to female entrepreneurship: women autonomy in entering the entrepreneurial culture but are instead placed in a position of dependence. In addition, due to the inferior social place women occupy, many lending institutions show less willingness to provide financing to female entrepreneurs than to their male peers: higher collateral is often required from

⁶⁹Ibid 45; OECD (n 1) 46.

⁷⁰Ascher (n 15) 107-108.

⁷¹OECD (n 1) 45.

⁷²Ibid 46-47.

⁷³Ibid 47.

⁷⁴World Bank (n 5) 4; Ascher (n 15) 106-107.

female entrepreneurs starting a business or running small to medium size businesses due to a negative perception investors may have concerning the capacity of females to successfully operate and grow businesses.⁷⁵ Notable example in this context are Latin America and the Caribbean where female entrepreneurs are required to provide considerably higher collateral when securing a loan compared to their male peers; as a result, women rely primarily on own savings and loans provided by family and friends in financing their companies, which prevents them from growing their businesses in the long term.⁷⁶ Additionally, in Tunisia only 47 per cent of women entrepreneurs who approach banks in seeking external financing, receive any loan whatsoever.⁷⁷ In Pakistan, although not faced with *per se* regulatory barriers to financing, women entrepreneurs generally have difficulties accessing formal lending institutions, such as banks, and, as a result, rarely employ external financing in establishing and managing businesses but utilize family and personal savings instead.⁷⁸ In Malawi, the locally active farmers clubs, which represent one of the main sources of external financing for small farmers, *'disqualify married women from full membership and stigmatize single women or women in polygamous marriages, [thus] undermining their capacity to benefit from the services the club could offer'*.⁷⁹

As far as developed economies are concerned, although women entrepreneurs benefit from enhanced formal legal protection, which should theoretically secure better external financing opportunities, financing institutions can often regard female-operated businesses as less profitable investments compared to male-owned ventures. For example, less than 5 per cent of all venture capital funds in the US are allocated to female-owned businesses.⁸⁰ In addition, the two economies providing the most sophisticated financial systems for entrepreneurship internationally, the USA and Israel, exhibit two times higher rates of business discontinuance due to lack of finance among female entrepreneurs compared to their male peers.⁸¹ Furthermore, according to a 2008 report by the European Commission, financial institutions and stakeholders tend to perceive women entrepreneurs as having less credibility compared to men, which involved greater difficulties for women in accessing external finance, especially in the spheres of science and technology where access to capital is critical for sustaining a business.⁸² In consequence, because of the fact that women entrepreneurs have greater difficulties in acquiring external financing in both developed and developing economies, they often lack the motivation to persevere in establishing businesses and do not engage in entrepreneurship at

⁷⁵ OECD (n 1) 47; World Bank (n 5) 4, 8.

⁷⁶ World Bank (n 5) 8.

⁷⁷ Ibid 8.

⁷⁸ Jamali (n 1) 238, 242.

⁷⁹ World Bank (n 5) 8.

⁸⁰ Brookings Institutes (n 4) 34.

⁸¹ GEM (n 30) 11.

⁸² EU Commission (n 31) 4.

all, or they start less ambitious projects, relying primarily on self-funding.⁸³ The initial lack of capital has further implications on the rate of female entrepreneurship, since start-ups which begin with more resources are more likely to grow in the future compared to firms which start with more moderate financing.⁸⁴ Therefore, the lack of finance at the initial stages of establishing a business can explain to some degree the fact that, in general terms, female-owned businesses tend to be smaller, less profitable and less growth oriented than businesses run by men. Additionally, because of the fact that women entrepreneurs experience difficulties in securing additional funding for their businesses (in the form of higher collateral, stricter loan obligations or a general reluctance on the part of creditors to fund female-operated ventures) means that the growth prospects of women-owned enterprises are significantly smaller compared to those of men.

Table 3. Examples of gender discrimination in external financing.

Latin America, The Caribbean region	Women are required to provide higher collateral in obtaining loans
Tunisia	Banks provide loans to less than half of all female applicants
Pakistan	Women report having diminished access to financing from lending institutions
Malawi	Small female farmers remain largely excluded from external financing opportunities
USA	Only 5% of all venture capital funds are allocated to female-owned enterprises
European Union	Women operating in science- and technology-intensive industries have limited access to external financing

2.3.4. Family

An important difference between men and women entrepreneurs emerges in terms of the balance between household and family chores, on the one hand, and operating a business, on the other. On average, women in both developed and developing economies bear a greater responsibility in terms of household-related activities and childcare compared to men.⁸⁵ Such competing demands on time prevent many women entrepreneurs from accessing the entrepreneurial culture at all: the more demanding household- and child-care related responsibilities are the less likely women are to engage

⁸³ OECD (n 1) 48.
⁸⁴ Ibid 48.
⁸⁵ Ascher (n 15) 108; OECD (n 1) 38, 46.

in entrepreneurial endeavors.⁸⁶ Additionally, women entrepreneurs who already operate businesses are more likely to devote less time to developing their companies but instead have to focus on juggling household and family chores with sustaining (where at all possible) a certain suboptimal level of business activity.⁸⁷ For instance, in the Netherlands women have been estimated to devote approximately 40 hours per week on household tasks, in comparison to an average of 17.5 hours for men; in consequence, female entrepreneurs in the Netherlands invest significantly less time in managing their businesses due to a greater necessity to allocate time between business and household responsibilities.⁸⁸ Similarly, in the beginning of the century women entrepreneurs in the UK were likely to spend approximately twice as much time on domestic chores as their male counterparts.⁸⁹ These statistics are consistent with a 2006 study conducted by the European Commission which indicated that women in the EU generally spent twice as much time on household activities as men, and thus were less engaged in running and growing their businesses compared to their male competitors.⁹⁰ Such disparities in the allocation of time on household activities instead of on business management are even greater in the developing world. For example, in Tanzania, men spend an average of less than 1.5 hours daily on household activities, while women have estimated to devote close to 4.5 hours per day on the same tasks.⁹¹ Lack of time due to increased household responsibilities also represents an obstacle for female entrepreneurs in seeking financing, and additional training⁹² which would allow them to acquire a wider range of skills and potentially increase their productivity. As a result, women who are heavily engaged in household- and childcare-related issues without receiving sufficient support are more likely to perform at suboptimal levels when operating businesses and to be less productive than men or single women with no children. Thus, the performance of female entrepreneurs appears to be greatly dependent on family status.

2.4. Features of female entrepreneurship

The conditions in which women entrepreneurs operate and the specific obstacles they face in terms of social and legal positions, financing and family duties shape to a large extent the culture of female entrepreneurship. These gender-specific hurdles determine the rates of female entrepreneurial activity, the size and profitability of female-owned and operated businesses, their growth prospects, the specific industries on which women entrepreneurs are most likely to operate, as well as the overall motivation women have when entering the entrepreneurial culture. Similarly to the universality of the obstacles female entrepreneurs encounter when establishing and managing businesses, the features of female

⁸⁶Foreman-Peck, Zhou (n 9) 7.

⁸⁷OECD (n 1) 46-48.

⁸⁸Foreman-Peck, Zhou (n 9) 7.

⁸⁹Ibid 7.

⁹⁰Ascher (n 15) 108.

⁹¹World Bank (n 5) 6.

⁹²Ascher (n 15) 108.

entrepreneurship examined below are also universal and are visible in both the developed and the developing world. Therefore, the following sections will seek to establish a direct link between, on the one hand, the barriers women face in creating start-ups and in operating efficient and successful business ventures, and, on the other hand, the differences exhibited by men and women entrepreneurs in terms of activity in the entrepreneurial culture, efficiency and capacity to develop their business endeavors.

2.4.1. Size and profitability

Businesses owned and operated by women entrepreneurs on average tend to be smaller in size, less growth-oriented and less profitable compared to those owned by men. This variation in performance exhibited by women and men entrepreneurs respectively is universal and can be observed in both developed and developing economies. However, there are slight differences in the manner in which factors such as the gender belief system and the institutional framework shape female entrepreneurship in the developed and in the developing world. In general, women control less capital compared to men because they exhibit lower overall patterns of remuneration, and female entrepreneurs are more likely to start with 'lower levels of overall capitalization and lower ratios of debt finance compared to their male counterparts' in both developed and developing economies.⁹³ Moreover, the rates of female entrepreneurship are affected by gender stereotypes which can create both a negative perception of female entrepreneurship in society, as well as a negative self-perception of women entrepreneurs. Entrepreneurship is still perceived to a large extent as a 'masculine' occupation and women entrepreneurs are often seen as less competent to operate businesses compared to their male peers.⁹⁴ Thus, there is a general condescending perception in both emerging markets and in the developed world that women who enter the business sphere have only modest chances of successfully establishing and developing a business venture.

In addition, industries such as retail and the service sector, which are traditionally ascribed as more appropriate to women entrepreneurs, tend to involve lower barriers to entry and to require less start-up capital;⁹⁵ as a result, these are less profitable fields to operate on and are thus often seen as less important economically.⁹⁶ These are also industries where businesses tend to be of a small-to-medium size,⁹⁷ and, since there usually exists an over-saturation of competition on these markets, they do not offer extensive growth prospects for businesses. As a result, some investors may be reluctant to provide funding to female-operated businesses, especially to start-ups and smaller enterprises. Due to gender stereotypes and industry choice, such businesses can often be perceived as more risky

⁹³Jamali (n 1) 234.

⁹⁴OECD (n 1) 34.

⁹⁵ World Bank (n 5) 3.

⁹⁶Ibid 5.

⁹⁷Brookings Institute (n 4) 33.

investments. Furthermore, investors might shy away from investing in female-operated businesses due to the fact that, overall, women entrepreneurs seem to be less growth oriented and thus such enterprises can be seen as less worth investing in due to the moderate profits they are expected to generate. In short, female entrepreneurial activity tends to be viewed as a relatively unimportant factor in the overall eco-system of entrepreneurship. However, such a negative perception of women-operated businesses creates a vicious cycle for women who strive to develop and expand their businesses: due to the general view on female entrepreneurship, such entrepreneurs may find it difficult to access additional financing, which then constrains their performance and confines them to operating small and unprofitable businesses. Obviously, these struggles are even more acute for women entrepreneurs in the developing world who, in addition to negative gender attitudes, have to operate in the context of a restrictive institutional framework which, in addition to preventing them from growing their businesses, also prevents them from competing efficiently and thus creates a bigger incentive for them to terminate their business activities.

The performance of female-operated businesses is also hindered by the lower rates of staff employment exhibited by women entrepreneurs compared to men. The bleak lack of financial and legal protection in the developing world makes employing additional or any staff at all unprofitable, which creates a perpetual cycle of inability to grow businesses on the part of women entrepreneurs due to their reluctance to hire personnel. Nevertheless, in spite of the unfavorable legal treatment and hostile socio-economic climate in which female entrepreneurs generally operate, a number of women in emerging economies are still able to grow their businesses and employ additional labor. For instance, in 2004 a sample of 118 women operating in Zambia operated with an average of 8.2 full-time employees per company; in Tanzania, 128 women operated with 5.9 staff members; and in Ethiopia, the average among 123 female entrepreneurs was 4.8 workers per business.⁹⁸ These instances prove that, even in harsh business conditions, female entrepreneurs are still capable of conducting efficient business activities and of generating sufficient profits in order to expand their ventures and hire additional employees. However, in general terms, the restrictive normative and institutional framework in developing countries leads women entrepreneurs to struggle in competing efficiently with their male peers and thus, due to limited profit-generating, prevents them from hiring additional labor. In terms of level entrepreneurial activity, women-owned businesses in developed economies exhibit much higher growth rates compared to emerging markets. For instance, the number of US-based companies run by women exceeds the general firm growth by 2:1, and in Canada the ratio is 1.5:1.⁹⁹ Nevertheless, despite the fast growth pace which has recently been observed among female entrepreneurship in developing countries, women in these economies are still significantly more likely to operate micro businesses compared to men, whereby, on average, female entrepreneurs function with

⁹⁸ OECD (n 1) 18.

⁹⁹ Ibid 17.

5 employees or less.¹⁰⁰ Therefore, even in economies which provide substantial legal and financial protection to women and which, at first glance, favor female entrepreneurship, women entrepreneurs struggle to break free from the SME norm and often find it difficult to grow businesses in terms of size and number of employees.

Women entrepreneurs also find themselves at a disadvantage compared to men because of the balance they need to seek between combining family responsibilities and operating a business. The competing demands on their time may induce many female entrepreneurs not to strive for attaining higher growth and efficiency levels, but instead to seek to balance both family and business. This leads to lower levels of efficiency and provides an additional explanation to the moderate success women entrepreneurs have compared to men. Household and family-related duties are particularly critical issues for female entrepreneurship in the developing world where women are approximately three times more likely to operate in the informal entrepreneurial culture compared to men.¹⁰¹ The huge rate of informal entrepreneurial activity among females in developing countries can be in part explained by the necessity of women to reconcile operating businesses with increased household and childcare duties. Although women worldwide experience competing demands on their time in terms of family and business responsibilities, women in developed countries are more likely to operate in the formal business sector but to limit the time devoted to their ventures.¹⁰² In contrast, in developing economies, constrained by both regulatory and financial obstacles, are attracted to self-employment as a career option because it provides greater flexibility in balancing household and business duties, and allows them to escape the formal institutional constraints to female entrepreneurship. Once again, however, there exists a vicious cycle for women entrepreneurs in terms of financing their businesses. The fact that women in developing countries have difficulties in accessing financing leads many of them to operate informally; however, operating from home and in the informal sphere of entrepreneurship damages the legitimacy of such businesses from the perspective of potential creditors, as well as consumers.¹⁰³ Thus, women in transitioning economies dominate the informal culture of entrepreneurship, while women entrepreneurs in the developed world on average operate formal but small and less-growth oriented businesses. In both cases, however, female entrepreneurs are trapped in operating modest and relatively unprofitable businesses, with little to no growth prospects.

2.4.2. Gender gap in entrepreneurship

The unfavorable cultural and socio-economic conditions in which female entrepreneurs operate have yet another negative implication on the role women occupy in the overall framework of entrepreneurship. The gender-specific impediments women face in establishing and operating

¹⁰⁰ Ibid 17.

¹⁰¹ Vossenber (n 29) 3.

¹⁰² Ibid 7.

¹⁰³ Ibid 4-6.

businesses lead to a segregation of the general entrepreneurial culture and create a significant gender gap between men and women entrepreneurs. The gender gap is reflected in terms of opportunity identification, higher barriers to entry on certain markets, and an increased tendency among female entrepreneurs to operate in the informal business culture compared to men. The fact that female entrepreneurs tend to prefer industries such as retail and the consumer sector stems as a direct consequence from the limited access to finance and the increased household responsibilities women generally face, as well as the insufficient support the national legislative framework may afford. However, these factors mean that other markets, which require additional capital or greater time commitment, for instance, the technology sector, are *de facto* foreclosed for female entrepreneurs, even if there are no explicit legal impediments in place for women to access these fields. In addition, access to certain industries is also restricted by gender stereotypes concerning the capacity of women to operate on highly-specialized markets.¹⁰⁴ In consequence, some women entrepreneurs are much less likely to recognize business opportunities beyond the traditional industry selection,¹⁰⁵ while others who are able to identify such opportunities may find accessing other fields impossible due to a strong gender bias. For instance, women entrepreneurs in both Europe and East Asia (including Singapore, Taiwan, South Korea and Japan) exhibit consistently low rates of opportunity recognition, despite the fact that the European market offers superior conditions for women entrepreneurs operating in the technology sectors, in comparison to other economies, and East Asia provides a favorable environment for female entrepreneurs who wish to invest in R&D.¹⁰⁶

The result of these *de facto* foreclosures is a strong segregation of entrepreneurship, whereby women entrepreneurs have access to different (and less profitable) business opportunities. Such segregation leads to a gender gap in entrepreneurship in relation to industry choice and turnover. Retail and consumer services are industries with relatively low barriers to entry and high levels of competition among a dispersed number of smaller players. Thus, these are fields which offer lower profitability compared to markets, such as technology, which involve high barriers to entry (for instance, in terms of the larger start-up capital required, the necessary specialized knowledge and a time commitment) and, therefore, offer higher profitability. The latter industries also allow for much greater margins of business growth and internationalization compared to, for instance, consumer services, where businesses are mostly local and operate on a much smaller scale. There is no evidence that women entrepreneurs who operate on typically male-dominated markets are less successful than their male competitors.¹⁰⁷ Therefore, the fact that many female entrepreneurs refrain from entering these industries can be explained by the gender segregation of the entrepreneurial culture. Similarly to the vicious cycle in which female entrepreneurs are sometimes trapped in terms of financing and growth

¹⁰⁴ Terjesen, Lloyd (n 21) 234-235; OECD (n 1) 33.

¹⁰⁵ OECD (n 1) 33.

¹⁰⁶ Terjesen, Lloyd (n 21) 14.

¹⁰⁷ *Ibid* 40.

aspirations, the industry segregation in entrepreneurship also creates a vicious cycle for women who wish to operate on 'non-traditional' markets. Although many women entrepreneurs choose to operate on industries which are already saturated with female-run businesses, those who wish to access other fields, such as technology, may find it excessively difficult to enter such markets due to the widespread gendering of the entrepreneurial culture. That is to say, because women traditionally operate on less profit-intensive fields, they are seen as less capable compared to men and thus have more difficulties in accessing additional capital in order to grow their businesses. In addition, because of the lack of experience female entrepreneurs normally have outside retail and the consumer services, they are often unable to identify viable business opportunities on alternative markets. Therefore, women who wish to create high-growth business ventures and who strive on access fields normally reserved for men entrepreneurs are likely to face diminished credit opportunities and excessively high barriers to entry on capital-intensive industries. As a result, such women are confined to traditional female market.

Another manifestation of the gender gap in entrepreneurship is the large number of women who operate in the informal entrepreneurial culture. Informal business activity is significantly more widespread among female entrepreneurs than among men, especially in the developing world.¹⁰⁸ While the gap is slowly closing, it is still apparent, albeit to a different extent, across all economies,¹⁰⁹ and especially so in the developing world (although developed economies also exhibit relatively high rates of entrepreneurship segregation).¹¹⁰ The highly uneven proportion of women entrepreneurs operating in the informal business sector in transitioning economies is due to the underlying negative perception of female entrepreneurship resulting from social stereotypes and religious doctrines, the higher regulatory and financial barriers women entrepreneurs face, and the career-family interface, among other factors.¹¹¹ Thus, it is the multi-level discrimination of women in the developing world that creates the large disparity in efficiency, industry-choice and growth levels between male and female entrepreneurs. The resulting gendering of entrepreneurship confines a great number of women to the informal entrepreneurial sphere, with little to no chance of operating in a formal capacity. In consequence, the ability of women to network, to identify new and viable business opportunities, to access resources and to develop their ventures is constrained to the extent that female entrepreneurs in the developing world exhibit the highest number of business discontinuance and the lowest growth rates internationally.

¹⁰⁸ International Monetary Fund, 'Women, Work and the Economy: Macroeconomic Gains from Gender Equity' (Discussion note) (September 2013) SDN/13/10, 10.

¹⁰⁹ Vossenbergh (n 29) 4.

¹¹⁰ *Ibid* 3.

¹¹¹ *Ibid* 4-6.

2.4.3. Motivation: necessity versus opportunity motives

The gender gap in entrepreneurship is not only reflected in a disparity in the rates of male and female entrepreneurship, but also in the motives which influence women entrepreneurs to access the business world in the developed and the developing world respectively. While in developed economies the main driving factor behind women's engagement in entrepreneurship is opportunity, in developing countries women are largely motivated to establish a business venture by necessity motives.¹¹² That is to say, women in the developed world are more likely to enter the entrepreneurial culture because they perceive entrepreneurship as a more profitable career option compared to other occupations, which could yield more personal benefits to them (for instance, larger economic gains, personal satisfaction, a flexible time schedule). For instance, the highest rates of opportunity motivation are exhibited by female entrepreneurs' operation in Developed Europe, where approximately 73 per cent of women enter the entrepreneurial sphere in pursuit of a business opportunity.¹¹³ Positive social attitudes towards women have been proven, firstly, to enhance the rates of female entrepreneurship, and secondly, to increase the number of women who enter the entrepreneurial culture led by opportunity motives.¹¹⁴ Norway provides comprehensible evidence vis-à-vis the direct relationship of gender norms and women's motivation in establishing and managing businesses. In 2012 the Global Gender Gap Report ranked Norway among the three economies which provided the highest levels of gender equality; in addition, according to the Global Entrepreneurship Monitor, Norway exhibited the lowest levels of necessity motivation among women entrepreneurs internationally (only 4 per cent).¹¹⁵ In short, where women's position in society and in entrepreneurship is safeguarded by the local normative and institutional framework, female entrepreneurs generally enter the entrepreneurial sphere in pursuit of business opportunities. Therefore, they are more likely to be growth-oriented and to strive to develop their businesses.

In contrast, female entrepreneurship in emerging markets is largely stimulated by necessity motivations, meaning that women entrepreneurs often come from impoverished backgrounds and need to generate additional income through business activity in order to sustain their families. The normative and institutional barriers create a labor gap whereby, due to gender-based discrimination and increased barriers to entry on the labor market, women engage in entrepreneurial activity because they have little to no access to job opportunities; therefore, entrepreneurship emerges as the sole viable career option.¹¹⁶ In addition, where women face enhanced household and childcare duties but receive

¹¹² World Bank (n 5) 3.

¹¹³ GEM (n 30) 9.

¹¹⁴ Vossenberg (n 29) 9.

¹¹⁵ Ibid 9.

¹¹⁶ Ibid 3; Ascher (n 15) 105.

no support from either the family or the state, entrepreneurship may be the sole option which allows reconciling these competing demands on their time. Thus, women in developing countries largely engage in entrepreneurship as a survival strategy and, focused on their current circumstances, rarely plan on sustaining long-term businesses.¹¹⁷ For example, in Sub-Saharan Africa approximately 37 per cent of women start a business due to necessity motives, and in the MENA/Mid-Asia region this rate reaches 36 per cent.¹¹⁸ However, necessity motivation is also visible among female entrepreneurs in developed economies, albeit to a lesser extent. In addition to contribution to family income, women in the developed world may be induced to choose self-employment over other career alternatives due to a necessity to reconcile family and work¹¹⁹ because of the greater demands on their time in terms of household chores and childcare. Therefore, female entrepreneurship in the developed world is also somewhat influenced by a necessity to accommodate family and work responsibilities via a more flexible schedule. Similarly to the family-business interface women in transitioning economies experience, reconciling household activities and the management of businesses also leads to lower performance rates due to the limited amount of time women entrepreneurs are able to devote on operating businesses. For example, married women in the USA have been found to be more likely to engage in entrepreneurial activity compared to unmarried ones,¹²⁰ but have shown on a consistent basis significantly lower growth aspirations compared to their male peers.¹²¹

As a result, necessity motivation can have a rather negative impact on female entrepreneurship. While opportunity motives induce entrepreneurs to strive for greater profitability and efficiency in operating businesses and to pursue higher growth rates, necessity motivation in fact hinders performance. Entrepreneurs motivated by necessity considerations enter the entrepreneurial sphere because access to other occupations is foreclosed to them and establishing a business is often the sole viable opportunity for generating income. As a result, necessity-motivated entrepreneurs are much less likely to innovate, and to grow their companies in terms of product output, number of employees and internationalization. In addition, entrepreneurs who establish businesses as a survival strategy are less likely to be able to focus extensively on their business operations compared to entrepreneurs who pursue business opportunities. Instead, necessity-motivated entrepreneurs will be likely to devote only enough time and resources to their business so as to guarantee a minimum margin of profit which would allow them to sustain themselves and their families. Thus, individuals who enter the entrepreneurial culture as a survival strategy operate at sub-efficient levels which hinder the profitability and growth prospects of their businesses. Given the fact that women entrepreneurs are overall more likely to perform led by necessity motives, it is not surprising that their businesses grow more slowly, are less innovative and

¹¹⁷ Terjesen, Lloyd (n 21) 234; GEM (n) 11.

¹¹⁸ GEM (n 30) 9.

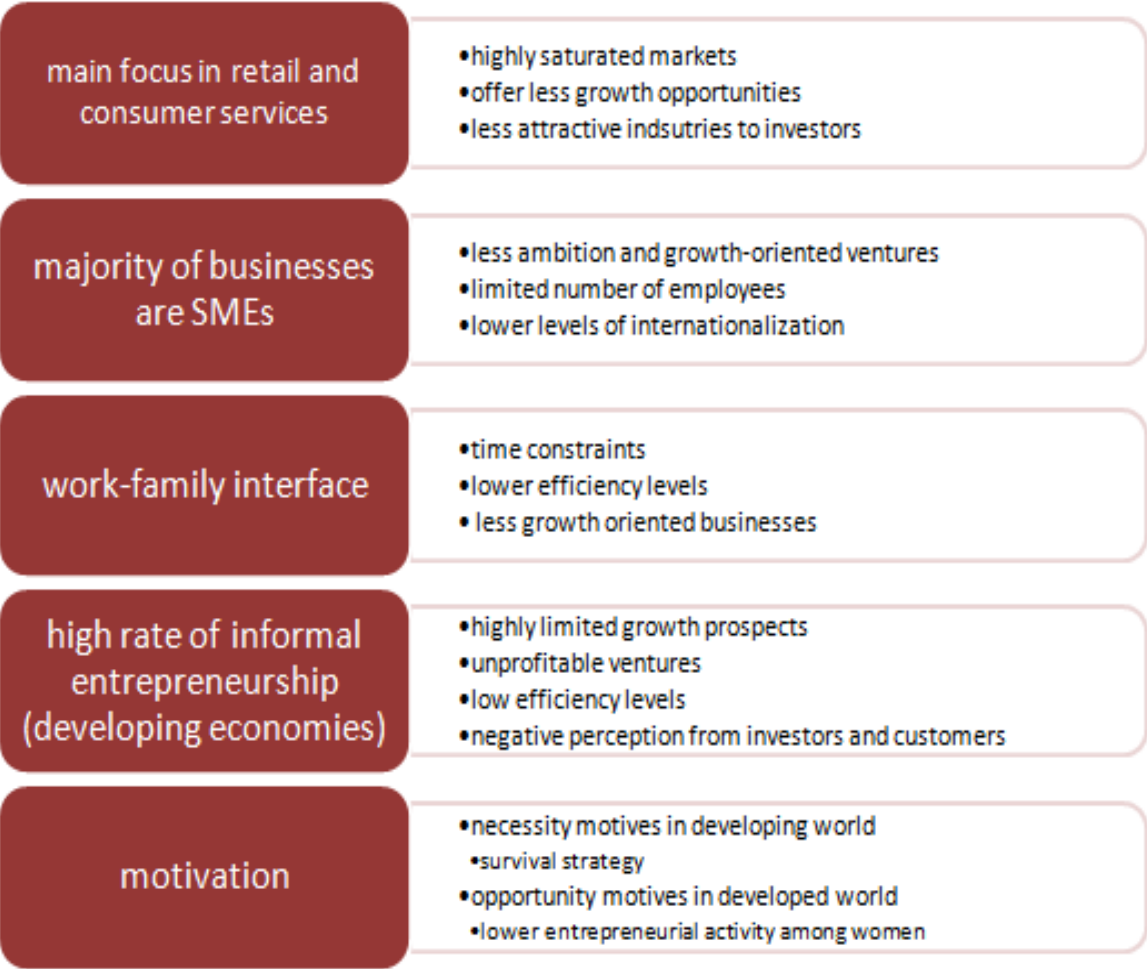
¹¹⁹ Ascher (n 15) 104.

¹²⁰ Foreman-Peck, Zhou (n 9) 14.

¹²¹ OECD (n 1) 35.

profitable, focus less on internationalization, and are less oriented towards inclusion of additional employees compared to male-operated ventures. For instance, in Sub-Saharan Africa, Latin America and the Caribbean region necessity motives in starting and operating a business are significantly more common among women entrepreneurs than among men.¹²² Therefore, female entrepreneurship exhibits greater inefficiency levels compared to the general entrepreneurial culture due to a lack of opportunity motives on the part of many women entrepreneurs and a prevailing necessity motivation in its stead.

Figure 2. Key features of female entrepreneurship and their implications on the rates and quality of women’s entrepreneurial activity



The issues assessed above, such as the normative and institutional treatment of women, family- and child-care time constraints over managing businesses, gender segregation of the entrepreneurial world, and opportunity versus necessity motivations for women to establish and operate companies have a profound impact on the culture of female entrepreneurship and the manner in which women

¹²² GEM (n 30) 9.

entrepreneurs are distinguishable as a separate group under the general umbrella of entrepreneurship. Nevertheless, above all other factors which influence the rates and quality of female entrepreneurship, education arises as its most crucial feature. The accessibility of education and the quality and variety of educational opportunities available to men, on the one hand, and women, on the other, represent the factor which exerts the most significant influence on the rates of female entrepreneurship and has the decisive impact over any disparities in the respective performance of men and women entrepreneurs. Thus, formal training and education represent a critical driver of female entrepreneurship in terms of the efficiency and quality of performance of women entrepreneurs, their ability to generate additional job opportunities on the labor market and their capacity to create value through their business activities. As a result, the author of the present study will argue that rectifying any disparities in the accessibility and quality of education available to girls and women can prove the best solution in addressing the issue of underperformance of women entrepreneurs. Improving women's educational opportunities will have as its consequence a superior female entrepreneurship which, in its turn, can impact substantially economic development, enhance GDP growth and drive the process of poverty reduction both in national economies and internationally. Thus, the subsequent chapters will prove that female entrepreneurs who are highly educated and who have access to formal training on an equal basis with their male peers are critical drivers of economic growth.

Chapter 3. Female education

Section 3.1: Education and entrepreneurship: an overview

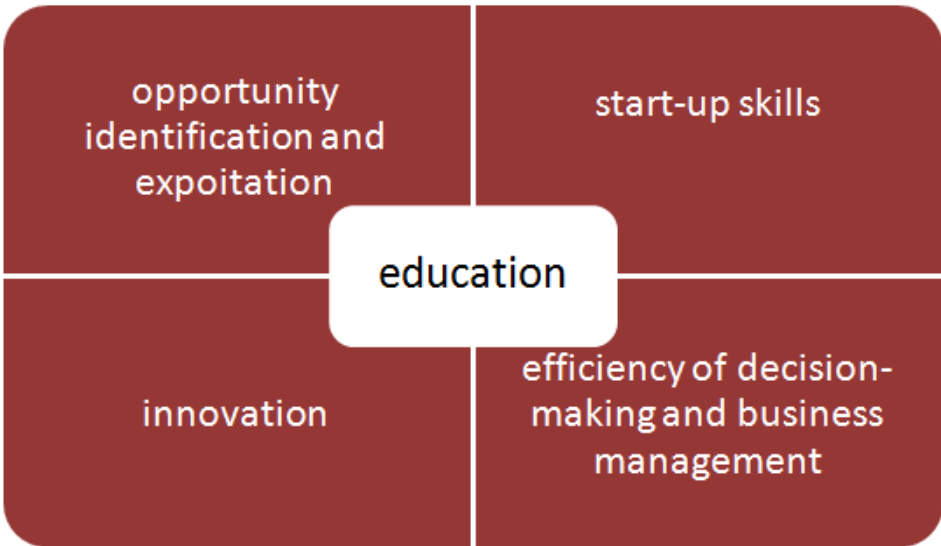
The existence of a strong connection between education and entrepreneurial success has been well documented in academia.¹²³ Education plays an essential role in entrepreneurship by providing a wide range of skills necessary for opportunity identification, and the ability to establish a business, as well as efficiency of decision-making. All of these are crucial aspects of the entrepreneurial culture, as they have a direct impact on profitability, growth rates, job formation and value creation that businesses display. The availability of formal training, as well as the range of educational opportunities individuals benefit from prior to their engaging in entrepreneurial endeavor, can significantly enhance the efficiency of entrepreneurs, as well as their capacity to grow businesses and to create value within the market on which they operate. Furthermore, entrepreneurs who benefit from higher levels of education are significantly more likely to innovate compared to entrepreneurs with little to no education. Innovation consists of the capacity to offer new products and services to consumers,¹²⁴ and is thus crucial to the entrepreneurial process. Entrepreneurs who innovate introduce improved products and higher-quality services to the market and, in consequence, create value for their customers by

¹²³ Ascher (n 15) 106.

¹²⁴ GEM (n 30) 32.

enhancing the performance of their own businesses and by stimulating the market in general. Conversely, entrepreneurs who are unable to innovate but saturate the market with products (or services) which already exist, implicitly limit consumer choice, and may even hinder the development of the market. As a result, entrepreneurs who have had access to superior educational opportunities are more likely to perform at increased rates of efficiency and productivity in operating businesses, to be more innovative and successful in managing their businesses, and to contribute to greater extent to value creation and economic development, compared to entrepreneurs who have received limited to no education.

Figure 3. Impact of education on entrepreneurial propensities.



This close interdependence between the quality of entrepreneurship and the right to education sheds light to a significant extent on the differences in performance displayed by men and women entrepreneurs respectively. As outlined above, female-owned and operated businesses, while steadily growing in number internationally, remain smaller, less ambitious and capable of generating less than men-operated ventures in both the developed and the developing world. In addition, women entrepreneurs tend to be over-represented in a limited number of industries which offer fewer opportunities for growth and profit maximization, while access to other sectors, which arguable provide superior business opportunities, seems to be limited. These specifics of female entrepreneurship, although traceable to matters such as normative, institutional and time constraints, are primary caused by gender inequality in education. This segregation in educational opportunities and formal training can be observed on two levels. Firstly, girls and women in some economies face gender-specific obstacles which constrain from exercising their right to education; thus, female entrepreneurs often have been exposed to limited training prior to entering the business world, while their male peers have had beet access to education. Secondly, similarly to the pattern of gendering the

markets on which it is acceptable for female entrepreneurs to operate, girls and young women often experience more difficulties in accessing certain academic fields compared to their male peers. As a result, women are exposed to a less varied education which constrains their capacities as entrepreneurs.

Section 3.2: The universal right to education

The right to education is today firmly embedded in the international legal order as a *universal* human right, meaning that gender equality in education forms an intrinsic part of the right.¹²⁵ Girls and boys are entitled to receive equal levels of education, as well as to have access to the same quality and variety of educational opportunities. Therefore, under international law, limiting the access to education based on gender discrimination is prohibited. Moreover, international law stipulates that the state bears a certain level so responsibility in promoting equality in the national educational system and in improving the accessibility of the right. In addition, investing in girls' and boys' education on an equal basis has been proven capable of yielding both private and public benefits in terms of improved rates of labor force participation, a higher quality of labor performance and enhanced economic expansion.¹²⁶ As a result, investing in female education and achieving gender equality in education are crucial factors on the international scene in terms of achieving higher rates of education and elimination gender-based discrimination therein, as well as in improving the quality of female entrepreneurship. However, there still persists a large gender gap in the educational opportunities available to males and females, despite continuous efforts for its reduction.¹²⁷ Although this disparity is significantly more visible in the developing world where the general access to education for females is often restricted, developed economies also exhibit signs of gender-based segregation in education, related to an implicit foreclosure of some academic fields to girls and women. Thus, the extent to which girls and women have access to formal training and the educational opportunities available therein have a direct and decisive impact on the rates and quality of female entrepreneurship.

Section 3.3: Female education in developing countries

The developing world has consistently exhibited large disparities in the accessibility of education to boys and girls, despite significant efforts to expand the availability and equality of education, as well as to eliminate gender inequality in education. The most prominent programs seeking equal and widespread access to education in transitioning economies involve the inclusion of schooling among

¹²⁵UNESCO, 'Girls' and Women's Right to Education: Overview of the Measures Supporting the Right to Education for Girls and Women Reported by the Member States' (8th Consultation) (2014) ED-2014/WS/2 – cdl 115.14, 3.

¹²⁶World Bank, 'Girls' Education in the 21st Century: Equality, Empowerment and Economic Growth' (Report) (January 2008) Department of International Development 24, 42, 54.

¹²⁷Ibid 3.

the Millennium Goals and the creation of the Education for All (EFA) initiative.¹²⁸ However, many developing economies have not yet attained equal participation in schooling for boys and girls and struggle with higher rates of illiteracy among females,¹²⁹ a discrepancy which is especially acute in rural areas.¹³⁰ Given the fact that a majority of the female population in developing countries is located in the country-side,¹³¹ the lack of accessibility to education for girls and women in these regions represents a major setback in the promotion of female education in transitioning economies. For instance, in 2008 41 million girls, most of whom living in Sub-Saharan Africa and South Asia did not attend school,¹³² while in 2011, approximately 25 per cent of all girls in the developing world remained outside the framework of formal education.¹³³ Although there is evidence that the rates of school in-attendance among females in the developing world are decreasing and the gender gap in education is slowly declining, there is still a significant discrepancy between the educational opportunities available to boys and girls. The lowest levels of female education in the developing world can be observed in Sub-Saharan Africa.¹³⁴ Developing and low-income economies display a significant gender gap in relation to primary education,¹³⁵ which is a foundational stage in training. This gender segregation increases even further at the level of secondary education, which is the most crucial stage for the acquisition of cognitive skills and competences necessary for successful participation in the labor market.¹³⁶

Thus, the low rates of female education in emerging markets have a largely negative impact on the levels of adult literacy among women, as well as the extent to which women have access to information and to ICT resources. Illiteracy among women living in underdeveloped countries is much higher in comparison to men,¹³⁷ which places women in the developing world in the position of the least educated group internationally. For example, in 2012 the literacy rate among women were the astounding low 39 per cent, while for men the level of literacy was as high as 65.7 per cent.¹³⁸ In Sierra Leone women exhibited even lower literacy rates of only 24.2 per cent for the same year; in comparison, the number of literate men was approximately double (46.7 per cent).¹³⁹ Literary levels

¹²⁸World Bank (n 5) 25.

¹²⁹Ibid 61-62; OECD (n 1) 40.

¹³⁰Navneet Gill Kaur, Jelena Letic, 'Female Education and Economic Growth: Theoretical Overview and Two Country Cases' (Bachelor thesis, University of Gothenburg 2012) 10.

¹³¹Pegah Jalilian, 'The Effects of Female Education on Human Development and Economic Growth: A Study of Human Capital Formation in Developing Countries (Master thesis, Sodestorn University 2012) 34.

¹³²World Bank (n 5) 3-4.

¹³³World Bank, 'Measuring the Economic Gains of Investing in Girls: The Girl Effect Dividend' (Policy research working paper) (August 2011) WPS5753, 2.

¹³⁴GEM (n 35) 21.

¹³⁵World Bank (n 126) 34.

¹³⁶Ibid 4.

¹³⁷OECD (n 1) 40.

¹³⁸Kaur, Letic (n 130) 12.

¹³⁹Ibid 12.

among women in Bangladesh amount to 43 per cent, in comparison to a 53 per cent rate for men.¹⁴⁰ Similarly, in Mexico women exhibit higher illiteracy rates compared to men, and in South Africa girls and young women have significantly fewer opportunities to pursue formal education (especially in relatively poor communities).¹⁴¹ Furthermore, the lack of education, in combination with the lower socio-economic status of women in developing countries, limits to a significant extent their access to ICT resources.¹⁴² For instance, in Africa women have been reported to be 23 per cent less likely to own a mobile phone compared to men, and for Middle East and South East Asia this rate increases to 24 and 37 per cent.¹⁴³ In 2011 women in Lao were reported to be almost two times less likely to use emails in the management of their businesses. Thus, the lack of formal schooling, which is additionally aggravated by a lack of financing, hinders the ability of women (in particular female entrepreneurs) to use ICT resources in their daily life and in the management of their companies. Finally, the low rates of formal education among the female population of transitioning economies prevent women from exercising the right to access to basic information on an equal footing compared to men.¹⁴⁴ Due to the fact that so many women in developing countries are illiterate and have limited access to education, accessing information becomes disproportionately difficult for them.

Table 4. Comparison between literacy rates among the female and male population in developing countries.

Country/Region	Female Literacy Rates	Male Literacy Rates
Developing world	39%	65.7 %
Sierra Leone	24.2 %	46.7 %
Bangladesh	43 %	53 %

The low school attendance rates observed among girls and women in the developing world are rooted in several issues, among which are competing demands on girls' time, poverty and gender attitudes. Firstly, due to gender stereotypes, girls and women are traditionally assigned the majority of the household activities, which constraints girls from devoting sufficient time to their studies.¹⁴⁵ This disproportionate workload hinders the quality of education: if girls bear the main responsibility of

¹⁴⁰ Ibid 40.

¹⁴¹ GEM (n 30) 29.

¹⁴² World Bank (n 5) 7.

¹⁴³ Ibid 7.

¹⁴⁴ OECD (n 1) 40.

¹⁴⁵ UNESCO (n 24) 6.

household-related tasks, they cannot devote sufficient time on their studies. As a result, even if girls attend school at increased rates, their learning process is constrained by other, competing demands on their time.¹⁴⁶ In consequence, girls are prevented from meaningful participation in the educational system which results in higher rates of school dropouts among girls compared to boys. Secondly, the generally inferior social status of females in the developing world leads to a (false) perception that investing in girls' education is less valuable and beneficial in comparison to boys' education.¹⁴⁷ Secondly, female education in the developing world is largely constrained by poverty. Girls from poor families are often compelled to give up education at an earlier stage compared to boys.¹⁴⁸ Families which cannot afford to invest in the education of all of their children often compel girls to stop attending school and focus on household activities instead, or to arrange early marriages for their daughters¹⁴⁹ (so that the financial burden associated with supporting girls and young women is shifted to another household). In addition, women's participation in the labor market is often perceived as inferior to men's, which leads to a perception that female education is an unnecessary investment.¹⁵⁰

There are several other reasons for the low rates of girls' education in developing economies, all of which are linked to the gender-belief system. One is a pattern of early marriages and teenage pregnancies,¹⁵¹ which places even greater family- and childcare-related responsibilities on girls. Another cause for the low attendance rates of girls is the presence of '*widespread intimidation and fear*'¹⁵² to which a large portion of the female population in the developing world is subjected. As a result, girls and young women are prevented from participating in the educational system because of gender-based violence and the lack of sufficient protection from it. Yet another factor which creates a gap in the level of literacy and education attributed to females in low-income countries is the limited access to additional training women may receive at a later stage in their life.¹⁵³ Women who have once exited the formal sphere of education often face foreclosed access to training programs which could increase their skill set and provide them with additional capacities which could increase their propensities to engaging in successful entrepreneurial activities. Finally, girls from excluded social groups, such as ethnic and religious minorities, and groups who speak a minority language, face even greater hurdles to accessing and remaining in the educational system.¹⁵⁴ Such groups are often subjected to unfavorable social treatment on the part of the majority population, stigmatized and

¹⁴⁶ World Bank, 'The Role of Education Quality in economic Growth' (Working paper) (2007) Policy Research Working Paper Series 4122, 1; World Bank (n 5) 33.

¹⁴⁷ World Bank (n 126) 61-62.

¹⁴⁸ Kaur, Letic (n 130) 10.

¹⁴⁹ Ibid 10.

¹⁵⁰ Ibid 11.

¹⁵¹ GEDI (n 21) 10.

¹⁵² UNESCO (n 125) 5.

¹⁵³ Ibid 7, 9.

¹⁵⁴ World Bank (n 126) 116.

discriminated; as a result of this overall exclusion, girls from such groups have limited access to education to an even greater extent than girls from the majority population.¹⁵⁵

Table 5. Reasons for low school attendance rates among girls in developing countries.

1. Increased household responsibilities	<ul style="list-style-type: none"> time constraints prevent girls from meaningful participation in the educational system
2. Negative perception of the value of girls' education	<ul style="list-style-type: none"> low-income families prefer to invest in boys' education girls are compelled to interrupt their education due to lack of finances
3. Early marriages and teenage pregnancies	<ul style="list-style-type: none"> girls are compelled to interrupt their studies due to increased family responsibilities
4. Gender-based violence and lack of protection	<ul style="list-style-type: none"> girls are prevented from attending school because of intimidation and fear
5. Limited access to additional training programs	<ul style="list-style-type: none"> girls and women who have interrupted their studies have little to no opportunities to resume their education
6. Social exclusion of minorities	<ul style="list-style-type: none"> unfavorable social treatment prevents girls from excluded groups from participating in the educational system

Section 3.4: Female education in developed countries

The developed world exhibits much higher enrollment rates among girls compared to developing and low-income economies, as well as a significantly smaller gap in enrollment rates.¹⁵⁶ High-human development economies, i.e. countries which invest extensively in education and formal training, tend to have a highly trained and skilled work force, and the labor market reveals substantial levels of efficiency, productivity and innovation.¹⁵⁷ Thus, countries which promote widespread and equal access to education, and invest in quality educational programs, exhibit literacy rates of almost 100 per cent; in contrast, developing countries, which conventionally are able to devote fewer means to investing in education and human capital, have low literacy rates of approximately 24 to 67 per cent.¹⁵⁸ In addition, developed economies have diminished substantially the disparity in attendance

¹⁵⁵ Ibid 116-118.
¹⁵⁶ Kaur, Letic (n 130) 10.
¹⁵⁷ Ibid 6, 10, 25.
¹⁵⁸ Ibid 12.

rates between boys and girls in comparison to the persisting large gender gap existing in lower-income countries.¹⁵⁹ As a result of the high enrollment rates and consistent attendance levels, women in the developed world are a highly educated and knowledgeable group. For instance, in 2008 women in the USA aged 25-34 years of age surpassed men in the same age group in terms of university degrees: while 25 per cent of men in the designated group had obtained a university education, women exhibited a level of 33 per cent.¹⁶⁰ Similarly, women in emerging markets, such as Brazil, Russia, India, China, who have access to improved educational opportunities compared to their peers, outnumber men in university degrees.¹⁶¹ Education rates among women in Developed Asia and Europe are also high: for instance, Slovenia, Slovakia, Poland and Spain exhibit higher education rates compared to men, and the same applies for women in Taiwan.¹⁶² The high levels of female education in developed economies are especially visible when examining the culture of female entrepreneurship in developed economies. Thus, women entrepreneurs in Europe and the USA have been reported to be better educated compared to both men entrepreneurs and women non-entrepreneurs.¹⁶³

However, although the gender gap in school participation rates between female and male students has been closed in the developed world, there exists a gender-based disparity in the types of formal training received by boys and girls and the academic fields which are most open to each group. Similarly to occupational segregation, the gender belief system creates a certain level of education segregation, whereby gender stereotypes assign different expectations regarding knowledge acquisition and competence to girls and boys respectively.¹⁶⁴ The vast majority of female students flock towards the humanities and social sciences, and only a small portion of them pursue an education in science and mathematics.¹⁶⁵ In a similar fashion to the gender gap existing in entrepreneurship whereby women choose to establish and operate businesses on a limited number of markets, there exists a substantial segregation in terms of the academic training men and women receive. This educational gap operates in a two-fold manner. Firstly, a segregation of the educational opportunities most open to men and women respectively leads to a segregation of the entrepreneurial culture.¹⁶⁶ Generally, women access a rather narrow set of academic fields, which limits their skill-set and constrains them in their choice of industry on which to establish and manage businesses. Thus, for example, women who have received an education in the fields of humanities have lower propensities to operate companies on technology- and science-intensive industries. Secondly, the '*typically feminine*' academic fields women choose are less likely to provide female entrepreneurs with the

¹⁵⁹ Ibid 12.

¹⁶⁰ World Bank (n 126) 42.

¹⁶¹ Ibid 32.

¹⁶² Gem (n 30) 29.

¹⁶³ GEM (n 30) 11.

¹⁶⁴ OECD (n 1) 34.

¹⁶⁵ Ibid 22.

¹⁶⁶ Ibid 22.

training and skill-set, such as start-up skills, which are most relevant to business management.¹⁶⁷ Thus, even highly educated women can be unprepared to enter the entrepreneurial culture due to the lack of adequate training which can support them in managing businesses at efficient rates. As a result, it could be inferred that women are less prepared to enter the entrepreneurial culture compared to men in both the developed and developing world due to a limited access to formal training and a narrow set of educational opportunities open to women.

Section 3.5: The correlation between education and female entrepreneurship

The barriers the majority of women in emerging markets face in obtaining formal training and the segregation of educational opportunities visible in both the developing and the developed world represent a major constraint to the level and quality of female entrepreneurship. While factors outlined above such as gender stereotypes, discrimination at the institutional level and time constraints contribute significantly to the lower rates of entrepreneurial activity among women, lack of formal training, the lower quality of female education and the gender gap in academic opportunities women experience represent the critical impediment to female entrepreneurship and to women's establishing and operating businesses efficient and innovative business ventures. Education and formal knowledge stand at the foundation of entrepreneurship, as they provide the crucial skill-set necessary for innovation, opportunity identification and exploitation, and expansion of business activities. As a result, education is critical for the quality of female entrepreneurship and the extent to which the entrepreneurial activity of women yields positive externalities for society by creating value and driving economic growth. The lack of gender equality is the core factor which hinders female entrepreneurship in both developed and developing economies, albeit in a different manner and to a different extent. Insufficient (or inadequate) training hinders female entrepreneurial activity in terms of growth prospects, capacity to operate formal businesses, opportunity identification and innovation.

3.5.1: Growth

Inequality in education constrains the growth of female-owned enterprises in a two-fold manner. Firstly, it prevents a number of women from entering the entrepreneurial culture for an extended period of time and thus limits the number of mature female-owned businesses. Secondly, it limits the opportunities women have to expand their business activities. Both uneducated and highly educated women, who lack sufficient training to operate in the entrepreneurial culture, face difficulties in establishing businesses due to the lack of start-up skills, i.e., the knowledge and capacities necessary in order to set up a business venture. Start-up skills are crucial not only during the initial stages of establishing a business, but can also have long-term implications for more mature companies. Entrepreneurs who lack key entrepreneurial propensities, such as the capacity to establish successful

¹⁶⁷ GEM (n 30) 29.

start-ups, are unlikely to be efficient in their business activities, or to have the capacities to grow their firm on a long-term basis. Thus, the lack of start-up skills among a significant portion of women entrepreneurs leads to the higher levels of business discontinuances among female entrepreneurs (compared to their male peers), especially in transitioning economies where educational opportunities are to a great extent unavailable to the female population. In addition, because of the lack of start-up skills, many women are unwilling to enter the entrepreneurial culture at all due to lower self-perception and an increased fear of failure.¹⁶⁸ Considering the bleak financial and legal position of women in transitioning economies, the high levels of illiteracy and additional lack of formal knowledge of the entrepreneurial sphere among a large portion of the female population in the developing world represent an enormous constraint on the expansion of female business activity.

Start-up activity among female entrepreneurs in developed countries is also constrained due to women's relatively weak business background and the gender segregation in the academic opportunities available to women.¹⁶⁹ Education and job affiliation are directly linked:¹⁷⁰ thus, women who have received training in the sphere of the humanities, for example, are less likely to consider entering the business sphere compared to individuals whose educational experience is related to entrepreneurship and business management. For instance, only 11 per cent of female entrepreneurs who established a start-up in the course of 2002 in 15 European countries had shown previous background in business.¹⁷¹ In a similar fashion, in 2007 only 28 per cent of women entrepreneurs operating on the US market demonstrated previous experience in self-employment, while the rate of men entrepreneurs was almost double.¹⁷² As a result, in the developing world, women are less likely to be able to establish successful businesses over an extended period of time due to the high rates of uneducated female entrepreneurs, and in developing countries women are less likely to engage in entrepreneurial activity compared to men because of their weaker academic and professional background in business.

In addition, women whose companies successfully transition from start-ups to a more mature stage of development are often unable to expand their business activities and grow their companies due to their weak academic experience. The combination of a limited business skill-set, weak legal protection (afforded to women in transitioning economies), increased family and household responsibilities and insufficient availability of external financing women face internationally prevents female entrepreneurs from growing their business ventures at the same rates as their male counterparts.¹⁷³ In addition, the inadequate academic experience many women have in terms of managing businesses

¹⁶⁸ Terjesen, Lloyd (n 21) 8.

¹⁶⁹ Brookings Institute (n 4) 34.

¹⁷⁰ OECD (n 1) 21.

¹⁷¹ Brookings Institute (n 4) 34.

¹⁷² *Ibid* 34.

¹⁷³ *Ibid* 35.

creates low self-esteem in connection to their propensities as entrepreneurs. Thus, the combination of an objective lack of formal knowledge of the entrepreneurial culture and a subjective perception of diminished entrepreneurial capacities leads women to be less ambitious in their business endeavors and less growth-oriented compared to their male peers, while female entrepreneurial activity remains mostly confined to the SME scene. This observation is supported by the significant differences in terms of growth projections exhibited by men and women entrepreneurs internationally: on average, women report lower growth aspirations in the scope of 7 to 9 percentage points compared to men.¹⁷⁴ Furthermore, women entrepreneurs exhibit lower aspirations in terms of internationalization, which can be observed in both the developing and the developed world. Thus, for instance, the United States, which has one of the most sophisticated cultures of entrepreneurship internationally, has exhibited the lowest levels of internationalization among women-operated businesses in the world, alongside Latin America and the Caribbean region.¹⁷⁵ In short, lack of formal education or the absence of training relevant to operating businesses impacts significantly the growth aspirations of women, by limiting their abilities to engage in long-term entrepreneurial activity and by creating a culture of stagnation of business growth among female entrepreneurs.

Finally, the high level of segregation in education leads to the segregation in entrepreneurship discussed in Section 2.4.2., whereby women entrepreneurs tend to operate primarily in retail and the service sector. These are markets which require little formal knowledge. In contrast, technology-intensive industries, where female entrepreneurs are generally severely underrepresented, are sectors which require high levels of education and a strong background in academic fields such as mathematics, natural sciences and engineering.¹⁷⁶ In the developing world, girls display lower enrollment rates in primary school compared to boys, and at the level of secondary education the gender gap becomes even larger.¹⁷⁷ In addition, the low rates of completion of secondary education among women limit the number of female entrepreneurs who have obtained university degrees and have accomplished a complete cycle of formal education. The result of the diminished exposure to formal training girls and women in transitioning economies is that the culture of female entrepreneurship in these countries is dominated by highly unskilled women, who have lower entrepreneurial propensities compared to their male peers.¹⁷⁸ Thus, the modest school enrollment rates among girls and the lower quality of female education in transitioning economies¹⁷⁹ explains why the majority of female entrepreneurs in developing countries operate in the informal business sector, or, where they are able to access the formal entrepreneurial culture, gravitate towards markets which require limited formal training and lower human capital. However, developed economies also exhibit a

¹⁷⁴ GEM (n 30) 11.

¹⁷⁵ *Ibid* 10.

¹⁷⁶ OECD (n 1) 40.

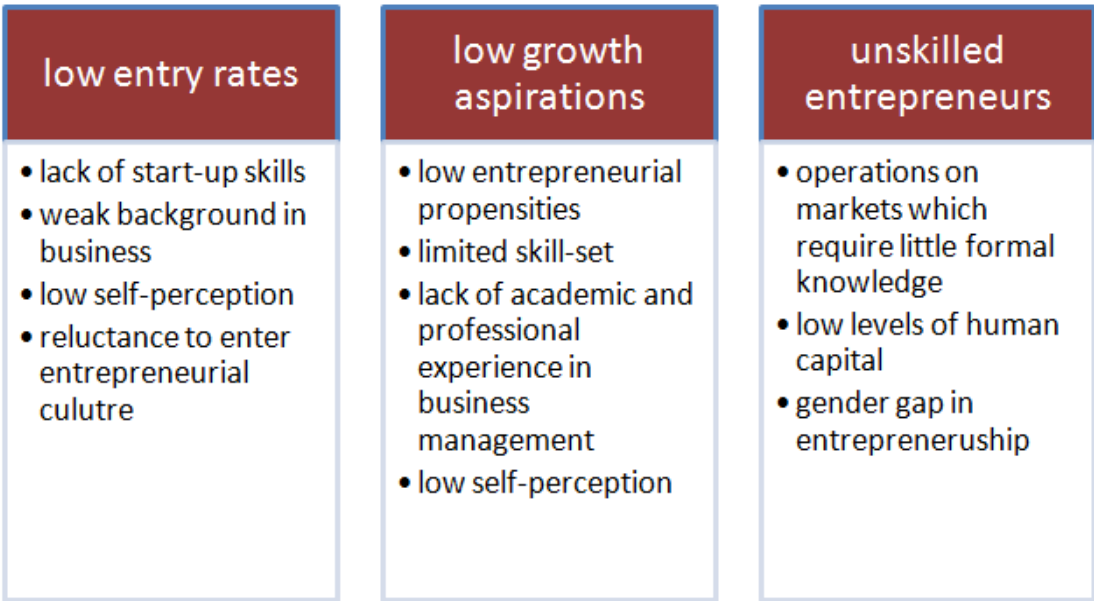
¹⁷⁷ *Ibid* 3, 4.

¹⁷⁸ *Ibid* 43.

¹⁷⁹ *Ibid* 7, 9.

major gender gap in sector orientation among entrepreneurs. Despite the fact that girls and boys generally have equal educational opportunities at the primary and secondary level and that the levels of post-secondary education or even higher among women than men, a small minority of female entrepreneurs choose to operate businesses on industries which require formal training.¹⁸⁰ Thus, the segregation of academic opportunities in developed economies open to men and women respectively limits the knowledge female entrepreneurs have of technology-intensive markets and limits their entrepreneurial propensities.

Figure 4. Impact of low education rates on the growth patterns of female-operated enterprises.



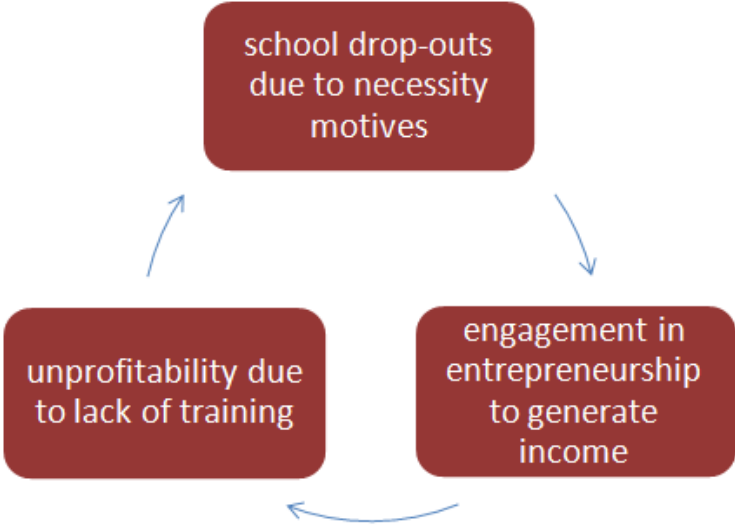
3.5.2: Informal business activity

The low rate of formal education exhibited by women in the developed world, in addition to the regulatory and social constraints they face in establishing and managing formal businesses, leads a significant portion of female entrepreneurs to operate in the informal entrepreneurial culture. The correlation between education and informal entrepreneurial activity is most visible when considering the high rate of necessity motivation among female entrepreneurs in the developing world. Women from low-income households are often forced to interrupt their education and engage in income-generating activities, instead, in order to contribute to the family sustenance.¹⁸¹ The level of education discontinuance because of necessity motives is higher among female than male students due to the fact that, generally, investing in girls’ education is perceived as less important compared to boys’

¹⁸⁰ Ibid 40.
¹⁸¹ UNESCO (n 24) 6.

education in transitioning economies,¹⁸² since men’s function in society is largely perceived to be of bread-earners, while women’s position is generally constricted in terms of family-makers. Nevertheless, due to persistent patterns of general poverty and lower rates of economic growth visible in transitioning economies, the income generated solely by men is often insufficient for the sustenance of an entire family. Thus, women are ‘pushed’ into the entrepreneurial culture because of survival motives, and girls and women from poor families are forced to interrupt their education in order to be able to contribute generating additional income for their families. However, because of limited exposure to formal education, women in the developing world often show low entrepreneurial propensities and lack the human capital, i.e. the knowledge and skill-set necessary to operate efficient, innovative and productive businesses, and the capacity to grow their ventures. As a result, necessity motivation creates a toxic correlation between education and the quality of female entrepreneurship, whereby women entrepreneurs are often confined to operating small, informal, inefficient and unprofitable businesses¹⁸³ due to their limited exposure to education and formal training.

Figure 5. Vicious relationship between lack of education and informal business activity.



3.5.3: Opportunity identification

Another impediment to female entrepreneurship stemming from the lower quality of female education relates to lower levels of opportunity identification exhibited by women entrepreneurs. The propensity to recognize viable business opportunities impacts both the rate at which start-ups are established and the ability of entrepreneurs to grow their businesses and expand their business activities to new geographic markets and additional industries. Thus, entrepreneurs who exhibit higher propensities of

¹⁸² World Bank (n 126) 61-62.
¹⁸³ World Bank (n 5) 5.

opportunity recognition are more likely establish new ventures at an accelerated rate, to operate their companies in an efficient manner which ensures their long-term survival and to manage businesses which are more ambitious and growth-oriented. Because of the limited educational opportunities women have in terms of general accessibility of formal training and of segregated academic experience, women entrepreneurs in both the developed and the developing world generally lag behind men in human capital, which has a negative impact on their ability to recognize and exploit business opportunities.¹⁸⁴ The high levels of illiteracy among the female population of transitioning economies, in addition to limiting the general entrepreneurial capacities of women, diminishes significantly their access to information.¹⁸⁵ Thus, the low levels of female education in these countries, in combination with the lack of finances and social isolation many women face, creates another level of inequality among women and men entrepreneurs, whereby women are to a large extent denied access to the most basic information. The inability of women in emerging markets to effectively exercise their right to information, in its turn, limits substantially their ability to recognize and exploit viable business opportunities.¹⁸⁶ However, low levels of opportunity recognition are not unique to the developing world. In fact, both Europe and several developed economies in East Asia (including Singapore, Taiwan, South Korea and Japan) have been reported to exhibit significantly lower levels of opportunity recognition among women entrepreneurs compared to their male counterparts.¹⁸⁷

The lesser propensities exhibited by female entrepreneurs internationally in terms of identifying and exploiting business opportunities are largely due to educational segregation and the weaker academic background and professional experience in business women generally have.¹⁸⁸ In addition, entrepreneurs who carry lower opportunity recognition propensities are more likely to be unable to identify profitable opportunities which can be pursued in an efficient manner. That is to say, entrepreneurs who lack sufficient knowledge of the entrepreneurial culture and enjoy limited business skills may be induced to pursue unprofitable opportunities, i.e. opportunities which entail higher costs compared to the financial and entrepreneurial benefits they yield.¹⁸⁹ Thus, because of the limited entrepreneurial propensities women enjoy, they are less likely compared to men to be able to separate profitable business opportunities which could be successfully implemented from opportunities whose cost would outweigh the potential business advantages. As a result, women entrepreneurs with low capacities to identify viable opportunities are unlikely to manage efficient and successful businesses, or to be able to grow their ventures. Therefore, gender inequality in education has a negative impact on female entrepreneurship vis-à-vis the diminished opportunity recognition propensities women

¹⁸⁴ Jamali (n 1) 234.

¹⁸⁵ OECD (n 1) 40.

¹⁸⁶ Ibid 40.

¹⁸⁷ Terjesen, Lloyd (n 21) 3, 14.

¹⁸⁸ OECD (n 1) 43.

¹⁸⁹ Ibid 43.

generally exhibit in comparison to men,¹⁹⁰ while the generally lower levels of human capital among female entrepreneurs constrains the efficiency and growth prospects of their ventures.

Table 6. Impact of gender inequality in education on opportunity recognition among female entrepreneurs.

Lack of educational opportunities	Limited skill-set	Low rates of opportunity recognition
<ul style="list-style-type: none"> • high rates of female illiteracy • limited access to information • low levels of human capital 	<ul style="list-style-type: none"> • lower entrepreneurial propensities • inefficiency of decision-making • inability of separating profitable from costly opportunities 	<ul style="list-style-type: none"> • limited expansion on new geographic markets • limited access to new industries • lower growth rates

3.5.5: Innovation

Finally, gender inequality in education constrains innovation among women entrepreneurs. High levels of education among the population increase labor force productivity and the skill-set of the workforce and lead to accelerates rates of innovation;¹⁹¹ thus, education has a direct impact on the adoption of new technologies and labor productivity.¹⁹² As a result, high rates of school participation yield substantial externalities by increasing the rate of innovation,¹⁹³ especially among entrepreneurs, in terms of product innovation (i.e., the process of generating ‘*new product and technology transfer*’)¹⁹⁴ and process innovation (i.e., the inclusion of ‘*new tech and R&D expenditure*’).¹⁹⁵ Due to the high levels of school drop-outs and limited school attendance among girls and women in the developing world, women entrepreneurs in transitioning economies are largely unable to innovate. The low rates of literacy and the limited skill-set female entrepreneurs enjoy, as well as the inability of a large number of women to utilize technology in the day-to-day management of their businesses, prevent female entrepreneurs from developing new and innovate services, from engaging in R&D or

¹⁹⁰ Jamali (n 1) 234.
¹⁹¹ Philippe Aghion, Lean Boustan, Caroline Hoxby, Jerome Vandenbussche, ‘The Causal Impact of Education on Economic Growth: Evidence from the United States’ (Conference draft) (2009) Brookings Papers, 4.
¹⁹² World Bank (n 126) 42.
¹⁹³ Ibid 58.
¹⁹⁴ Terjesen, Lloyd (n 21) 8.
¹⁹⁵ Ibid 8.

from exploiting new technological developments in their business operations. For instance, female entrepreneurs operating in Developing Asia report lower levels of innovation compared to their male counterparts and the lowest levels of innovation among women entrepreneurs internationally.¹⁹⁶ In comparison, the MENA/Mid-Asia region exhibits slightly higher levels of innovation among women entrepreneurs but this area also is reported to show the largest gender gap in entrepreneurship rates.¹⁹⁷ Therefore, a significant number of women entrepreneurs operating on emerging markets conduct technologically-irrelevant businesses, which exhibit low rates of innovativeness and efficiency of management.

In contrast, due to the substantial educational opportunities available, women entrepreneurs in some parts of the developed world generally exhibit high rates of innovation. For instance, the highest level of innovation among both male and female entrepreneurs is exhibited by women entrepreneurs operating in the United States.¹⁹⁸ Similarly, in Europe female and male entrepreneurs display equal rates of innovation.¹⁹⁹ The accelerated rate of innovation among these groups can be traced to the high level of education to which both entrepreneurs and their employees are exposed.²⁰⁰ However in some regions of the developed world, female entrepreneurs lag behind their male peers in terms of innovation. For example, women entrepreneurs in Israel lag behind their male peers in terms of innovation, while the latter report higher levels of innovation than men entrepreneurs in the US and Europe combined.²⁰¹ In addition, despite the enhanced performance of women in Europe and the United States, the Global Entrepreneurship and Development Institute found that in 2014 there was *'a 13 per cent decrease in the rates of innovativeness among female entrepreneurs in the technology sector, despite an international increase in tech transfer'*, as well as *'a 19 per cent decrease in the presence of female entrepreneurs'* in the industry.²⁰² As a result, innovation levels among female entrepreneurs internationally remain relatively low, while the gender gap in entrepreneurship still represents an obstacle for women to engage in business operations on technology-intensive markets. In addition, the existence of industry-segregation in entrepreneurship and the limited number of women operating on science and technology-intensive markets offer fewer opportunities for female to establish and manage innovative enterprises.

¹⁹⁶ GEM (n 30) 32

¹⁹⁷ Ibid 32.

¹⁹⁸ Ibid 10, 32.

¹⁹⁹ Ibid 10, 32.

²⁰⁰ Ibid 32.

²⁰¹ Ibid 32.

²⁰² Terjesen, Lloyd (n 21) 3.

Table 7. Innovation levels among female entrepreneurs.

Region	Innovation among female entrepreneurs in comparison so male peers
Developing Asia	<ul style="list-style-type: none">• lower rates of innovation among female compared to male counterparts• lowest rates of innovation in female entrepreneurship internationally
MENA/Mid-Asia region	<ul style="list-style-type: none">• slightly higher rates of innovation among female entrepreneurs compared to male peers• largest gender gap in entrepreneurship rates
USA	<ul style="list-style-type: none">• higher innovation rates among women entrepreneurs compared to men
Europe	<ul style="list-style-type: none">• equal innovation rates among men and women entrepreneurs
Israel	<ul style="list-style-type: none">• higher innovation rates among men entrepreneurs compared to female peers• higher innovation levels of male entrepreneurship compared to USA and Europe

Chapter 4. Female entrepreneurship as a driver of economic growth

4.1: Impact of gender inequality in education on female entrepreneurship and economic development

Gender inequality in education poses a major constraint female entrepreneurship and the quality of female entrepreneurial activity. The negative impact that the gender gap in education exerts over female entrepreneurship is most acute in terms of the growth and innovativeness of women-owned enterprises. Due to limited access to education and segregated academic opportunities, women generally tend to be less growth oriented in their business activities and to operate ventures with only moderate growth prospects, while the products and services offered by many female-managed businesses are less innovative compared to the output generated by their male peers. The sub-optimal performance of women entrepreneurs due to inequality in education, in addition to hampering the rates and quality of female entrepreneurship, has a negative influence on economic growth generally because business growth and innovation are crucial factors of economic development.

Firstly, impeding girls' access to education impedes growth by limiting the level of female labor participation, including the rate at which women establish and operate businesses.²⁰³ In contrast, if women had equal educational opportunities to men, they would enjoy an enhanced access to entrepreneurship, which would increase the rate at which females form and manage businesses in an economy. In addition, unskilled women who do access to the entrepreneurial culture operate at low productivity rates because they lack sufficient training and knowledge.²⁰⁴ As a result, women lack the human capital to manage efficient businesses and are able to generate only limited volumes of output on the market. Therefore, gender inequality in education artificially restricts economic growth by excluding women from receiving high quality education which, in its turn, reduces *'the average amount of human capital in a society and thus harms economic performance'*.²⁰⁵ Furthermore, because of the fact that female entrepreneurs operate at sub-efficient levels and their businesses enjoy limited growth prospects, women are unable to sufficiently contribute to job creation in the economy because of the high rate of business discontinuance among female entrepreneurs and the generally small size of female-owned ventures, whereby women normally operate with between 0-5 employees. In contrast, if women had better access to formal training, it is likely that the women would be able to establish successful start-ups at an accelerated rate, as well as to grow their businesses and hire additional employees in the process. Thus, the lower quality of female education prevents women establishing employment for themselves and for others. Finally, because of lack of education and of academic or professional experience relevant to business management, women struggle to operate highly-profitable enterprises because they have lower entrepreneurial propensities compared to men. The decreased profitability of female-owned businesses, combined with their limited growth prospects, restricts women's earnings. This, in turn, presents *'a major barrier to human development, economic growth and poverty reduction'*.²⁰⁶

Secondly, gender inequality in education reduces innovation in entrepreneurship by limiting women's propensities to utilize new technology in the management of their businesses which, in turn, reduces the quality of the goods and services generated by female-owned enterprises. High levels of human capital are essential for innovation, as highly-skilled workers are better equipped to perform at increased levels of productivity and to contribute to technological development.²⁰⁷ Thus, entrepreneurs with higher levels of education are significantly more likely to manage innovative businesses and to introduce new technologies in their production process and in the day-to-day management of their companies. Due to the widespread female illiteracy in developing countries and the low confidence women have in using ICT, the majority of female entrepreneurs in transitioning economies lack the

²⁰³ World Bank (n 126) 7.

²⁰⁴ Kaur, Letic (n 130) 8.

²⁰⁵ Jalilian (n 131) 36, 37.

²⁰⁶ World Bank (n 126) 9.

²⁰⁷ Ibid 42.

propensities to innovate. For instance, despite high rates of participation in entrepreneurship among women in Thailand and a substantial number of established female-managed enterprises, innovation levels among women entrepreneurs remain low, whereby they are unable to introduce new and innovative products and services on the market.²⁰⁸ In some developed economies, women entrepreneurs also struggle to innovate, as mentioned in Section 3.5.5. due to the substantial level of segregation in academic experience and the fewer number of women who have received formal education in technology and science. Thus, because of the lack of equal educational opportunities, women entrepreneurs in both the developed and the developing world are unable to actively contribute to technological development because they largely lack the knowledge and skill-set to adopt new technologies in their businesses and engage in innovative entrepreneurial activity. As technological development is key to economic growth, gender inequality in education hampers women's ability to fully contribute to economies development. Lower overall human capital levels among women entrepreneurs prevents them from stimulating the market by introducing new products and services, while the inability of less skilled women to utilize technology in their day-to-day business operations restricts the volume and quality of the output they generate.

In short, as a result of the segregated educational opportunities women have access to and the limited entrepreneurial skill-set they enjoy internationally, female entrepreneurship represents a vast source of untapped economic wealth, employment creation and innovation.²⁰⁹ Moreover, achieving equality in education can not only impact female entrepreneurship positively, but can also enhance the performance of the entrepreneurial culture in general.²¹⁰ The potential women entrepreneurs carry in terms of economic growth is particularly important in the developing world, where women generally have less access to education, and face increased social, legal and financial barriers to entry in the business culture, compared to their peers in developed economies.²¹¹ Male and female education represents imperfect substitutes:²¹² the fact that men carry higher rates of human capital and are thus better equipped to operate productive and efficient businesses does not diminish the important of female education. Women's lower levels of human capital diminish the general rate of human capital in society and decrease the overall productivity of the workforce, which, in turn, reduced economic growth.²¹³ As a result of the direct impact education and human development have on economic growth, gender equality in education does not benefit women entrepreneurs alone, but has the potential to yield substantial economic benefits for society at large. However, despite the current widespread gender inequality in education, as well as the existence of other gender-specific obstacles to female

²⁰⁸ GEM (n 30) 32.

²⁰⁹ Jamali (n 1) 232; Brookings Institute (n 4) 31.

²¹⁰ Jamali (n 1) 232.

²¹¹ Brookings Insitute (n 4) 31; Vossenberg (n 29) 1.

²¹² Kaur, Letic (n 130) 12.

²¹³ Ibid 12.

entrepreneurship (such as institutional and social constraints), women entrepreneurs still exerts considerable influence over GDP growth and economic development.

4.2: Female entrepreneurship's contribution to economic growth

A study conducted by the Global Entrepreneurship Monitor in 2010 estimated that in 59 economies worldwide, which, at the time, represented 52 per cent of the population internationally and 84 per cent of the world's GDP, 104 million women were operating businesses, of which 83 were operating established enterprises (i.e., companies which had been operational for over three and a half years).²¹⁴ In addition, according to the 2012 GEM study, the number of women entrepreneurs establishing or running mature businesses for 67 countries internationally was at that point 126 million.²¹⁵ The rate at which women enter the entrepreneurial culture internationally continues to rise each year, as a result of which female entrepreneurs are increasingly contributing to job creation, poverty reduction and GDP growth around the globe.²¹⁶ Although female entrepreneurship has only recently been recognized as an important driver of economic growth²¹⁷ and data concerning the specific impact of women entrepreneurs on economic development is still deficient²¹⁸ (especially in transitioning economies),²¹⁹ multiple country-specific examples point to the increasing impact women entrepreneurs have on the national economy and on global economic growth rates.

As far as the developing world is concerned, the available data suggest that the economic and social returns of education on female entrepreneurship are higher for transitioning economies than for developed countries, and, thus women entrepreneurs have an enormous potential in contributing to GDP growth and poverty reduction.²²⁰ Firstly, both economies which exhibit high rates of female entrepreneurial activity and countries which have low rates of women participation in business benefit from female entrepreneurship in terms of the added output and profits female-operated businesses are able to generate next to male-managed companies, as well as the ability of women entrepreneurs to contribute to family income and provide additional resources for their households. For instance, in 2004 self-employment among women in Nepal amounted to an astounding 84 per cent, while in Bangladesh only 8 per cent of the female workforce was self-employed; however, in both countries women entrepreneurs were reported to have a considerable impact on the development of the national economy and to contribute extensively to family income.²²¹ Furthermore, women entrepreneurs operating in Developing Europe (for instance, Russia, Romania, and Poland), in South and Southeast

²¹⁴ CIPD (n 2) 3.

²¹⁵ GEM (n 30) 6.

²¹⁶ Ascher (n 15) 98.

²¹⁷ Jamali (n 1) 232-233.

²¹⁸ Acher (n 15) 101.

²¹⁹ OECD (n 1) 18.

²²⁰ World Bank (n 126) 27.

²²¹ OECD (n 1) 18.

Asia and in Latin America have been proven to have an important impact on the growth of the national economy, despite the fact that a significant portion of female entrepreneurs on these markets operate small-to-medium size venture.²²² Thus, it can be presumed that if women had more equal access to education compared to their male peers and thus were able to develop an equivalent level of human capital, they would be able to grow their businesses at a more accelerated pace and to create additional product and service output on the market, which, in its turn would yield both private benefits (in terms of greater contribution to family income) and social benefits (in connection to improved market stimulation, and higher GDP rates). In addition, women in some developing economies which exhibit low rates of female self-employment abstain from engaging in entrepreneurial activity due to low self-perception and an increased fear of failure. Increased educational opportunities and additional years of schooling would increase the level of human capital among the female population of these economies and would, therefore, stimulate women's participation in the labor force generally and, more specifically, in entrepreneurship, as well as enhance the opportunities of female entrepreneurs to establish efficient ventures which could successfully transition to from start-ups to mature businesses. For instance, the World Bank has estimated that *'if each Burundian girl completed the next level of education, the total contribution to productivity over her lifetime could be equivalent to nearly one year of Burundi's GDP'* and that if *'girls in Kenya, Tanzania, Senegal and Uganda had completed primary school alone, their additional output over their lifetime would be equivalent to 20%, 18%, 14% and 13% of annual GDP, respectively,'* while if they completed secondary school, *'they would contribute 48%, 32%, 24% and 34% (of annual GDP)'*.²²³

Secondly, in some transitioning economies, female participation in entrepreneurship is relatively equal to or even surpasses the rate at which men enter the business sphere: for instance, in 2002 the GEM estimated that China, Thailand and South Africa exhibited smaller gender gaps in entrepreneurship compared to other economies, while in Ghana the ratio between female and male participation in entrepreneurship amounted to 6:1.²²⁴ However, because of the high rates of school drop outs among girls in Sub-Saharan Africa, a substantial number of female entrepreneurs in the region operate in the informal entrepreneurial culture, which hinders the performance and profitability of their business. As a result, given the already high rate of female entrepreneurship in some transitioning economies, it can be expected that if the access to formal training among the female population was improved, the enhanced level and quality of female education would have incredibly high social and economic returns by stimulating general labor productivity, as well as business efficiency, and by increasing the rate at which female-owned enterprises grow. In addition, as discussed in Section 3.5.1., some female entrepreneurs in emerging markets (such as Zambia, Tanzania and Ethiopia) are able to develop and grow their businesses, as well as to break from the typical trend among women entrepreneurs of

²²² Ascher (n 15) 100.

²²³ World Bank (n 133) 14.

²²⁴ Ascher (n 15) 99.

operating with a limited number of employees, and hire additional staff instead, despite the harsh conditions of general gender inequality in which they operate. Given the strong performance of female entrepreneurs in terms of their ability to carry out business activity and create, it could be expected that if the gender gap in education was decreased by providing girls and women with enhanced opportunities for formal training, women entrepreneurs operating on these markets can have a make a substantial contribution in terms of job creation and poverty reduction. In conclusion, investing in girls’ education and expanding the opportunities for formal training girls and women in developing countries have access to can boost majorly the rates and quality of female entrepreneurship in transitioning economies and thus enhance general economic development. Improved rates of human capital among the female population can lead to overall higher labor productivity, more innovation in the entrepreneurial culture, increased job creation and higher volumes of output. Thus, gender equality in education can yield significant social benefits in the form of accelerated economic growth and poverty reduction.

Table 8. GDP growth as a result of additional schooling opportunities for girls in Africa.

Country	GDP contribution upon completion of primary school	GDP contribution upon completion of secondary school
Kenya	20 %	48 %
Tanzania	18 %	32 %
Senegal	14 %	24 %
Uganda	13 %	34 %

Enhancing gender equality in education in the developed world vis-à-vis encouraging girls and women to obtain more varied academic experience can also impact positively the rates and quality of female entrepreneurship and boost GDP growth, albeit to a more limited extent compared to developing countries. The core issue relating to gender inequality in education in developed economies is the gender gap in educational opportunities concerning formal training in science and technology and the limited exposure girls and women have to academic and professional experiences which can increase the entrepreneurial propensities of female business owners. Given the fact that women entrepreneurs operating in developed economies are already a highly educated group, it can be assumed that an increase in the rate of women who have formal education in fields related to business management can further enhance the level of human capital female entrepreneurs carry and allow them to innovate at increased levels, generate additional output, expand their business activities and create more employment. For example, according to studies conducted by the OECD, in 2004, the 6.4 million self-employed women operated in the USA were able to *‘provide employment for 9.2 million people and create significant sales’*, and the estimated number of employees among over 10 million self-

employed women in the EU for the same year amounted to 15 million individuals.²²⁵ By 2015, the number of job provided by women entrepreneurs operating in the US had increased to 23 million.²²⁶ It is important to remember that, traditionally, women are more likely to operate micro firms, i.e. to employ less than 5 people or to operate without any employees at all.²²⁷ If it is assumed that the relatively low level of additional staff employment among female entrepreneurs is (partially) due to their limited academic and professional experience in business management and the resulting lower propensities to grow their businesses at the same pace as men, encouraging women to obtain formal training in a greater variety of academic fields (instead of the traditional ‘feminine’ areas of social sciences and the humanities) can improve the propensities of female entrepreneurs to expand their entrepreneurial activities. As a result of the accelerated grow levels, women entrepreneurs would be more likely to hire additional employees and thus contribute further to job creation.

Table 9. Rate of self-employment among women in developed economies in 2004.

Country	Rate of female-operated businesses in the economy.
United States	28 %
South Korea	36 %
Germany	18 %
United Kingdom	26 %

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Furthermore, increasing the human capital female entrepreneurs carry and thus stimulated the growth of female-owned enterprises can have a major impact on GDP growth. In 2004 the OECD estimated women entrepreneurs operating in Canada generated a contribution to the national economy of over CAD 18, 109 million.²²⁹ In a 2015 study, the World Bank estimated that female-owned enterprises in the USA contributed almost USD 3 trillion to the national economy.²³⁰ Thus, the Center for Women’s Business Research concluded that *‘[if] US women-owned businesses were their own country, they would have the 5th largest GDP in the world’*.²³¹ However, the average annual sales reported by Canadian female-owned enterprises were lower compared to those of male-managed businesses: for instance, in 2000 men entrepreneurs operating SMEs more than doubled the profits generated by their female peers.²³² These findings are consistent with the generally lower level of profitability exhibited by women entrepreneurs compared to men internationally. In addition, women tend to be more

²²⁵ OECD (n 1) 6.

²²⁶ World Bank (n 5) 3.

²²⁷ OECD (n 1) 17.

²²⁸ Ibid 15.

²²⁹ Ibid 15.

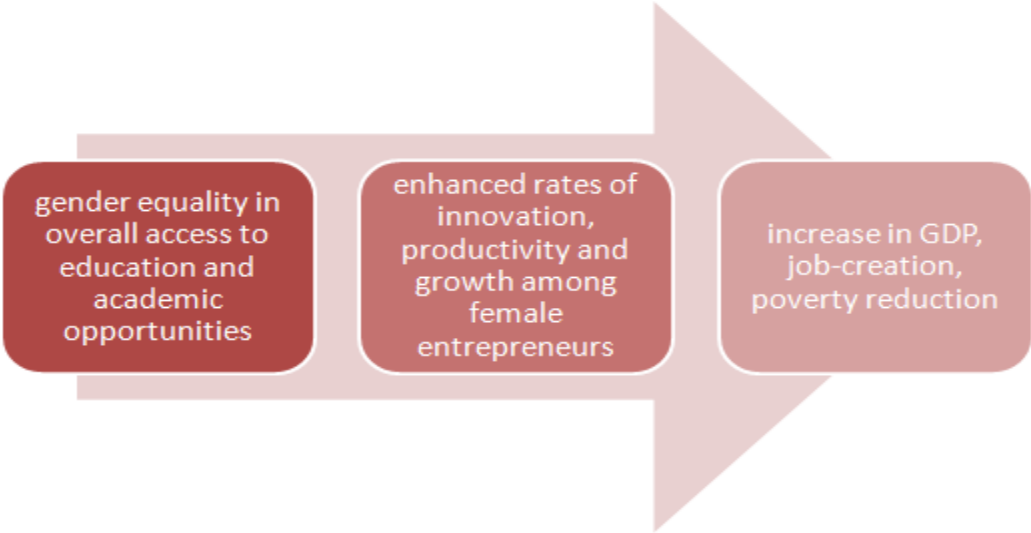
²³⁰ World Bank (n 5) 3.

²³¹ Ascher (n 15) 99.

²³² OECD (n 1) 13, 14.

reluctant to engage in entrepreneurial activity compared to men. For instance, in 2011 men in the UK were approximately *'twice as likely to be entrepreneurially active as women'*.²³³ The existence of a gender gap in participation rates in entrepreneurship hampers the economic growth of developed economies. Thus, if women and men in the UK exhibited equivalent participation levels, economic growth in the country *'could further increase (...) by 0.5 percentage points per year, with a potential gain of 10% of GDP by 2030'*.²³⁴ Considering these data, it is evident that female entrepreneurship in the developed world in connection to reduction of unemployment and economic growth. As a result, it can be assumed that if the gender gap in educational opportunities were decreased, women would be in a position to influence job creation and GDP growth to an even further extent. In addition, closing the gender gap in education would also likely reduce the gender gap in entrepreneurship, whereby women would have increased access to science- and technology-intensive fields, which would increase the contribution of female entrepreneurship to innovation and productivity.

Figure 6. The correlation between female education and entrepreneurship and economic growth.



Chapter 5. Policy recommendations

Due to the vital role the right to education plays in enhancing the performance of the entrepreneurial culture, in particular female entrepreneurship, and in contributing to economic growth, attaining equality in education worldwide is crucial for improving the performance of female entrepreneurs and the influence they exert on economic development, job-creation and poverty reduction. In view of the fact that women in many economies suffer from widespread gender inequality not only in terms of

²³³ CIPD (n 2) 3.
²³⁴ Ibid 3.

their ability to exercise the right to education, but also in connection to discriminatory institutional and social treatment, female entrepreneurship and the substantial economic potential it carries can best be maximized if all gender-based constraints are removed. Thus, women entrepreneurs would be able to achieve their full potential as a source of economic wealth and a driver for economic development if they had access to educational and financial opportunities on an equal footing with men, and, in addition, if they received equivalent legal treatment and protection. However, gender-based impediments to female entrepreneurship other than restricted access to education and formal training are the focus of this work. As a result, this Chapter will center solely on policy recommendations aimed at improving the extent to which girls and women are able to exercise their right to education on an equal basis to their male peers. Both developed and developing countries need to improve gender equality in formal training and introduce reforms in the national legal order aiming at eradicating gender inequality in education. However, because women entrepreneurs in the two sets of countries face different challenges in terms of educational opportunities, the aim of the policies proposed below will be different for transitioning economies and for the developed world.

Women in the developing world are the most disadvantaged group internationally in terms of formal training. Girls and women in emerging markets remain less educated than both male counterparts and from their female peers in developed economies, as they face social and economic constraints in exercising their right to education (in terms of unfavorable perception of the value of female education) and lack the legal means to effectively exercise the right due to their diminished position in society and widespread social isolation. For this reason, educational reforms which aim to diminish the gender gap in education in developing countries can be classified in four broad categories: financial support, promotion of gender sensitivity in education, increasing female school attendance among socially excluded groups and the provision of additional training for girls and women who have interrupted their studies.

Firstly, financial support can prove an effective mechanism of combating gender inequality in education because many girls exit the educational system due to low household income and an inability on the part of the families to fund their education. Therefore, a useful policy which would incentivize poor families to provide additional support to girls' education would be the use of scholarships, conditional cash transfers, stipends²³⁵ and school design programs.²³⁶ Such financial support would partly relieve the economic burden investing in female education places on low-income households. Such measures have already proven successful in raising the level of female school enrollment in some developing countries,²³⁷ and can prove especially effective in reducing the gender gap in secondary education, which the most important level of formal training in terms of acquisition

²³⁵ World Bank (n 126) 3.

²³⁶ *Ibid* 122.

²³⁷ *Ibid* 6.

of cognitive skills but exhibits the higher rate of gender segregation.²³⁸ Thus, the provision of additional financial support by the state would allow poor households to invest in both girls' and boys' education, instead of prioritizing one group over the other.

Secondly, school provides children with a platform where they can challenge gender stereotypes and gender-restrictive norms.²³⁹ As a result, increasing gender sensitivity in the educational system can provide an important outlet for both male and female students to develop their potential in a safer and less gender-oppressive environment. This can be achieved through the inclusion of gender-sensitive and –balanced teaching course materials and curricula, and by hiring more female teachers,²⁴⁰ by promoting gender sensitivity among teachers²⁴¹ as well as by '*making schools and school grounds physically and psychologically safe for girls*' and by implementing '*policies to fight discrimination, harassment and abuse*' in the school system.²⁴² Such reforms would combat acute issues such as gender based violence and negative social attitudes towards girls' education, which have proven to be important constraints on the rates of female school attendance.

Thirdly, as discussed in Chapter 3, a large portion of girls coming from ethnic and religious minorities are denied effective access to education because of widespread social exclusion of such groups. As a result, implementing mechanisms which would incentivize children from minorities to attend and stay in school at enhanced rated benefits both female and male education. Measures which can improve access to education for students from socially excluded groups include the provision of study materials in different languages, where there are linguistic minorities, and hiring teaching staff who speak minority languages, as well as the provision of compensatory programs aimed at socially disadvantaged children.²⁴³ Such policies have proven effective in a number of developing and developed countries with ethnic minorities, among which are Spain, Brazil, India, Chile, Malaysia and Mexico.²⁴⁴ However, the implementation of such reforms may prove difficult and burdensome for the government where significant resources need to be devoted to increasing the school participation levels among girls from the majority group. For instance, while middle-income countries like Chile have been able to reach out to minority students via such programs, the implementation of these measures has proven too burdensome financially for low-income economies.²⁴⁵

Finally, in order to improve literacy rates and technology utilization among the female population in developing countries, it is insufficient to target only girls who are currently in school, Instead, it is also

²³⁸ Ibid 4; 280.

²³⁹ Ibid 13.

²⁴⁰ Ibid 12.

²⁴¹ UNESCO (n 24) 10.

²⁴² World Bank (n 126) 12.

²⁴³ Ibid 119, 120.

²⁴⁴ Ibid 119, 120, 123.

²⁴⁵ Ibid 123.

necessary to consider girls and women who have dropped out of the formal educational system but who wish to acquire additional training. Such training programs have been proven to increase the overall level of female entrepreneurship in the national economy.²⁴⁶ Initiatives aimed at improving the qualification of girls and women who have interrupted their education can be particularly important for female entrepreneurs operating in the informal business culture, as they could allow women to expand their knowledge and skill-set and transition their businesses to the formal entrepreneurial sector. Such programs have been implemented in a number of transitioning economies (for instance, in Tanzania, Ghana, Ethiopia and Rwanda) and are not confined to the provision of additional training.²⁴⁷ Instead, these initiatives can include a wide range of support mechanisms for women to develop their entrepreneurial potential, business development services (BDS), technical support, female empowerment workshops and the provision of additional funding.²⁴⁸

As far as developed economies are concerned, the core issue with regard to gender inequality in education is the segregation in academic opportunities most readily available to men and women respectively, and the low rates of female entrepreneurs who have academic or professional experience in business operations. Thus, reforms in developed economies should be aimed at increasing the entrepreneurial propensities of women, including start-up skills and opportunity identification, as well as at closing the gender gap between female- and male-dominated academic fields and increasing women's participation in science- and technology-intensive training. Policies which target these issues are likely to decrease significantly the gender gap in entrepreneurship and to provide better equipment for female entrepreneurs to establish and operate efficient, innovative and growth-oriented businesses. In addition, women who have received formal training relating to business management are more likely to have higher self-perception as workers and entrepreneurs and to enter the entrepreneurial culture at an accelerated rate. In fact, the three core issues in the developed world which have been identified as most restrictive on female entrepreneurship in academia and by policy makers pertain to low capacities of opportunity identification, low self-perception and a low rate of women entrepreneurship in technology-intensive industries.

Thus, for instance, Europe needs to enhance opportunity recognition among women entrepreneurs, i.e. '*women's ability to recognize good opportunities to start a business in the area in which they live*' and East Asia needs to improve the level of self-perception of women, i.e. the belief '*that they possess the required knowledge and skills to start a business*'.²⁴⁹ In addition, despite the relatively high levels of innovation exhibited by female entrepreneurs in Europe, the European Commission has recognized that the existence of a gender gap in education creates a substantial segregation of the European

²⁴⁶ World Bank (n 5) 14.

²⁴⁷ Vossenbergh (n 29) 15, 16.

²⁴⁸ Ibid 15.

²⁴⁹ GEDI (n 21) 3.

entrepreneurial culture, whereby few women entrepreneurs access science- and technology-intensive industries which offer more opportunities for innovativeness and business expansion.²⁵⁰ Instead, the majority of women entrepreneurs active on the European market prefer to operate on sectors such as retail and consumer services, which are traditionally less impactful in terms of productivity, innovation and economic growth. As a result, the Commission has stated that *'[w]omen's intellectual potential and their contribution to Europe's competitiveness are not being maximized'*.²⁵¹ However, because the existence of gender inequality in education in the developed world is the result of (mostly) social attitudes and are due to unequal training opportunities or lack of legal mechanisms for girls and women to enforce their right to education, policies which can decrease the gender gap in education and, instead, enhance opportunity identification and exploitation among female entrepreneurs, as well as increase their self-esteem as entrepreneurs do not relate to improving the rates of formal female education. Instead, governments need to provide coaching and additional training to women entrepreneurs, actively encourage equal academic opportunities and an increased access among female students to academic fields typically dominated by men, as well as promote networking among female entrepreneurs both on national and international level in order to provide enhanced knowledge and understating of the entrepreneurial culture.²⁵²

Table 10. Policy recommendations aimed at promoting female education.

Region	Objectives	Policy recommendations
Developing world	<ul style="list-style-type: none"> • increase school attendance among girls • close the gender gap in secondary education • decrease illiteracy rates • provide enhanced legal protection for girls and women to be able to exercise their right to education • increase the use of technology among the female population 	<ul style="list-style-type: none"> • provide financial support programs • increase gender sensitivity in the educational system • reach out to girls from socially excluded groups • provide additional training schemes for girls and women who have interrupted their education
Developed world	<ul style="list-style-type: none"> • improve the general entrepreneurial propensities of women, including start-up skills • increase opportunity perception among female entrepreneurs • enhance women's self-perception as entrepreneurs • close gender gap in academic experience 	<ul style="list-style-type: none"> • provide coaching programs • actively promote equal access to academic opportunities • encourage women's participation in academic fields traditionally dominated by men • promote networking among female entrepreneurs

²⁵⁰ EU Commission (n 31) 1.

²⁵¹ Ibid 1.

²⁵² Ascher (n 15) 108, 109.

Chapter 6. Conclusion

Female entrepreneurship represents an essential source of economic strength in relation to GDP growth, innovation, job-creation and poverty reduction in both the developed and the developing world. However, due to the existence of gender inequality in education, women's entrepreneurial potential and their contribution to economic development are hampered. While transitioning economies exhibit large gender-based disparities in the accessibility of education, whereby girls and women have only limited access to formal training and largely lack legal mechanisms which could allow them to effectively enforce their right to education, developed countries display more subtle gender segregation in education, whereby women tend to gravitate towards a more limited number of academic fields compared to their male peers and, as a result, have less academic and professional experience in business management. Nevertheless, the gender gap in education in both sets of countries restricts women's knowledge and skill-set and thus creates an unequal playing field for male and female entrepreneurs, with the latter carrying less human capital and having less entrepreneurial propensities compared to their male competitors. This disparity in formal training, in combination with the existence of a gender-based discriminatory institutional and social framework, creates significant impediments to the rates and quality of female entrepreneurship internationally. Women entrepreneurs in emerging markets display alarmingly low rates of literacy and ability to utilize technology in the day-to-day operation of their businesses compared to their male counterparts. In addition, a substantial majority of female entrepreneurs in transitioning economies operates in the informal business culture. As a result of the restricted educational opportunities girls and women in these countries enjoy, female entrepreneurs largely lack the skill-set to establish start-ups which can successfully transition to a more mature stage of business development, or to expand their enterprises. Instead, women entrepreneurs in the developing world tend to be low- or unskilled workers who operate businesses at sub-efficient levels of productivity and whose ventures generate modest profits and have limited growth-prospects. Women entrepreneurs in the developed world, although a particularly educated group, exhibit lower self-esteem and more limited entrepreneurial propensities compared to their male peers. As a result, female entrepreneurs in developed countries display lower rates of entry into the entrepreneurial culture, slower business growth and limited internationalization. Additionally, women in both developed and developing economies tend to operate on markets which require little formal knowledge and offer moderate opportunities for business expansion. In contrast, female entrepreneurs who are active on technology-intensive industries, which offer higher growth prospects and increased profitability, remain a minority internationally. Therefore, the gender gap in education leads to a gender gap in entrepreneurship, whereby women's entrepreneurial potential is severely restricted due to lack of formal training and relevant academic and professional experience in business operations. The right to education thus emerges as a crucial driver of female entrepreneurship. Enhanced educational opportunities for women entrepreneurs can result in an increase of the level of female

entrepreneurial activity internationally, as well as improve to a considerable extent the quality of female entrepreneurship. Providing girls and women with educational opportunities equivalent to those available to their male peers can greatly boost the performance of female-owned businesses and thus contribute to economic growth. Women entrepreneurs are capable of generating significant social and economic benefits even under extremely harsh socio-economic conditions, as seen in some developing economies. Given the important impact female entrepreneurship currently exerts of GDP growth, job-creation and poverty reduction, it can be expected that if women had access to equal formal training compared to men, female-owned businesses would become an even greater source of economic development. Thus, gender equality in education is essential for economic development, as it drives female entrepreneurship and fuels the potential of women entrepreneurs to generate economic and social externalities both on national and international level.

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