Female Entrepreneurship:
A Grouped Division of Europe and Central Asia

Introduction

The constant changes in sociocultural conditions in the global market and the tremendous growth in the number of women's companies culminates in the growing interest in research on female entrepreneurship (Brush, 1992; Moreira et al., 2019). However, despite the growing trend, there is still a lack of understanding about the role that women entrepreneurs play in the process of internationalization of companies and how countries are grouped in terms of female entrepreneurship (Moreira et al., 2019).
In this sense, this article aims to contribute to a better understanding of how the countries of Europe and Central Asia group in terms of female entrepreneurship. To achieve the proposed objective, the research was based on a statistical study, using SPSS software, through a Cluster Analysis to a sample collected in the Database The World Bank – Enterprise Surveys.

Literature Review

Although women have owned their own companies throughout history (Anderson & Zinsser, 1988), the interest of politics and the popular press in the phenomenon of women entrepreneurs is relatively recent (Brush, 1992; Lerner et al., 1997; Moreira et al., 2019).
Hanson (2009, p. 251) proposed a more inclusive definition of entrepreneurship, arguing that entrepreneurship should be seen as a "gender geographical process". According to the above-mentioned author, this inclusive definition of entrepreneurship should be expanded from the narrow focus on the figure of the "hero" (male) created by Schumpeter (1945) (Ahl, 2006; Ahl & Marlow, 2012; Bird & Brush, 2002) who produces totally new products or services, which cause imbalance in the market, to include anyone who "owns a business, takes on the risks associated with property, deals with the uncertainties of resource coordination and is responsible for day-to-day management of the business".
Considering the positive social impact of entrepreneurial activities by women, such as improving income distribution and diversifying the economy (Akter et al., 2019; Gupta et al., 2014; Vázquez-Carrasco et al., 2012), women entrepreneurs are an important factor in reducing inequality and promoting local development (Akter et al., 2019; Alves et al., 2017; Nieva, 2015).
Europe and Central Asia have the lowest rates of female TEA (Percentage of the population aged 18 to 64 who are nascent entrepreneur or managing owner of a new business) and greater gender differences compared to other regions of the world (Elam et al., 2019). It should be noted that the absolute gender difference

is the difference between the male and female levels of TEA. While useful, it is clearly dependent on the scale of business activity in each country (Bosma et al., 2020).

Studies by formal companies in Eastern Europe and Central Asia have found that women-owned companies tend to be small and use less external financing (Sabarwal & Terrell, 2008). Sabarwal and Terrell (2008) also found that returns at the scale of women-owned companies are significantly higher than male-owned companies, implying that women entrepreneurs would earn more from increasing their businesses compared to male entrepreneurs. This study also found that the main reason for the suboptimal size of women's companies is capital constraints (Sabarwal and Terrell, 2008). Although women entrepreneurs represent a significant part of the economy, they face challenges in obtaining the resources needed to expand their businesses (Gatewood et al., 2009).

The environment in which individuals are active also plays a prominent role in the decision to bet on entrepreneurship (Jack & Anderson, 2002; Minniti, 2010; van der Zwan et al., 2012). In addition, there seems to be a wide variation between countries in relation to factors that facilitate or hinder entrepreneurship by women and men (Verheul et al., 2006). By grouping countries on the basis of the level of economic development, it can be concluded that in low-income countries, the gender gap in entrepreneurship is smaller than in more developed countries (Baughn et al., 2006). In developing countries, women face barriers to entering the formal labour market and resort to entrepreneurship to escape unemployment or even poverty (Minniti & Naudé, 2010; Mroczkowski, 1997; Welter et al., 2003). Thus, understanding the role of female entrepreneurship in the context of economic development is especially important (Minniti & Naudé, 2010; Naudé, 2010).

Methodology

In a first phase, a literary review was carried out with the purpose of exposing the theme of female entrepreneurship. In this sense, the research of these articles was carried out on the Web of Knowledge, and the number of citations was consolidated in their selection criteria. Following the theoretical research and ascertained the concepts and constructions of the themes in relation, the explanatory variables were made to the theme Female Entrepreneurship at The World Bank – Enterprise Surveys.

The practical component of this work consists in the realization of a statistical study, of quantitative nature, using a multivariate technique, namely Cluster Analysis, using the Statistical Package for the Social Science (SPSS). Using Cluster Analysis it is possible to group the countries of Europe and Central Asia in terms of female entrepreneurship. This technique will be applied to a sample constructed by extracting quantitative data from The World Bank (Enterprise

Surveys) platform, built on a sample of 35 countries in Europe and Central Asia (company data is grouped into country-level indicators).

Results

Hierarchical cluster analysis was carried out, based on the variables that explain female entrepreneurship, verifying that it was identified by two groups of countries. In this context, the formation of two clusters is noted, the first composed of 31 countries and the second by the other 4 countries that make up Europe and Central Asia.
Subsequently, an analysis of K means was performed, in order to be able to group each country to the clusters whose centroids are closest. There are no differences in the classification determined by hierarchical cluster analysis. In this case, Cluster 1 consists of 15 countries and Cluster 2 consists of 20 countries.
It is verified that in Cluster 1 the means of the two variables are higher than the global mean. In Cluster 1 are countries that have a female participation in companies, that is, a female entrepreneurship rate above the Global average. On the other hand, in Cluster 2 are the countries with percentages of female participation in companies below the Global average.

Figure 1: Geographical representation of clusters

It is possible to see through Figure 1 that Cluster 2 essentially encompasses countries in southern Europe and southwestern Europe, also encompassing some of Central Asia. On the other hand, in cluster 1 are the countries of Europe mainly Nordic and some belonging to Asia.

Conclusions and Implications

In line with the objective of the work and through Cluster Analysis, it is concluded that the countries of Europe and Central Asia can be divided into two groups. The difference between the two clusters can be justified by the role of women in the countries concerned.

According to the Gender Gap Report of the World Economic Forum, the Nordic countries present themselves as the most egalitarian. In this sense, it is noticeable that the countries belonging to **Cluster 1** have a higher level of female entrepreneurship than the global average. On the other hand, the countries of South-Eastern Europe are characterized by the heterogeneity of their ethnic structure. Genders continue to be defined more by differences than by similarities. There is a very clear separation of roles according to gender. It promotes a concept of unbalanced success from the point of view of genders. In this respect, religions continue to have a great influence on gender segregation. Although they are slowly gaining ground, women-friendly transformations often face resistance from traditional cultural codes, customary law and ancient cultural practices. In Turkey, for example, the figure of the so-called "honour crime" persists. In addition, as regards the characterization of the role of women in southern Europe, in particular as regards the division of paid and unpaid labour within the household, a clear gender divide is perceived. It is up to women almost exclusively, both household and elderly tasks. This situation is all the more problematic if we consider that, despite the massive entry of women into the labour market, it did not correspond to greater collaboration of the spouse in domestic tasks. All this may justify the fact that countries belonging to **Cluster 2** have female entrepreneurship rates below the global average.

In this sense, it is observed that in fact, the environment in which individuals are active plays a prominent role in the decision to bet on entrepreneurship, corroborating the literature (Jack & Anderson, 2002; Minniti, 2010; van der Zwan et al., 2012). However, it is not possible to justify the difference between the 2 clusters based on economic development.

This study has as an implication a better understanding of how the economies of Europe and Central Asia are distributed in terms of female entrepreneurship.

In this sense, it is suggested as a proposal for future research to investigate the explanatory factors of cluster distribution, trying to understand not only why in the Nordic countries of Europe and some in Central Asia there is a higher rate of female entrepreneurship but also why in the countries of southern and southwestern Europe there is a lower rate of female entrepreneurship.

The limitation of the study is the restriction on economies in Europe and Central Asia as an analytical basis, which may not have allowed a true interpretation of the results.

Acknowledgments

This work has been supported by national funds through FCT - Fundação para a Ciência e Tecnologia through project UIDB/04728/2020

References

Ahl, H. (2006). Why Research on Women Entrepreneurs Needs New Directions. *Entrepreneurship: Theory and Practice*, *30*(5), 595–621. https://doi.org/10.1111/j.1540-6520.2006.00138.x

Ahl, H., & Marlow, S. (2012). Exploring the dynamics of gender, feminism and entrepreneurship: Advancing debate to escape a dead end? *Organization*, *19*(5), 543–562. https://doi.org/10.1177/1350508412448695

Akter, M., Rahman, M., & Radicic, D. (2019). Women entrepreneurship in international trade: Bridging the gap by bringing feminist theories into entrepreneurship and internationalization theories. *Sustainability (Switzerland)*, *11*(22). https://doi.org/10.3390/su11226230

Alves, M. F. R., Galina, S. V. R., Macini, N., Cagica Carvalho, L., & Costa, T. (2017). Internationalization and innovation in nascent companies: does gender matter? *Journal of Small Business and Enterprise Development*, *24*(4), 887–905. https://doi.org/10.1108/JSBED-01-2017-0020

Anderson, B. S., & Zinsser, J. P. (1988). *A history of their own: Vol. I- I-* Harper & Row.

Baughn, C.C., Chua, B., & Neupert., K. E. (2006). The normative context for women's participation in entrepreneruship: A multicountry study. *Entrepreneurship Theory and Practice*, *30*(5), 687–708.

Bird, B., & Brush, C. (2002). A Gendered Perspective on Organizational Creation. *Entrepreneurship Theory and Practice*, *26*(3), 41–65. https://doi.org/https://doi.org/10.1177/104225870202600303

Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J., & Tarnawa, A. (2020). *GEM - Global entrepreneurship monitor 2019/2020 Global Report*.

Brush, C. G. (1992). Research on Women Business Owners: Past Trends, a New Perspective and Future Directions. *Entrepreneurship Theory and Practice*, *16*(4), 5–30. https://doi.org/10.1177/104225879201600401

Gatewood, E. J., Brush, C. G., Carter, N.M., Greene, P. G., & Hart, M.M. (2009). Diana: A symbol of women entrepreneurs' hunt for knowledge, money, and the rewards of entrepreneurship. *Small Business Economics*, *32*(2), 129–144. https://doi.org/10.1007/s11187-008-9152-8

Gupta, V. K., Javadian, G., & Jalili, N. (2014). Role of entrepreneur gender and management style in influencing perceptions and behaviors of new recruits: Evidence from the Islamic Republic of Iran. *Journal of International Entrepreneurship*, *12*(1), 85–109. https://doi.org/10.1007/s10843-014-0120-x

Hanson, S. (2009). Changing Places Through Women's Entrepreneurship. *Economic Geography*, *85*(3), 245–267.

Jack, S. L., & Anderson, A. R. (2002). The effects of embeddedness on the entrepreneurial process. *Journal of Business Venturing*, *17*(5), 467–487. https://doi.org/10.1016/S0883-9026(01)00076-3

Lerner, M., Brush, C., & Hisrich, R. (1997). Israeli women entrepreneurs: An examination of factors affecting performance. *Journal of Business Venturing*, *12*(4), 315–339. https://doi.org/10.1016/S0883-9026(96)00061-4

Minniti, M. (2010). Female entrepreneurship and economic activity. *The European Journal of Development Research*, *22*(3), 294–312.

Minniti, M., & Naudé, W. (2010). *What do we know about the patterns and determinants of female entrepreneurship across countries?* 227–293.

Moreira, J., Marques, C. S., Braga, A., & Ratten, V. (2019). A systematic review of women's entrepreneurship and internationalization literature. *Thunderbird International Business Review*, *61*(4), 635–648. https://doi.org/10.1002/tie.22045

Mroczkowski, T. (1997). Women as employees and entrepreneurs in the Polish transformation. *Industrial Relations Journal*, *28*(2), 83–91. https://doi.org/10.1111/1468-2338.00045

Naudé, W. (2010). Entrepreneurship, developing countries, and development economics: New approaches and insights. *Small Business Economics*, *34*(1), 1–12. https://doi.org/10.1007/s11187-009-9198-2

Nieva, F. O. (2015). Social women entrepreneurship in the Kingdom of Saudi Arabia. *Journal of Global Entrepreneurship Research*, *5*(1), 11. https://doi.org/10.1186/s40497-015-0028-5

Sabarwal, S., & Terrell, K. (2008). Does Gender Matter for Firm Performance? Evidence from the East European and Central Asian Region. In *Gender and Development Group* (Issue 4705). https://doi.org/10.2139/ssrn.1223454

van der Zwan, P., Verheul, I., & Thurik, A. R. (2012). The entrepreneurial ladder, gender, and regional development. *Small Business Economics*, *39*(3), 627–643. https://doi.org/10.1007/s11187-011-9334-7

Vázquez-Carrasco, R., López-Pérez, M. E., & Centeno, E. (2012). A qualitative approach to the challenges for women in management: Are they really starting in the 21st century? *Quality and Quantity*, *46*(5), 1337–1357. https://doi.org/10.1007/s11135-011-9449-6

Verheul, I., Stel, A. van, & Thurik, R. (2006). Explaining female and male entrepreneurship at the country level. *Entrepreneurship and Regional Development*, *18*(2), 151–183. https://doi.org/10.1080/08985620500532053

Welter, F., Smallbone, D., Aculai, E., Isakova, N., & Scha- kirova, N. (2003). Female entrepreneurship in post-Soviet countries. In *New perspectives on women entrepreneurs* (In J. Butl, pp. 223–239). Greenwich: Information Age Publishing.