

Women entrepreneurs and work–life interface: The impact of sustainable economies on success

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Abstract:

The role of sustainable economies in the success of women-owned businesses across countries is under-researched. This study examines how country economic and political contexts are related to processes that occur in the work–life interface of women entrepreneurs. The research uses data from 10 countries chosen on the basis of multi-dimensional country context constructs (i.e., select economic and political factors). Work–life facets are measured by family instrumental and emotional support (enrichment dimension) and by work–family conflict and other personal problems (interference dimension). The results show that the likelihood of total family (instrumental and emotional) support decreases linearly as the country development level increases. By contrast, the country context is related to work–family conflict and related personal problems in an inverted U-shaped form. Conflict and problems are the highest in mid-level developed countries and lower in both low- and high-level developed economies.

Keywords: Female entrepreneurship | Sustainable economies | Country context | Family support | Work–family conflict | Personal problems

Article:

1. Introduction

Women-owned businesses are important for economic growth and job creation (Mari et al., 2016, Verheul et al., 2006). The number of female entrepreneurs is growing worldwide in both emerging and developed economies. For example, 32% of entrepreneurs in the European Union are women (European Commission, 2017, p. 63). However, the role of sustainable economies in the success of these businesses in both the short and long run is under-researched. This study contributes to an understanding of the impact of major economic and political factors on work–life dimensions of women-owned businesses. This is important because a better understanding of the impact of the economy and politics on the success of women-owned businesses could improve public policy efforts. To our knowledge, only one article compares stages of economic development and work–life balance at the start-up stage to a certain extent (see Welsh, Kaciak,

& Thongpapanl, 2016). The objective of this study is therefore to fill this gap by investigating whether and how country economic and political contexts are related to the experiences of women entrepreneurs across two fundamental spheres of life: work/business and family.

Despite some progress in this area, women still face obstacles that are gender specific (Jennings & Brush, 2013). Idiosyncrasies unique to women include various family-related contexts in which women are most often immersed (Hughes, Jennings, Brush, Carter, & Welter, 2012) and relate to approaches such as the family embeddedness perspective (Aldrich & Cliff, 2003), the 5 M (market, money, management, motherhood, and meso-/macro-environment) framework for female entrepreneurship (Brush, de Bruin, & Welter, 2009), and the work–family balance perspective (Jennings and McDougald, 2007, Rey-Marti et al., 2015). Work and family life are intertwined for most people but are especially interconnected for entrepreneurs in general (Hsu et al., 2016, Jennings and McDougald, 2007) and female business owners in particular (Hodges et al., 2015, Loscocco and Bird, 2012, Peris-Ortiz et al., 2012, Shelton, 2006). Research on the relationship between these two life spheres typically invokes the work–family interface literature (Greenhaus and Allen, 2011, Jennings and McDougald, 2007), also referred to as the business–family interface or BFI framework (Hsu et al., 2016, Welsh and Kaciak, 2019). The BFI setting is built along two dimensions: enrichment and interference (Hsu et al., 2016). Enrichment refers to a positive connection between the business and family domains (Eddleston and Powell, 2012, Powell and Eddleston, 2013), while interference results from the clash of the two areas (Hsu et al., 2016, Jennings and McDougald, 2007, Shelton, 2006). The family–business enrichment construct can be further divided into instrumental (e.g., organizational, financial) and emotional (e.g., moral, affective) family support components (Hsu et al., 2016).

The environment makes a difference in work–life conditions for female entrepreneurship. Scholars recognize the importance of various contexts outside the family realm, including regional conditions (Basco, 2015, Stough et al., 2015) or country-specific factors (Daniele and Geys, 2016, Gupta and Levenburg, 2010, Pathak et al., 2013, Smith, 2008, Welsh et al., 2016, Welsh et al., 2018). The current study investigates the relationship between two of these contexts—namely, family-related factors and country-level conditions. Specifically, it examines whether the intensity of the BFI dimensions varies depending on country-level characteristics, such as economic and political development.

The structure of the paper is as follows: we begin by specifying components of the country and work–family contexts and developing two hypotheses. The first is grounded in social support theory, and the second derives from the conservation of resources theory combined with institutional economics. Then, we estimate several logistic regression models to verify the hypothesized relationships between country context and the BFI dimensions. Following that, we discuss the empirical findings and their implications. Finally, we articulate the study's limitations, suggest future research directions, and present policy implications.

2. Theoretical framework and hypotheses development

2.1. The country context

Research recognizes the importance of different contexts (e.g., family, region, country) in which female entrepreneurs operate (Basco, 2015, Hughes et al., 2012, Mari et al., 2016, Noguera et al., 2015, Simon-Moya et al., 2014, Stough et al., 2015). While acknowledging the importance of the family (Aldrich and Cliff, 2003, Brush et al., 2009), the current study also focuses on country-specific factors that can account for the variance in female entrepreneurs' behaviors (Daniele and Geys, 2016, Estrin and Mickiewicz, 2011, French et al., 2018, Gupta and Levenburg, 2010, Pathak et al., 2013, Smith, 2008, Welsh et al., 2016, Welsh et al., 2018). Only a few studies have attempted to explain entrepreneurial dynamics across various country settings (Aragon-Mendoza et al., 2016, Autio and Fu, 2015, Diaz-Casero et al., 2013, Estrin et al., 2013, Devece et al., 2016, Simon-Moya et al., 2014), and even fewer have examined possible links between national environments and specific components of female entrepreneurs' BFI structures (Welsh et al., 2016, Welsh et al., 2018).

The country context is a multifaceted phenomenon involving various economic, political, and socio-cultural factors. This study concentrates on select country-specific characteristics that pertain to the country's level of economic and political advancement. Specifically, we focus on a combination of gross domestic product (GDP) (at purchasing power parity) per capita, stage of economic development (SED) (Acs et al., 2008, Porter, 1990, Schwab, 2017), and several other popular indexes, such as the global competitiveness index (GCI) (Schwab, 2017), political stability, corruption perceptions, and the conglomerate of political rights and civil liberties.

A country's economic and political environment can affect the mechanisms involved in the interference or likelihood of family support for female entrepreneurs in a negative or positive way depending on the family's personal economic situation. Therefore, the types of support, conflict issues, and the country context should be examined from an environmental perspective.

2.2. Family support

Women's entrepreneurial activities are often supported, in various ways, by their families (Brush et al., 2009, Jennings and Brush, 2013). Such backing may be instrumental and/or emotional (French et al., 2018). Any family support is fundamental to business success (Akehurst et al., 2012, Collins-Dodd et al., 2004, Jennings and Brush, 2013, Shelton, 2006, Singh et al., 2001).

Family instrumental (tangible) support typically involves financial and/or organizational assistance to the woman entrepreneur and constitutes one of the BFI dimensions (Hsu et al., 2016).

For a woman entrepreneur to be able to launch and grow her business venture, family financial support may be valuable and indispensable (Cetindamar, Gupta, Karadeniz, & Egrican, 2012). Family members may help the entrepreneur financially either directly by making family finances available to her or indirectly by providing help in obtaining external resources (Akehurst et al., 2012, Kim and Gao, 2013). Instrumental support may also be exercised through family organizational assistance with running the business (Arregle et al., 2007, Chang et al., 2009, Eddleston and Powell, 2012).

Emotional support of entrepreneurs is also well-recognized in the literature as important (Hoang and Antoncic, 2003, Liao and Welsch, 2005, Prasad et al., 2013). It may take the form of understanding, attention, emotional encouragement, or an overall positive attitude (Eddleston and Powell, 2012, Edelman et al., 2016, Powell and Eddleston, 2013), and in general, it contributes to family cohesiveness (Edelman, Manolova, Shirokova, & Tsukanova, 2016). Family members' moral support can also be in the form of psychological assistance to a woman entrepreneur in dealing with business problems or encouragement of the woman's career choice to be an entrepreneur (Eddleston & Powell, 2012). Such support may be crucial for maintaining business momentum during particularly overwhelming business periods (Hilbrecht, 2016). Family affective support is embedded in family social capital (Cetindamar et al., 2012, Chang et al., 2009) and is part of "familiness" (Chrisman et al., 2003, Zaefarian et al., 2016). Familiness refers to the support the business owner receives from the family (Chrisman et al., 2003, Zaefarian et al., 2016) and is an important element for business success (Akehurst et al., 2012). Having a supportive and stimulating family environment rather than a distant and unwelcoming (in terms of business ideas) family environment is beneficial to entrepreneurial activities (Basco, 2015, Baughn et al., 2006, Essers and Benschop, 2009).

This study investigates the relationship between country context and the two types of family support (instrumental and emotional) combined. According to French et al. (2018), the two family support types are well established in the literature in terms of construct definition and operationalization; as such, they are the most commonly studied factors in the work–family interface.

We follow French et al. (2018) and employ social support theory (Cohen & Wills, 1985) as a theoretical framework for hypotheses development. Our focus is specifically on the utility perspective (Cohen, Gottlieb, & Underwood, 2000) derived from this theory. According to the utility perspective, social support is more useful when it is required to a greater extent. For example, entrepreneurs in countries with poor economic and political indicators may value and need social support in general and family support in particular more than entrepreneurs in countries with prosperous indicators. Thus, total family support (instrumental and emotional combined) has an overall tendency to decrease with an increase of the country economic and political development level (country context).

Family support constitutes part of social support (Cohen and Wills, 1985, House et al., 1988)—a socially enacted construct formed by societal norms (Kim, Sherman, & Taylor, 2008). Therefore, national context may aid in shaping social support in general and family support processes in particular. For example, Alesina and Giuliano, 2010, Daniele and Geys, 2016 find that family ties weaken with a country's level of development. In developing countries in which institutions are deficient, strong family ties will act as a substitute for weak institutions and markets (Dyer & Mortensen, 2005). Welsh et al. (2016) find a negative relationship between the SED (measured through the GCI) and family support. Other studies also find that family support for running entrepreneurial activities is crucial for entrepreneurs in countries characterized by inefficient institutional structures (Bardasi et al., 2011, De Bruin et al., 2007, Xheneti et al., 2019). Thus, we propose the following:

H1. The relationship between country economic and political development (country context) and family support is negative.

2.3. Work–family conflict and other personal problems

Interference (e.g., conflict between family and business, an imbalance, spillover of negative emotions from one domain to the other) is the second dimension of the BFI that female entrepreneurs frequently encounter (the first dimension comprises the enrichment components of family instrumental and emotional support). The negative impact of gender-related personal problems on women's entrepreneurial careers is well established in the literature (Baughn et al., 2006, Cropanzano et al., 2003, Diaz-Garcia and Brush, 2012, Forson, 2013, Mari et al., 2016, Pflanz and Ogle, 2006, Rey-Marti et al., 2015, Saridakis et al., 2014, Welsh et al., 2014, Welsh et al., 2014). Women entrepreneurs' personal problems most often arise from the clash between the family and business spheres (Baughn et al., 2006, Hsu et al., 2016, Stoner et al., 1990), fueled by work–family conflict (Eddleston and Powell, 2012, Hodges et al., 2015, Jennings and McDougald, 2007, Loscocco and Bird, 2012, Parasuraman and Simmers, 2001, Rothausen, 2009, Shelton, 2006). Typical issues related to work–family conflicts that women entrepreneurs face include job–spouse conflict, job–home responsibilities, and job–parent obligations (Kim and Ling, 2001, Kirkwood and Tootell, 2008). In essence, although personal problems can disturb business and family life of any entrepreneur, they particularly affect female entrepreneurs. Women often have a greater responsibility for childcare than men (Sullivan & Meek, 2012), and they generally report that being an entrepreneur affects their family life negatively (Ufuk & Özgen, 2001).

To link country context and work–family conflict, this study uses the conservation of resources theory (Hobfoll, 1989). According to this theory, when resources are lost or threatened, stress-related outcomes occur with greater intensity (for a detailed discussion of the application of the conservation of resources model to work–family conflict, see Grandey & Cropanzano, 1998). Thus, in line with Joplin, Shaffer, Francesco, and Lau (2003), resources are more likely to be threatened in country settings in which entrepreneurs experience greater and more dynamic changes in macro-level economic, political, social, and/or legal factors. In such volatile environments, entrepreneurs perceive greater demands or a greater threat of loss of resources. Economic turmoil decreases valued resources and engenders stress reactions in the family domain (Ollier-Malaterre & Foucreault, 2017) Countries that undergo such dynamic changes are typically located in the transition stages either between the factor- and efficiency-driven stages or between the efficiency- and innovation-driven stages of economic development (Acs et al., 2008, Porter, 1990, Schwab, 2017). Such transition economies represent a challenging or outright hostile institutional environment (Iakovleva et al., 2013, Tonoyan et al., 2010, Vial, 2011, Welter and Smallbone, 2011). Economic and political institutions in transition economies impose bureaucratic burdens on entrepreneurial firms, increasing uncertainty (Tonoyan, Strohmeyer, Habib, & Perlitiz, 2010). As such, we posit that the work–family conflict, combined with other personal problems, will reach its peak in these countries.

Conversely, according to institutional theory (North, 1990), entrepreneurs in highly developed countries enjoy steadier economic and political conditions, which reduce uncertainty and risk and thereby lead to greater stability and decreased personal problems. Furthermore, in these

countries, organizational and governmental (institutional) support is more available, which also reduces work–family conflict (Korabik, Lero, & Ayman, 2003). In support of this argument, Ollier-Malaterre, Valcour, den Dulk, and Kossek (2013) find that people in stable countries with extensive public provisions experience lower levels of work–family conflict.

Finally, entrepreneurs who operate in countries characterized by low economic and political development are mainly necessity entrepreneurs (Baker, Gedajlovic, & Lubatkin, 2005) who must be resourceful (Powell & Baker, 2011), self-efficient, and resilient in the face of adverse conditions such as under-developed country institutions (Ayala and Manzano, 2014, Baluku et al., 2016, Bullough and Renko, 2013, Bullough et al., 2014, Sabatino, 2016). These types of entrepreneurs must have greater courage and stamina to be able to start and develop their businesses, and as such they will likely not be bothered by personal problems in the same way as their counterparts in the aforementioned transition, middle-level economies. Under-developed institutions, while posing more challenges to entrepreneurs, may also serve to heighten their ability to cope with problems (Sundaramurthy & Kreiner, 2008), and thus they develop resilience, which is a vital element for the survival of the business in a competitive arena (Ayala and Manzano, 2014, Bullough and Renko, 2013, Bullough et al., 2014). In such environments, entrepreneurs may be better prepared to face unfavorable conditions in their private lives (Sidani, 2005). As Sundaramurthy and Kreiner (2008) note, individuals may develop “work boundaries” (i.e., psychological barriers) that prevent other problems and conflicts from permeating their professional activities. Such boundaries are perfected with experience. In summary, we argue that in countries in which the level of economic and political development is low or very low, any woman entrepreneur who manages to establish and run a private business, despite the institutional voids, must be able to conquer many obstacles and show strong personal resilience, both of which can make her a more successful entrepreneur. Thus:

H2. The relationship between country economic and political development (country context) and work–family conflict and other personal problems follows an inverted U shape.

3. Method

3.1. Data collection

For this multi-country study, we used the questionnaire from Hisrich and Brush, 1982, Hisrich and Brush, 1984, Hisrich and Brush, 1985, which has been modified by Hisrich et al., 2006, Lerner et al., 1997. The survey was translated and back-translated into the native country languages using Earley (1987) procedure. The questionnaire included a mixture of dichotomous, multiple choice, open-ended, and rank-order items.

3.2. The sample

Data collection took place between 2012 and 2015 using online surveys and personal contacts with business organizations throughout each country. The number of usable surveys from each country included (in alphabetical order) 137 from Brazil, 155 from Canada, 115 from China, 117 from Egypt, 138 from Japan, 116 from Jordan, 116 from Morocco, 184 from Poland, 187 from Slovakia, and 147 from Turkey. We pooled all respondents ($n = 1412$) into one common data set.

3.3. Dependent variables

3.3.1. Family support

Family support is an aggregate of family instrumental (*financial* and *organizational*) support and family emotional support. We assign the value of 1 to family *financial* support if a woman entrepreneur started the business borrowing from her family and 0 if she financed the start-up with her own savings or with money borrowed from non-relatives and/or banks (see Tonoyan et al., 2010). Family *organizational* support determines whether a woman entrepreneur launched her business with (1) or without (0) her family members' organizational/administrative involvement (Cooper and Saral, 2013, Welsh et al., 2016). The aggregate variable *family instrumental support*, which is an ordinal combination of the two financial and organizational support variables, takes the value of 0 (=0 + 0) if a woman entrepreneur reported neither family financial nor organizational support, 1 (=1 + 0 or 0 + 1) if she reported only one type of support, and 2 (=1 + 1) if she reported both types of support.

The variable *family emotional support* is also ordinal. The initial data on all moral supporters are rankings of four of 10 (i.e., pick and rank k of n ; ties allowed) predetermined moral supporters in a business venture (spouse, child, parent, sibling, relative, friend, mentor, government agency, private agency, or other). Then, we obtain a ratio of (a) the total number of picks by a woman entrepreneur from the first five (family-related) supporters to (b) the total number of selections across all 10 types of supporters. Thus, the more a woman entrepreneur picks from the first five supporters (a), the stronger is her family emotional support (for a similar approach to determining the strength of family ties, see Alesina & Giuliano, 2010). The resulting ratios (a)/(b) represent the intensity of family-related sources of moral support to the total number of supporters (family and non-family-related). Given its significant negative skew, we recode the variable comprising the ratios into an ordinal level with the following values: 0 for ratios between 0 and 0.25, 1 for ratios between 0.26 and 0.75, and 2 for ratios between 0.76 and 1. As a robustness check, we review several other coding possibilities as well; however, the results are qualitatively similar to those obtained with the described coding.

Again, the total family support variable *family support* is an aggregate of two ordinal variables, *family instrumental support* and *family emotional support*. It is thus also an ordinal variable, and we assign it to consecutive integer values ranging from 0, if a woman entrepreneur reported neither financial nor organizational support and, at the same time, reported low family emotional support (from 0 to 0.25), to 4, if she reported both financial and organizational support while also indicating the highest level of family emotional support (from 0.76 to 1).

3.3.2. Work–family conflict and other personal problems

We obtained the initial data as rankings of four of nine (i.e., pick and rank k of n ; ties allowed) predetermined categories of personal problems in the business venture (conflict between business and family relationships, conflict between business and personal relationships, emotional stress, family stress, loneliness, poor or lack of support, time management, dealing with men, and dealing with car transport drivers). We measure work–family conflict in two

ways. First, we determine the total number of picks by a woman entrepreneur from the list to produce a metric variable depicting the quantity of problems a respondent experienced in the range from 0 to 9. Second, because the variable's right skew is significant and the standard procedure of taking the variable's logarithm does not convert it successfully to a normal distribution, we recode the variable into an ordinal format with categories ordered as follows: 0 if the number of problems is between 0 and 1, 1 if the number of problems is between 2 and 5, and 2 if the number of problems is between 6 and 9. As a robustness check, we review other coding possibilities as well, such as, for example, 0 for the number of problems between 0 and 2, 1 for the number between 3 and 6, 2 for the number between 7 and 9, and so on. The results are qualitatively similar to those obtained with the coding finally adopted in this study.

3.4. Independent variable

Country context serves as our independent variable. Its components include GDP at purchasing power parity per capita (International Monetary Fund. (2017) (2017) (2017, 2017), the SED (Acs et al., 2008, Schwab, 2017), the GCI (Schwab, 2017), the Political Stability Index (STAB) (http://www.theglobaleconomy.com/rankings/wb_political_stability/), the Corruption Perceptions Index (CORR) (www.transparency.org/cpi), and the conglomerate of Political Rights and Civil Liberties rating, or so-called freedom index (FREE) (<https://freedomhouse.org/report/fiw-2017-table-country-scores>). Table 1 presents the data. The measure of country context thus depicts two dimensions of country characteristics—its economic development (measured through GDP, SED, and GCI) and its political/institutional environment (reflected in STAB, CORR, and FREE). Such an approach to a multi-faceted character of a phenomenon is a well-established procedure in the literature. For example, the Global Entrepreneurship and Development Index is based on 15 components, ranging from gender to risk capital (Acs, Autio, & Szerb, 2014). Diaz-Casero et al. (2013) also use a combination of various country-level institutional variables. Thus, entrepreneurial activity is affected not only by the country's level of economic development but also by political factors such as political stability and economic freedom. The study's focus on both the economic dimension and its political counterpart is warranted given the recent findings in this area (Diaz-Casero, Diaz-Aunion, Sanchez-Escobedo, Coduras, & Hernandez-Mogollon, 2012).

The sample used in this study comprises a heterogeneous group of countries in various stages of economic and political development. Brazil, China, Egypt, Jordan, and Morocco are in the efficiency-driven stage; Poland, Slovakia, and Turkey are in transition between the efficiency- and innovation-driven stages; and Canada and Japan are firmly in the innovation-driven stage (Schwab, 2017). No country in the sample is in the factor-driven stage (or in the transition between the factor- and efficiency-driven stages), though Egypt is perhaps the closest country to this category (Hadidi & Kirby, 2015).

Table 1. Country characteristics.

Country	GDP ^a	SED ^b	GCI ^c	STAB ^d	CORR ^e	FREE ^f	Factor Score ^g
CANADA	46,437	5	5.35	1.24	82	99	1.70
JAPAN	41,275	5	5.49	0.98	72	96	1.48
POLAND	27,764	4	4.59	0.87	62	89	0.59
SLOVAKIA	31,339	4	4.33	0.96	51	89	0.45
TURKEY	24,912	4	4.42	-1.28	41	38	-0.43
BRAZIL	15,242	3	4.14	-0.38	40	79	-0.52
CHINA	15,399	3	5.00	-0.56	40	15	-0.63
JORDAN	12,278	3	4.30	-0.58	48	37	-0.68
MOROCCO	8,330	3	4.24	-0.34	37	41	-0.82
EGYPT	12,554	3	3.90	-1.34	34	26	-1.17

^a GDP = Gross Domestic Product (PPP) per capita (in USD); World Economic Outlook Database, April 2017, International Monetary Fund.

^b SED = Stage of Economic Development (1 = factor-driven stage, 2 = in transition between factor- and efficiency-driven stages, 3 = efficiency-driven stage, 4 = in transition between efficiency- and innovation-driven stages, 5 = innovation-driven stage; stages 1 and 2 not present among the selected countries); <http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf>.

^c GCI = Global Competition Index. The higher the index, the more competitive globally the country is; http://www.theglobaleconomy.com/rankings/wb_political_stability/.

^d STAB = Political Stability Index. The higher the index, the more politically stable the country is; www.transparency.org/cpi.

^e CORR = Corruption Perceptions Index. The higher the index, the less corrupt the country is; www.transparency.org/cpi.

^f FREE = Country Freedom Rating. The higher the rating, the more generally understood freedom is present in the country; <https://freedomhouse.org/report/fiw-2017-table-country-scores>.

^g Factor Scores (produced by Varimax rotation) measure Country Context (CC) – the country level of combined economic and political development.

We carried out a factor analysis of the country economic and political characteristics (Table 1) using Varimax rotation. Both the Kaiser–Meyer–Olkin measure of sampling adequacy (KMO = 0.809) and the *p*-value for the Bartlett’s test of sphericity (*p* = 0.000) indicate that the data are adequate for this type of analysis. The resulting factor scores assigned to each of the countries are available in the last columns of Table 1. Each score depicts an aggregate, multiple measure of the country’s level of economic and political development, where positive scores indicate a higher level of development and negative scores correspond to a lower level. Such an integration of available indexes on countries rather than singling out a unitary or composite index provides a complete and more nuanced picture of the economic and political conditions across countries because they can be examined as a multi-dimensional phenomenon (Marcotte, 2013). The results of the factor analysis are further supplemented and reinforced by exploratory hierarchical cluster analysis (the absence of pre-defined clusters makes this technique more appropriate than the k-means procedure). This study submitted the country characteristics (Table 1) to Ward’s algorithm (for a similar clustering procedure, see Marcotte, 2013). Inspection of the dendrogram (Fig. 1) and evaluation of the agglomeration distance statistics indicate that a three-cluster solution is acceptable. The five countries grouped in the top cluster in the dendrogram, Economic/Political Cluster 1 (China, Brazil, Jordan, Egypt, and Morocco), also appear at the bottom of the negative factor scores range (Table 1). These countries have generally low GDP, low SED, low STAB, high corruption (low CORR), and low FREE. Conversely, the two countries in the middle cluster, Economic/Political Cluster 2 (Canada and Japan), are located at

the top range of the positive factor scores. These countries represent high GDP, high SED, high STAB, low corruption (high CORR), and high FREE. In the third cluster, at the bottom of the dendrogram, are three countries from Economic/Political Cluster 3 (Poland, Turkey, and Slovakia); they are also indicated by middle (around 0) values of the factor scores and represent medium levels of economic and political development. In summary, *country context*, which comprises the factor scores, captures the aggregate level of a country's economic and political advancement.

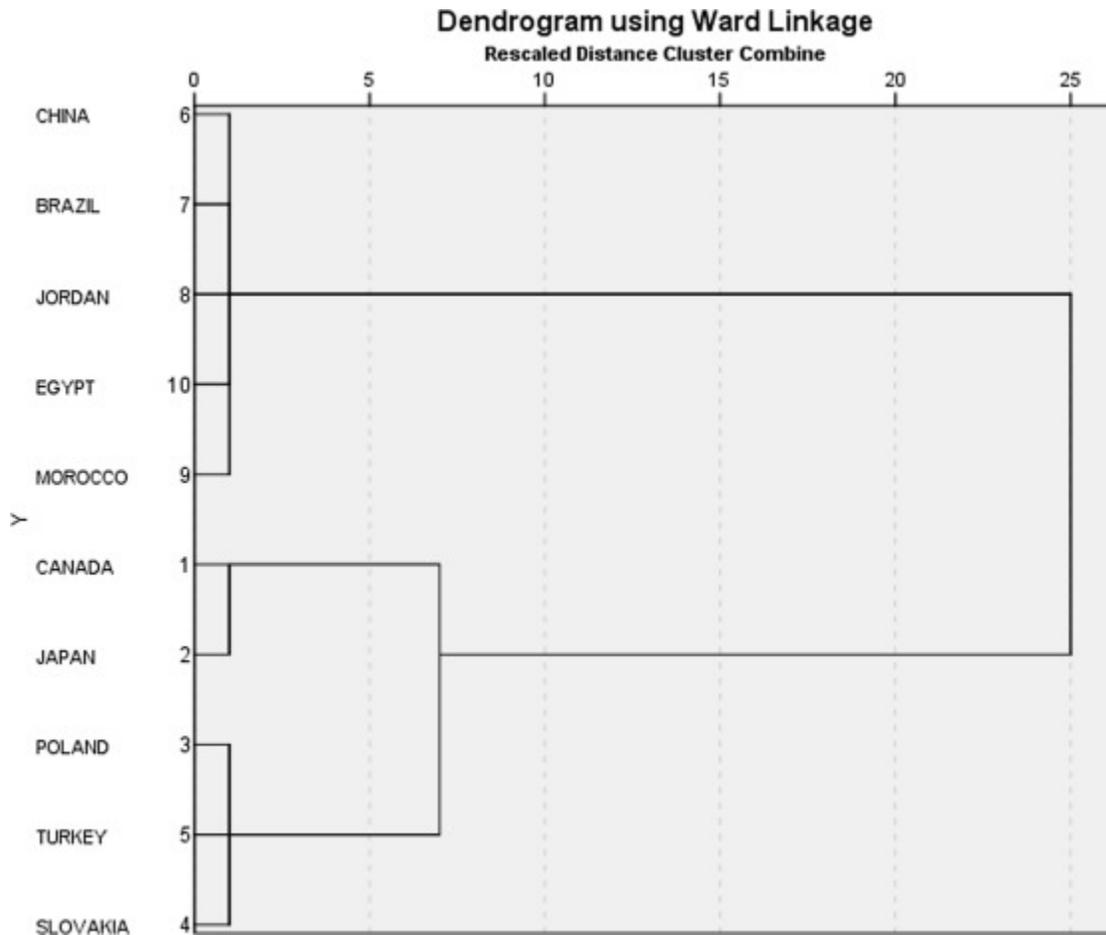


Fig. 1. Cluster dendrogram on the country characteristics.

3.5. Control variables

We account for three control variables typically used in entrepreneurship research to eliminate their possible influence on the relationship between the independent and dependent variables: the entrepreneur's age, her level of education, and family business ownership. The entrepreneur's age exerts an important influence on the business venture (Pathak et al., 2013). We categorized *age* as 1 if the entrepreneur was 40 years of age and older and 0 otherwise (Mas-Tur, Pinazo, Tur-Porcar, & Sanchez-Masferrer, 2015). Education can increase a woman's access to knowledge that will help in running her business (Pathak et al., 2013). Thus, we measure *educational level* as 1 if the woman entrepreneur has a high school diploma or above and 0 otherwise. Other studies have also employed categorical coding of education level

(Lofstrom et al., 2014, Manolova et al., 2006, Pathak et al., 2013), while Cruz et al., 2012, Mastur et al., 2015 specifically use binary coding. We coded *family business ownership* structure to distinguish family businesses (1) from non-family business (0). Consensus on the definition of a family firm is lacking in the literature (see Howorth, Rose, & Hamilton, 2010), as a family business is a complex issue (Ramadani & Hoy, 2015). In this study, we asked respondents to use their own judgment of whether their business was a “family business” when responding to the survey items (Westhead, 1997).

4. Data analysis and results

Table 2 provides the descriptive statistics for the pooled sample (including means and Pearson correlation coefficients). The study tested for multicollinearity and calculated variance inflation factors for the explanatory variables. The factors were all below 1.5, suggesting no apparent problems with collinearity among the explanatory variables (Allison, 1999, Hair et al., 2010). To address the possibility of heteroskedasticity (when the error variances are not constant for all observations), we employed the heteroskedasticity-robust Huber–White estimation for the standard errors (Huber, 1967, White, 1980, Wooldridge, 2003, p. 258). Finally, to address a possible problem of common method bias that may result from collecting behavioral and attitudinal data from self-reported questionnaires at one point in time, we used Harman’s single-factor test on all observed variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The exploratory factor analysis produced the unrotated factor solution with three factors, accounting for 53.6% of the total variance explained. As a single, dominant factor solution did not emerge from the data, we can conclude that common method bias is not prevalent in this study. Given the ordinal nature of the dependent variables, we performed several logistic regression analyses to test the hypothesized relationships between economic and political country-specific factors, family support, and work–family conflict/personal problems. Table 3 reports the results.

Table 2. Variable descriptive statistics and correlations.

Variables	N	Mean	Min	Max	1	2	3	4	5
1. Family Support	1157	1.75	0	4	1				
2. Work-Family Conflict/ Personal Problems	1011	1.09	0	2	-0.010	1			
3. Country Context	1412	0.10	-1.17	1.70	-0.232**	0.077*	1		
4. Entrepreneur’s Age	1138	0.50	0	1	-0.128**	-0.033	0.175**	1	
5. Educational Level	1123	0.75	0	1	-0.060*	-0.048	0.062*	-0.091**	1
6. Family Business Ownership	1065	0.32	0	1	0.275**	-0.033	-0.070*	0.109**	-0.022

Note: ** p < 0.01 (two-tailed). * p < 0.05 (two-tailed).

Models 1a and 1b investigate the relationships between *country context* (country level of economic and political development measured through factor scores) and *family support*. Model 1a tests only the control variables, whereas Model 1b adds the independent variable *country context*. The regression coefficient for this variable is negative ($\beta = -0.390$) and strongly significant ($p < 0.0001$), in support of H1. We also tested the possible impact of the squared and cubed terms of *country context*; however, their addition did not change the linear shape of the hypothesized relationship between country context and family support.

Table 3. Logistic regression results.

	Model 1a N = 1040 (ordered logit)	Model 1b N = 1040 (ordered logit)	Model 2a N = 935 (ordered logit)	Model 2b N = 935 (ordered logit)	Model 2c N = 935 (ordered logit)
Dependent variable	Family support (FS)	Family support (FS)	WFC/Personal problems	WFC/Personal problems	WFC/Personal problems
Control variables:					
Age	-0.626*** (0.117)	-0.515*** (0.118)	-0.148 (0.136)	-0.192 (0.137)	-0.188 (0.137)
Educational level	-0.356*** (0.138)	-0.322** (0.141)	-0.266* (0.161)	-0.282* (0.160)	-0.178 (0.160)
Family business ownership	1.229*** (0.127)	1.187*** (0.129)	-0.093 (0.149)	-0.061 (0.149)	-0.198 (0.154)
Independent variable:					
Country context (factor scores)		-0.390*** (0.058)		0.176*** (0.068)	0.571*** (0.084)
Country context (factor scores) squared					-0.677*** (0.094)
Reliability:					
Model χ^2	403.133***	441.968***	173.312***	178.718***	225.532***
Df	3	4	3	4	5
Percent of cases correctly predicted	36.9	36.8	63.6	63.6	63.6

Note 1. Regression coefficients: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$; two-tailed tests.

Note 2. Heteroskedasticity-robust standard errors in the parentheses.

Models 2a–2c analyze the relationships between *country context* and *work–family conflict* and other *personal problems*. Model 2a includes only the control variables. In Model 2b, the regression coefficient for *country context* is positive ($\beta = 0.176$) and strongly significant ($p < 0.0001$). To shed additional light on a possible non-linear nature of this relationship, we added the squared term of *country context* in Model 2c. The regression coefficient for *country context* is still positive and significant, while the regression coefficient for the squared term is negative and significant ($\beta = -0.677$, $p < 0.0001$), which suggests that the relationship between country context and work–family conflict follows an inverted U shape; these results provide support for H2. We also tested a possible impact of the cubed term of *country context*, but its addition did not change the quadratic shape of the curve.

Overall, all models were significant (all $ps = 0.000$) based on the chi-square statistic (Model 1a: $\chi^2 = 403.133$; Model 1b: $\chi^2 = 441.968$; Model 2a: $\chi^2 = 173.312$; Model 2b: $\chi^2 = 178.718$; Model 2c: $\chi^2 = 225.532$). The percentages of cases correctly predicted were rather low, ranging from 36.8% to 63.6%.

5. Discussion

This study used data from 10 sustainable economic countries (Brazil, Canada, China, Egypt, Japan, Jordan, Morocco, Poland, Slovakia, and Turkey) to show that country context matters and that the intensity of the BFI dimensions varies depending on the country's level of economic and political development (Nissan et al., 2012, Welsh et al., 2016, Welsh et al., 2018). Specifically, the study finds two meaningful patterns in the relationships between country context, operationalized as the country level of economic and political development, and the two

dimensions of the BFI framework: family support (instrumental and emotional combined) and work–family conflict supplemented with other gender-related personal problems (interference).

First, the study shows that the country level of economic and political development has a negative relationship to family support (H1). The likelihood of family support is the highest in countries at the lower end of the development (economic and political) spectrum and the lowest in countries at the high end of this spectrum. In a similar vein, Welsh et al. (2018) show that family support is needed more in less developed countries, in which women are more likely to be forced to rely on help from family members to operate their businesses. Welsh et al. (2016) also report that the likelihood of family support is the highest in countries at low levels of development and the lowest in economically and politically advanced national settings. The difference between our study and that of Welsh et al. (2016) is that Welsh et al. draw on only one dimension of country economic development (i.e., GCI), whereas we employed a multi-dimensional country context construct comprising several country-specific characteristics, including GDP (at purchasing power parity) per capita, SED and several other popular indexes (i.e., GCI, STAB, CORR, and FREE).

In addition, although French et al. (2018) hypothesize a similar negative relationship between the country economic context (though measured only through national GDP) and work–family conflict, they do not find support for their conjecture. By contrast, we find support for this theoretically sound hypothesis based on the utility perspective grounded in social support theory.

Second, we find that the relationship between the country level of economic and political development and the likelihood of work–family conflict and other personal problems has an inverted U shape (H2), such that the likelihood of personal problems is generally the highest in transition countries at the medium development level. Again, this result strongly matches that of Welsh et al. (2016). Personal problems seem to most affect women entrepreneurs in the economies transitioning from one development stage to another. The unpredictable institutional changes that take place during a transition stage may increase the uncertainty in running a business and thus amplify the obstacles and barriers for entrepreneurs in such countries.

Although country cultural dimensions are not the focus of this study, our results also lend support (though only partially) to extant research examining the relationship between culture and work–family conflict. We assessed several countries located at the low end of the spectrum of economic and political development that are also high in-group collectivism according to the GLOBE project (e.g., Morocco scores the highest [6.37] among the 10 countries considered) (House, Hanges, Javidan, Dorman, & Gupta, 2004). Other research has also used the GLOBE framework to investigate the influence of culture within the work–family field (e.g., Powell, Francesco, & Ling, 2009). Several studies (e.g., Billing et al., 2014, Powell et al., 2009, Spector et al., 2004, Spector et al., 2007, Yang et al., 2000) also find that people in collectivist societies focus on the family's welfare, which reduces work–family conflict. This is similar to what we successfully predicted on the basis of economic and political dimensions.

Moreover, the aforementioned studies suggest that highly individualist societies experience greater work–family conflict because their members view work demands as competing with the family. Our study supports this hypothesis only for the individualist countries (i.e., Poland and

Slovakia) that are mid-level of economic and political development; these are mainly countries in the transition period from one stage of economic development to another. By contrast, we find lower levels of work–family conflict for countries at the high end of the spectrum of economic and political development; these countries are also individualist societies (i.e., Canada and Japan, at least according to Asian standards). In other words, extant research typically finds a linear relationship between collectivism/individualism and work–family conflict that increases when a country moves from a collectivist state to an individualist one. However, we find a non-linear relationship (an inverted U shape), suggesting lower work–family conflict at both ends of the collectivism/individualism spectrum (i.e., low for collectivist Morocco and low for individualist Canada and Japan). According to our results, only countries at the medium level of economic and political development experience the greatest work–family conflict, regardless of whether they are individualist (Poland and Slovakia) or collectivist (China and Turkey). Future research combining economic/political and cultural dimensions, as suggested by French et al., 2018, Marcotte, 2013, and Ollier-Malaterre and Foucreault’s (2017) “culture and structure” approach, is necessary to explain this contradiction.

5.1. Limitations and future research directions

This study has several limitations that must be considered when interpreting the results. First, the study is cross-sectional, and therefore its findings are limited. Second, although we obtained data from 10 countries, we would have preferred to include more countries at the lower end of the economic and political development spectrum, including those in the factor-driven stage and in the transition from the factor- to the efficiency-driven stage. Third, the surveys are convenience samples taken online and mostly with support organizations and networks of women entrepreneurs in the 10 countries. Therefore, the results are strongly influenced by people who have access to the Internet and/or belong to networking organizations. The sample is quite diverse in terms of basic socio-demographic characteristics; nevertheless, care should be taken when generalizing the results to other country contexts.

As mentioned previously, future research should examine the relationships between country context and work–family interface constructs (enrichment and interference) and measure the country context simultaneously through both structural (e.g., economic/political) and cultural (i.e., “structure and culture”; see Ollier-Malaterre & Foucreault, 2017) dimensions. Furthermore, research should investigate the enrichment dimension of the work–family interface separately for instrumental and emotional support. Comparison of the two types of support warrants additional studies and theoretical development, a research direction that French et al. (2018) also mention.

5.2. Policy implications

This study has important implications for public policy in the countries studied. However, other countries at the same level of economic and political development and socio-economic categorization may have similar situations involving women entrepreneurs. As such, this study is helpful in gauging the needs of women entrepreneurs at different socio-economic levels and public policy initiatives required to reflect these differences. The U.N. Women (2017a) Commission on the Status of Women 61st session had “women’s economic empowerment in the changing world of work” as its main theme. In 2018, the main theme was

“challenges and opportunities in achieving gender equality and the empowerment of rural women and girls” (UN Women Annual Report, 2018). Both sessions had the underlying theme of elevating the role of women entrepreneurs.

Many studies confirm that women entrepreneurs raise the level of economic development of families and the community. A major issue is the lack of recognition of the new business, which is a major hurdle worldwide, especially for countries at the lower end of the economic spectrum. Entrepreneurs are pioneers in society’s recognition of the roles of women and the success they can achieve. Lakshmi Puri, the UN Women’s deputy executive director at the 2017 Global Conference on Women and Entrepreneurship in Hangzhou, China, reiterated this in her speech (see U.N. Women, 2017b).

Of foremost importance is access to financing, in both the start-up and growth stages. Financing enables the business to increase hiring beyond the one-person format, which is an issue at the lower and middle economic levels. Job training is also necessary at all levels, and entrepreneurship training should start in high school, though financial literacy could be taught as early as grade school. Public policy investment in childcare facilities and supplemental funding for childcare and eldercare would be wise at all levels, but particularly at the low and middle economic levels. Other public policy efforts should involve the family to influence long-term attitudes toward household duties and specify modeling behaviors and actions to achieve change for women and work that can be carried forth for generations.

6. Conclusion

Approaches to female entrepreneurship around the world need further exploration to better understand how sustainable economies affect female entrepreneurship overall, including women’s contribution to economies in both developed and emerging countries. The answer to this question could affect public policy and funding initiatives that will fuel the growth of women-owned businesses or reduce their impact.

The results of our study show that the likelihood of family (instrumental and emotional combined) support in female entrepreneurship decreases as the country development level increases. We also find that in mid-level developed countries in transition, work–family conflict and other personal problems are highest. Support systems for women entrepreneurs in mid-level transition economies should therefore lead public policy efforts. The importance of sustainable development of countries and the impact on economic indicators and quality of life cannot be underestimated.

With evidence from 10 countries, this study sheds better light on female entrepreneurship in various economic and political settings. The major conclusion of this research is that the degree of support that women entrepreneurs receive from their families and the intensity of their gender-related personal problems depend on the level of economic and political development in the country in which they operate. Consideration of this major factor is integral to the success of these businesses and will have an exponential effect on the impact of public policy and financial initiatives.

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