Breaking Barriers and Bridging Gaps: The influence of Entrepreneurship Policies on Women's entry into Entrepreneurship

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ABSTRACT

Purpose

How does the interplay between entrepreneurship policies and both formal and informal gender equality affect women's inclination towards self-employment in contrast to men?

Design/methodology/approach

This study introduces and validates a comprehensive multi-level model underpinned by symbolic interactionism, institutional theory, and the nuances of gendered institutions. Employing innovative analytical techniques and leveraging data from 66 countries, we scrutinize how formal and informal gendered institutional arrangements either inhibit or facilitate an environment favorable to women's entrepreneurial activities.

Findings

Significantly, our research delves into the nuanced effects of specific entrepreneurship policies across diverse nations. While these policies can bridge the gendered resource gap, a profound understanding of broader gender dynamics is crucial for fostering an inclusive entrepreneurial landscape.

Originality

Our insights advocate for a more integrated approach to bolster women's participation in entrepreneurship, thus furthering their socio-economic progression.

Keywords: Entrepreneurship policy; institutional theory; gendered context; symbolic interactionism; gender equality

INTRODUCTION

In today's global economy, the role of women's entrepreneurship as a catalyst for sustainable development has been elevated to the forefront of socio-economic discourse. As debates surrounding economic advancement, unemployment mitigation, and poverty reduction intensify, the significance of women in entrepreneurship becomes paramount (Afshan et al., 2021; De Vita et al., 2014; Marques et al., 2017). Recognizing the potential of women's entrepreneurship, policymakers worldwide have developed and implemented a range of policies from financial incentives to streamlining administrative processes (Cumming, 2007; Cumming and Fischer, 2012; Phan et al., 2016). Yet, a pronounced gender disparity in entrepreneurship endures across nations, hinting at underlying cultural, historical, and institutional biases against gender entrepreneurial equality (GEM, 2020; Hiller, 2014). This has costly implications: global economies face potential losses up to $172 trillion due to gender disparities (World Bank, 2023), while gender parity in entrepreneurship could infuse $12 trillion into the global economy by 2025 (Woetzel, 2023).

While entrepreneurship policies form a cornerstone of the entrepreneurial ecosystem, they remain under-explored in academic literature (Hechavarría and Ingram 2019; Spigel, Kitagawa, and Mason 2020). Furthermore, while prior literature on women's entrepreneurship has primarily spotlighted the general conditions of the entrepreneurial landscape, it has largely sidestepped the nuanced, reflexive, and theoretically-grounded understanding of women's specific gendered entrepreneurial context. This 'one-size-fits-all' approach not only ignores the fluid and dynamic nature of gender differences but also obscures the historical, political and cultural underpinnings that sustain gendered institutions and shape women's opportunities and life chances (Ahl and Marlow, 2012; Marlow and McAdam, 2013). Moreover, this gender-neutral approach has been

implicated in past research failures to untangle the web of challenges and opportunities sculpted by gendered institutions (Johnsen and McMahon, 2005; Pathak et al., 2012). Entrepreneurship inherently intersects with gender dynamics (Ahl, 2006). Despite its importance, a mere 20-22% of entrepreneurship research emphasizes women and gender perspectives (Strawser et al., 2021). The challenges facing women entrepreneurs, like the gender gap and related obstacles, are significant and multifaceted (Strawser et al., 2021).

Navigating this backdrop, this study aims to develop a deeper understanding of the intricate relationship between gender equality, entrepreneurship policies, and their consequent impact on women's entrepreneurial decisions. Central to this exploration is the distinction between formal and informal gender equality. The former focuses on measurable disparities in areas such as the economy, education, and health, while the latter examines ingrained societal norms related to gender roles (Cislaghi and Heise, 2019). Both facets of gender equality, deeply rooted in historical and cultural contexts, play pivotal roles in shaping women's access to entrepreneurial resources and opportunities. Such gendered norms, deeply entrenched in societal discourses, can both limit and guide women's career and entrepreneurial choices (Friedland and Alford, 1991).

Addressing these gaps, our study integrates symbolic interactionism with institutional theory, strengthening the theoretical foundation of women's entrepreneurship. Our work leans into feminist philosophy, emphasizing the gendered nuances of knowledge and the consequent influence of gendered institutions on entrepreneurial ventures (Butler, 1993; Marlow and McAdams, 2013). By foregrounding these dynamics, our work contributes to the context-sensitive, theoretically-rich approach to women's entrepreneurship (Brush et al., 2009; Jennings and Brush, 2013). To achieve this, we develop a comprehensive multi-level framework of moderated moderation effects for understanding the gendered institutionalization of women's

entrepreneurship, integrating country-level institutional formal and informal gender equality aspects with individual-level women's entrepreneurial activity. Our innovative analysis techniques, robust multi-level measure, and compelling data from 66 countries provide a resounding answer to our research question: How do entrepreneurship policies in conjunction with formal and informal gender equality influence the inclination of women towards self-employment compared to men?. Our approach account for nuanced understanding of a moderated moderation effect.

In addressing these questions, we not only extend the bounds of institutional theory and entrepreneurship research but also pave new pathways for understanding women's entrepreneurship on a global scale (Stenholm et al., 2011). A depiction of our research model is presented in Figure 1.

--- Insert Figure 1 here ---

THEORETICAL BACKGROUND

Symbolic Interactionism and Women's Entrepreneurship

Symbolic interactionism theory asserts that employment decisions, particularly for women, arise from the interplay between self-choice, institutions, and social life, all of which are shaped by social interactions (Mead, 1934). Notably, women's responses to an objective are informed by the symbolic significance it holds within a particular social context.

In recent years, scholarly discourse around women's entrepreneurship has pivoted towards the impact of institutional settings, moving away from solely individual sociodemographic factors (e.g., Klyver et al., 2013; Saeed et al., 2015; Goltz et al., 2015; Dheer et al., 2019; Darnihamedani and Terjesen, 2022). Stryker (1980) views entrepreneurship as a self-affirming cycle informed by identity beliefs and symbolic interactionism. Yet, societal constructs and stereotypes, especially

those questioning women's business acumen, stand as formidable challenges for women entrepreneurs, shaping external perceptions and impacting their ventures.

Central to our research is the institutional theory (North, 1990; Baumol, 1990). We adopt Williamson's (2000) framework that segments institutional settings into four hierarchical layers. The top encompasses informal institutions like norms, while the subsequent levels delve into formal regulatory frameworks, governance structures, and resource allocations, respectively. Our contribution to the discourse seeks to illuminate the first two layers of this structure, particularly examining how formal and informal gender equalities are shaped by women's entrepreneurship policies and how these layers might affect their entrepreneurial decisions.

These institutional environments create conditions that either propel or deter individuals from engaging in entrepreneurial endeavors (Mitchell et al., 2007). Such environments can steer perceptions about resource accessibility and societal expectations, making certain endeavors more salient to specific groups (Toh and Leonardelli, 2012; Dheer et al., 2019). Given the considerable institutional challenges women face when considering entrepreneurship, many are deterred from viewing self-employment as a feasible career path (Klyver et al., 2013). Our research aims not only to delve deep into these challenges but also to propose actionable solutions. The insights garnered will be invaluable for policymakers, scholars, and practitioners dedicated to advancing gender equality and championing women in entrepreneurship.

To truly understand the multifaceted influences on women's entrepreneurial pursuits, cross-cultural studies are paramount (Ahl and Nelson, 2015; Henry et al., 2017). Symbolic interactionism theory underscores the importance of a dual analysis—examining both macro and micro-level dynamics. By weaving in formal and informal gender equality elements, alongside entrepreneurship policy into our research framework, we embark on a detailed examination of the

varying forces that mold women's entrepreneurial trajectories. Capitalizing on the multilevel analytical prowess of symbolic interactionism theory (Chang, 2004), our research aims to unravel how overarching entrepreneurship policies mesh with gender equality dynamics, influencing grassroots entrepreneurial activities among women.

Role of Entrepreneurship policy in women's entrepreneurial activity

To catalyze the formation of new entrepreneurial ventures, the establishment of entrepreneurship policies is crucial (Rigby and Ramlogan, 2013). Across the globe, various governments have adopted such policies, aiming to invigorate entrepreneurial activity (Henry et al., 2017; Minniti and Nardone, 2007). Specifically, for women entrepreneurs, these policies have the potential to dismantle systemic barriers like limited access to capital, onerous taxes and bureaucracy, lack of expansive networks, and deficiencies in government support programs.

Entrepreneurial success, especially among women, is heavily influenced by the presence of a supportive entrepreneurial ecosystem. Such ecosystems are characterized by reduced barriers to entry, a solid legal and commercial infrastructure, and robust supportive government policies (Hechavarría and Ingram, 2019). An essential pillar of these ecosystems is government policies, which have a direct bearing on entrepreneurs and the decisions they make (Mazzarol, 2014; Stam, 2015; Zhang et al., 2022). Recognized widely for their capability to stimulate job creation, economic development, and international competitiveness, entrepreneurship policies are fundamental instruments for fostering growth in different nations (Hopkins, 2017).

Despite the clear benefits, the intersection of entrepreneurship policy and women's entrepreneurial endeavors has surprisingly remained an under-researched area (Nziku and Struthers, 2018). Current literature reveals a gap in the study of policy factors that influence women's entrepreneurial ventures. For instance, Link and Strong's (2016) analysis discovered that a mere

4% of gender and entrepreneurship literature articles broached the subject of public policy. Similarly, out of 165 studies centered on women's entrepreneurship policy, only 75 delved into the implications of such policies (Foss et al., 2019). This underlines the existing knowledge gap and underpins the need for further exploration in identifying efficient policy measures tailored for the upliftment of women entrepreneurs (Henry et al., 2017). Recognizing and understanding the policy implications for women's entrepreneurship is paramount, ensuring a more inclusive, supportive, and enabling entrepreneurial environment for women (Foss et al., 2019; Zhang et al., 2022).

Entrepreneurship policy, formal gender equality and women's entrepreneurial activity. At the heart of formal gender equality lies the conviction that both genders should be granted equivalent opportunities. Yet, this often exposes persistent gender discrepancies, evident in domains like health, economy, education, and politics. Post World War II, several countries legally recognized women's political rights, yet disparities persist in numerous domains (Ramirez et al., 1997; Paxton et al., 2006). These disparities can be attributed to regulations that guide women's employment choices. Sculpted by societal interactions, these rules can inadvertently reinforce restrictive gender roles (Klyver et al., 2013). However, there's a silver lining: nations advanced in gender empowerment typically provide women enhanced legal protections and equitable professional and academic opportunities (Hosken, 1994).

Researchers have delved into the nexus between women's political empowerment and their engagement in entrepreneurship (Elam and Terjesen, 2010; Goltz et al., 2015). When assessing venture creation, it becomes evident that formal gender equality doesn't always ensure equitable access to resources. This disparity makes launching and sustaining business ventures notably challenging for women in certain societies (Achtenhagen and Welter, 2003; Carter et al., 2003).

Furthermore, women's professional choices are complex, influenced by factors such as job timing, effort required, and the nature of job roles (Williams, 2004). While supportive governmental policies can augment women's entrepreneurial involvement (Alvarez et al., 2011), many studies singularly focus on specific countries (e.g., developing - Datta and Gailey, 2012; transitioning - Bui et al., 2018, and developed nations - Welter, 2004), failing to present a global overview of gendered entrepreneurial tendencies (Kelley et al., 2017). Hence, it's imperative for policy formulators to ensure that strategies aren't gender-neutral but are instead customized to specific gender needs, country contexts, and regional nuances within those countries (Acs et al., 2004).

Interestingly, in several welfare states championing formal gender equality, there's an unintentional sidelining of women in the realm of self-employment. Their primary focus is on conventional employment benefits, often neglecting self-employed women's unique challenges. This oversight is highlighted in studies across Denmark, Sweden, and Germany, and supported by political science research (Mandel, 2009). Therefore, given the interaction between entrepreneurship policy, gender equality and its implications on entrepreneurial choices, we propose the following hypothesis:

> **Hypothesis 1:** *In countries with a higher level of formal gender equality, the positive impact of the extensiveness of a country's entrepreneurship policies on women's inclinations towards self-employment is anticipated to be lower compared to men's.*

This hypothesis postulates that while levels of formal gender equality—embodied by gender-based disparities —are aimed at fostering entrepreneurial activities, their effectiveness in promoting self-employment among women is contingent upon the country's entrepreneurship policies, less than men. This approach exemplifies a moderated moderation effect, where the interplay between

formal gender equality and the extensiveness of entrepreneurship policies disproportionately benefits men. Essentially, this hypothesis tests a three-way interaction effect, elucidating how gender and entrepreneurship policies together modify the impact of formal gender equality on the likelihood of entrepreneurial entry among women relative to men.

Entrepreneurship policy, Informal gender equality and women's entrepreneurial activity. *E*ntrepreneurship policy, Informal gender equality, and women's entrepreneurial activity are deeply intertwined, with societal constructs significantly shaping gender roles and behaviors. Predominantly, informal gender equality institutions shape the perception of gender roles, casting women primarily in household roles while reserving the role of the breadwinner for men (Achtenhagen and Welter 2003; Welter et al. 2003; Bianchi et al. 2000; Bittman et al. 2003). This molding of gender expectations isn't merely restrictive to women's aspirations; it has a cascading impact on the well-being of the broader society (North 1994; Olson 2000; Sheridan 2004).

Gender norms globally, among the most potent unwritten social rules, play a pivotal role in shaping gender behaviors (Cislaghi and Heise, 2019). Such norms erect significant professional barriers for women, curtailing their participation in the labor force (Ford et al., 2021; Naldini et al., 2016). It's essential to recognize that entrepreneurship is intertwined with gender and societal institutions, with societal status beliefs reinforcing the diminished stature of women in entrepreneurial domains (Ahl and Marlow, 2012; Brush et al., 2009; Henry et al., 2016; Yousafzai et al., 2015).

Despite the formal recognition of gender equality in many countries, gender-role attitudes still deter women from activities beyond domestic confines (Baughn et al. 2006; Kantor 2002; Welter et al. 2003). This results in labor market segregation, causing wage disparities and relegating women to lower-status roles or necessity-driven occupations (Marlow 2002; Blumberg 2004;

Welter et al., 2014), resulting in inferior levels of wages, stifling their potential and limiting their impact (Marlow 2002; Blumberg 2004).

The societal environment exerts a significant influence on women's professional decisions. Deep-seated stereotypes often unfairly characterize female entrepreneurs as less competent, despite objective evidence to the contrary (Malmström et al., 2017). Compounding these challenges, women often grapple with societal expectations that conflict with professional aspirations, especially during motherhood, making the development of entrepreneurial intentions more complex (Krueger et al., 2000).

Despite the odds, when women embark on entrepreneurial journeys, they frequently confront the challenge of juggling family and work. Societal norms, particularly in traditional societies, often burden women with household responsibilities, leading to professional-personal conflicts that could hamper business growth (Gilbert 1997). This sentiment is echoed in a study on German couples where women's household roles weren't dictated by their control over resources but by prevailing social norms (Grunow et al., 2007). Breaking free from such traditional gender-role expectations is instrumental for bolstering women's entrepreneurial growth and offering them a level playing field (Achtenhagen and Welter 2003; Baughn et al. 2006).

Considering the discussions above, the normative challenges facing women entrepreneurs arise from sustained gender inequalities. Addressing these differences isn't merely a resource allocation exercise; it's about recognizing that women often face undue pressures and achieve less, even when constraints are removed, indicating that normative concerns play an important role in women entrepreneurs' decision-making processes (Karim et al., 2023). Research has shown that state policies and support have a positive impact on both men's and women's entrepreneurship, but women's entrepreneurship is further influenced by social norms, culture, and ease of access to

markets (Hechavarría and Ingram, 2019). Building on this discussion, we propose the following hypothesis:

> ***Hypothesis 2:*** *In contrast, in countries with a higher level of informal gender equality, the positive impact of the extensiveness of a country's entrepreneurship policies on women's inclinations towards self-employment is anticipated to be higher compared to men's.*

This hypothesis postulates that while levels of informal gender equality—embodied by societal norms and attitudes that support equitable gender roles —are aimed at fostering entrepreneurial activities, their effectiveness in promoting self-employment among women is contingent upon the country's entrepreneurship policies, more than men. It posits a moderated moderation effect, where the interplay between informal gender equality and the extensiveness of entrepreneurship policies disproportionately benefits women, potentially narrowing or reversing the gender gap in entrepreneurial pursuits. At its core, this hypothesis examines a three-way interaction effect, positing that in settings where informal social frameworks are conducive to gender equality, women are likely to experience enhanced motivational and practical advantages from entrepreneurship-promoting policies.

METHOD

Data

In this research, a robust analysis was conducted using an extensive dataset from the Global Entrepreneurship Monitor's (GEM) Adult Population Survey (APS). This dataset spans 12 years (2006-2017) and includes a significant sample of 1,107,480 individual respondents across 66 countries, providing a comprehensive and diverse platform to rigorously examine our hypotheses.

To enhance the validity of the theoretical assertions made, the research approach incorporated a multilevel dataset. This dataset is characterized by its depth, capturing both individual (micro-level) and country-specific (macro-level) data. Such an approach aligns with the hierarchical structure of the analytical framework adopted for this study. The micro-level data were anchored by GEM's APS survey, which is renowned for its methodological rigor and provides a representative sample of the population in each participating country (Autio et al., 2013; Reynolds et al., 2005), and has been extensively utilized in diverse empirical studies conducted over the last two decades (e.g., Boudreaux et al., 2019; Raza et al., 2020).

To overcome the 'ecological fallacy' issue that often afflicts contextual entrepreneurship research, which advocates for the utilization of unaggregated data (e.g., Autio et al., 2013), we opted for an unaggregated data (individual) approach to measure entrepreneurial entry. We obtained macro-level constructs data from various sources, including Global Gender Gap Index reports (Greig et al., 2006) issued by the World Economic Forum, GEM's National Expert Survey (NES), Cislaghi et al.'s (2022) seminal work, the Human Development Index (HDI), and the World Governance Indicators (WGI) dataset provided by the World Bank.

Measures

Dependent Variable (micro-level). In the context of our preceding exposition on entrepreneurial action, the present study meticulously operationalizes an individual's initiation into entrepreneurial endeavors as the dependent variable, drawing from the rigorous dataset provided by GEM's APS dataset. GEM classifies entrepreneurs into three categories: (i) nascent entrepreneurs, defined as individuals who have embarked on a new venture within the past year but have yet to remunerate wages for over three months; (ii) owner-managers of nascent ventures who have engaged in wage payment for a duration extending beyond three months but not surpassing 42 months; and, lastly,

(iii) owner-managers helming established entities aged beyond the 42-month mark. Given our research focus on unraveling the macro-level external catalysts influencing individual entrepreneurial ventures, our study gravitates towards nascent and new owner-managers, categorizing them under the ambit of 'early stage entrepreneurial entry.'

The GEM APS survey probes participants regarding their engagement in "TEAYY" early-stage entrepreneurial pursuits. Those identified within the nascent and new entrepreneurial echelons were ascribed a value of 1, while their non-participatory counterparts received a value of 0, resulting in a dichotomous dependent variable, as detailed in Table 1. This methodological approach to gauging entrepreneurial entry, anchored by a singular item, is established in entrepreneurship research (Boudreaux et al., 2019; Shade and Schuhmacher et al., 2022).

--- Insert Table 1 here ---

Key Explanatory Variable (micro-level).

We utilized gender as an independent variable to investigate the macro-level institutional factors on entrepreneurial entry. The data was derived from the GEM's APS survey, where females ascribed a value of 2, while males are represented by a value of 1. In our final sample of 1,107,480 respondents, 559,701 (50.5%) were male respondents, and 547,779 (49.5%) were female respondents.

Key Explanatory Variables (macro-level). We sourced data from multiple repositories to encompass three macro-level variables: formal gender equality, informal gender equality, and entrepreneurship policy for the 66 countries featured in our study. This annual data for our explanatory variables spans from 2006 to 2017.

The measure for formal gender equality was derived from reports produced by the World Economic Forum (Greig et al., 2006), which introduced the formal gender equality framework in

2006 to gauge gender-based disparities. This metric of formal gender equality considers four pivotal domains: (i) economic participation and opportunity, (ii) political empowerment, (iii) educational attainment, and (iv) health and survival. These factors collectively scope and significance of gender-based inequities and facilitate tracking their progress in societies globally. Scores range between 0 and 1, where a higher score signifies a smaller gender gap and vice versa. For analytical convenience, this variable was standardized to have a mean of 0 and a standard deviation of 1, allowing us to elucidate its relation to entrepreneurial entry in terms of a unit standard deviation shift in this metric.

Data on informal gender equality was procured from the World Values Survey (WVS) and the European Values Survey (EVS), both of which gathered information via their national affiliates. These sources gathered insights from adult respondents in each of the participating nations (Inglehart et al., 2014a, b; World Values Survey, 2019). Collected in distinct phases, we harnessed six iterations of the WVS and four from the EVS to amass data spanning 1981 through 2014. Informal gender equality gauges job availability for women in relation to men. Specifically, the WVS and EVS surveys posed the question: 'When jobs are scarce, should men have more entitlement to a job than women?' with respondents given three choices (a = yes; b = neither; c = no). The dataset was extracted from a recent publication by Cislaghi et al. (2022). Given the diverse data origins, z-standardized scores were employed to ensure a consistent mean of 0 and standard deviation of 1.

We derived our Entrepreneurship Policy (EP) data from the GEM's National Expert Surveys (NES), conducted annually from 2006 to 2017 for each country featured in our study. These surveys engaged national experts renowned for their acumen and proficiency in entrepreneurship, including academics, entrepreneurs, administrators, consultants, and policymakers. EP offers an

insight into a nation-specific entrepreneurship policy for every year considered. This metric is an amalgamation of four integral aspects extracted from GEM's National Expert Surveys. These are: (i) financial opportunities accessible to entrepreneurs, (ii) government entrepreneurial strategies, (iii) the influence of taxation and bureaucracy on entrepreneurial endeavors, and (iv) state-backed support initiatives for entrepreneurs. Collectively, these components provide an index of the degree of support extended to entrepreneurial activities at a national level within a country. Our application of this metric aligns with its utilization in a recent research paper by Zhang et al. (2022), underscoring its pertinence and dependability. Through elucidating the derivation of our EP measure, we endeavor to furnish a thorough comprehension of how our study scrutinizes the effects of policy dimensions on individual entrepreneurial pursuits across diverse national contexts.

Control Variable. Our study employed an array of micro-level and macro-level control variables. The micro-level variables, sourced from GEM's APS for all participant countries from 2006 to 2017 (Goltz et al., 2015; Amoros et al., 2019), helped account for elements impacting entrepreneurial behavior.

Age: Historically, age has been viewed as pivotal to entrepreneurial undertakings (Levesque and Minniti, 2006). Notably, younger individuals often exhibit a higher propensity towards entrepreneurial activities (Amoros et al., 2019).

Education Level: This is intrinsically tied to entrepreneurial entry (Allen et al., 2008). Entrepreneurs with advanced education are typically more adept at discerning opportunities (Kwon and Arenius, 2010). For our analysis, education was categorized into five tiers: no education (0), some education (1), primary education (2), secondary education (3), and graduate level (4).

Socioeconomic Status: Represented via household income, it stands as a significant determinant of entrepreneurial inclination (Arenius and Minniti, 2005). We segmented this into three brackets: lower income (1), middle income (2), and higher income (3).

Moreover, we incorporated the following three attitude-oriented variables linked with entrepreneurial ventures (Goltz et al., 2015).

Social Capital: Gauged by whether respondents knew someone who had launched a business in the preceding two years (1 = yes, 0 = no). This factor exemplifies a positive correlation with entrepreneurial pursuits (Kwon and Arenius, 2010).

Self-efficacy: A reflection of requisite entrepreneurial knowledge and skills, determined by asking respondents whether they had the necessary knowledge, skills, and experience to start a business (1 = yes, 0 = no).

Fear of Failure: This pertains to apprehensions and self-doubt during entrepreneurial endeavors (Autio et al., 2013), assessed by asking respondents whether fear of failure prevented them from starting a venture (1 = yes, 0 = no).

On the macro front, we factored in two variables that have been recognized as pivotal for entrepreneurial activities (Goltz et al., 2015). GDP per capita PPP, affecting entrepreneurial behavior at the macro level, was obtained from World Governance Indicators of the World Bank, w (van Stel et al., 2005). Human Development Index (HDI), a combined measure of various elements such as education, well-being, life expectancy, standard of living, literacy, and quality of life, was obtained from a UNDP report.

FINDINGS

Empirical Multilevel Analysis

To account for the wider context of macro-level effects in which individuals operate, we measured entrepreneurial entry at the individual-level, rather than relying on aggregated data. The hierarchical nature of our data, with individuals mapped to specific regions, warrants the use of multilevel modelling, an approach found appropriate when data possesses such a structure (Goltz et al., 2015; Amoros et al., 2019). Recognizing the risks associated with ecological fallacy (Robinson, 1950) and to prevent erroneous estimations, we adopted multilevel modelling. This allowed for variability in effects at the macro level (Hox et al., 2018). Our analysis was conducted using hierarchical linear modelling combined with mixed-effects logistic regression, factoring in the study's hierarchical setup and the binary nature of the entrepreneurial entry dependent variable (Klyver et al., 2013; Shade and Schuhmacher et al., 2022). The efficacy of multilevel approaches in elucidating macro-level institutional environments alongside micro-level entrepreneurial behaviors has been underscored in prior research (Autio et al., 2013; Amoros et al., 2019), affirming its relevance for GEM data analysis. We also ensured the validity of our research design by examining an estimated model focusing solely on the country-year effect to confirm the significance of the random intercepts for entrepreneurial entry (Amoros et al., 2019).

The indispensability of multilevel modelling at the micro-level becomes evident when the Intra-Class Correlation (ICC) identifies pronounced disparities at the state level in micro-variables (Hofmann et al., 2000; Peterson et al., 2012, Autio et al., 2013; Boudreaux et al., 2019). We ran a baseline model devoid of controls or predictors for entrepreneurial entry to verify the appropriateness of a multilevel modelling approach for our study. The ICC, commonly employed in cross-country investigations, measures the fraction of total variance attributed to the macro-level component (Peterson and Castro, 2006). It was employed to assess the variance in the dependent variable, entrepreneurial entry, spanning multiple countries. Our findings showed that

an 11.3% variance in entrepreneurial entry is attributable to differences between countries, thereby substantiating the choice of multilevel analysis over ordinary least squares (OLS) regression as being more fitting for our study.

Descriptive statistics, a pairwise correlation matrix, and a multicollinearity test for macro and micro-level predictors, controls, and the dependent variable are presented in Table 3. Our research model integrates both macro and micro variables, necessitating a multicollinearity examination. Based on our assessment, shown in Table 3, the highest VIF score observed was 4.69 for GDP per capita PPP, while the lowest tolerance score was 0.21, also for GDP per capita PPP. Given that no VIF score surpassed 10 and tolerance remained above 0.1, multicollinearity does not pose a concern for this study (Estrin et al., 2022).

--- Insert Table 3 here ---

Table 4 displays the results from our mixed-effects multilevel logistic regression analysis, which explores the study's hypotheses regarding the moderated moderation effects of gender, formal and informal gender equality, and entrepreneurship policies on entrepreneurial activity. To rigorously test our hypotheses, we adopted a three-step testing strategy, as suggested by Hmieleski et al. (2013) and Cheraghi et al. (2019). In the first step, only macro and micro-level control variables were incorporated (Model 1). In the second step, all predictor variables were introduced (Model 2). For the third step, each model was enriched by including one interaction term at a time (Models 3-4). Finally, Model 5 was enhanced by integrating all two-way and three-way interaction terms. Furthermore, Table 5 showcases the mixed-effects multilevel logistic regression analysis performed on separate samples for men and women.

--- Insert Table 4 and Table 5 here ---

Hypothesis 1: In Table 4, Model 3, a significant negative moderated moderation effect of gender, entrepreneurship policy, and formal gender equality on entrepreneurial entry is observed (H1: $\beta =$ -0.05, $p < 0.001$). This result suggests that in societies with high levels of entrepreneurship policies combined with high levels of formal gender equality, the gender gap in entrepreneurial entry becomes more pronounced. The interaction indicates that as these levels increase, the negative association between being a woman and engaging in entrepreneurial activity decreases.

Further exploration through separate analyses for women and men is conducted. In Table 5, focusing on women (Model 1), a significant positive relationship is found between the combined effects of formal gender equality and entrepreneurship policy on women's entrepreneurial entry ($\beta = 0.04$, $p < 0.001$). For men (Model 3), this relationship also remains positive, but with a slightly higher coefficient ($\beta = 0.06$, $p < 0.001$). These coefficients represent the predicted change in entrepreneurial entry rates for each gender corresponding to an increase in the combined level of entrepreneurship policies and formal gender equality.

The results indicate that while both men and women benefit from increased levels of entrepreneurship policies and formal gender equality, the effect is slightly more pronounced for men. This difference in effect sizes aligns with the negative three-way interaction observed in Table 4, supporting Hypothesis 1. These findings underscore that although entrepreneurial activity for both genders is positively influenced by these factors, men tend to benefit slightly more from the increase in these combined levels.

Hypothesis 2: In Table 4, Model 4, a significant positive moderated moderation effect of gender, entrepreneurship policy, and informal gender equality on entrepreneurial entry is observed (H2: $\beta = 0.03$, $p < 0.001$). This finding suggests that in environments where entrepreneurship policies are robust and informal gender equality is pronounced, the conditions for entrepreneurship become

more favourable for women relative to men. Specifically, it highlights that the synergistic effect of elevated entrepreneurship policies and enhanced informal gender equality contributes more significantly to increasing women's propensity for entrepreneurship than it does for men. This nuanced understanding underscores the differential impact that a combination of supportive entrepreneurship policies and informal gender equality has on empowering women's entrepreneurial endeavours.

Further investigation of this three-way interaction was conducted through separate analyses for men and women. Analyzing women's data in Table 5, Model 2, reveals a significant positive relationship between informal gender equality and entrepreneurship policy on women's entrepreneurial entry ($\beta = 0.07$, $p < 0.001$). This implies that women are more inclined to start entrepreneurial ventures in contexts where informal gender equality and entrepreneurship policies are robust. Conversely, the analysis of men's data (Table 5, Model 4) shows a positive association as well ($\beta = 0.05$, $p < 0.001$), but with a slightly lesser magnitude.

The analysis reveals that, within contexts characterized by robust entrepreneurship policies and strong informal gender equality, the influence on the inclination towards entrepreneurship demonstrates a greater magnitude of change for women ($\beta = 0.07$) compared to men ($\beta = 0.05$). This distinction indicates that women's entrepreneurial engagement responds more significantly to enhancements in these conditions. It is crucial to underline that the coefficients elucidate the degree of change in entrepreneurial participation for each gender as the combined intensity of entrepreneurship policy and informal gender equality elevates, rather than comparing the overall rates of entrepreneurial activity between genders. Consequently, this nuanced interpretation

reinforces the validation of Hypothesis 2, highlighting the differential impact of supportive

ecosystems on fostering women's entrepreneurial ventures compared to men's.

Additional Analysis and Robustness checks

To strengthen the robustness of our primary results and further our theory-testing, we carried out

four additional analyses.

First, in an effort to refine our theory testing, we engaged in a systematic self-reflection of our

main findings (Anderson et al., 2019). In this endeavor, we undertook a mixed-effect multilevel

logistic regression analysis. While employing the same macro-level and micro-level predictors,

controls, and dependent variable as our main study, we shifted our focus to the period from 2006

to 2013, rather than from 2006 to 2017. This analysis, which encompassed 675,360 individual

observations across 59 countries, yielded results that align with our principal findings (as displayed

in Table 6: Models 1 and 2).

Next, we examined the sensitivity of our primary results when excluding the country with the most

substantial number of observations from our main dataset (Lihn and Bjørnskov, 2017). Our

analysis identified Spain as having the highest number of observations (see Table 2). To assess the

resilience of our results, we excluded Spain and carried out a multilevel logistic regression analysis

on a dataset spanning from 2006 to 2017, which consisted of 920,728 individual observations from

65 countries. Remarkably, the findings from this adjusted dataset remain in harmony with our

primary conclusions (see Table 6: Models 3 and 4).

Thirdly, to further authenticate our main findings, we conducted a multilevel logistic regression

analysis exclusively for OECD countries. This analysis maintained the same control and predictor

variables related to entrepreneurial entry. It's pertinent to note that Colombia and Lithuania were

omitted from the OECD countries' analysis, given their accession to the OECD in 2018 and 2020, respectively, while our study's timeframe extends from 2006 to 2017. The insights gleaned from this focused analysis are in congruence with our primary outcomes (refer to Table 6: Models 5 and 6). This scrutiny lends added resilience to our overarching conclusions.

Finally, while our main analysis emphasized entrepreneurship policy, drawing inspiration from relevant literature, we formulated an alternative measure for entrepreneurship policy, utilizing data from the Ease of Doing Business - World Bank Dataset and the Global Competitiveness Report of World Economic Freedom. These alternative measures are detailed in Table 7. To further test the robustness of our findings, we performed a mixed-effect multilevel logistic regression analysis using alternative measures of entrepreneurship policy instead of our main measure, including all predictors and control variables. The findings from this analysis are consistent with our main results (Table 6: Model 7 and 8), which provides robustness to our analysis.

--- Insert Table 6 and Table 7 here ---

DISCUSSION

Entrepreneurship, inherently nuanced by societal fabric, extends far beyond business creation—it is interwoven with cultural, political, and socio-economic contours (Bruton and Ahlstrom, 2003). While previous studies have ventured into understanding the influences on women's entrepreneurial activity, our study bridges a distinct gap. It delineates the interaction between national entrepreneurial policies and gendered contexts, focusing on both formal and informal gender equality across 66 countries.

Our findings highlight that while national-level policies indeed shape women's entrepreneurial decisions, their efficacy is significantly modulated by the prevailing gender contexts (Brush et al., 2009). Specifically, in environments where entrepreneurial policies and formal gender equality are

robust, such policies promote women's entrepreneurial activity, albeit not as much as they promote men's entrepreneurial activity. Conversely, when these policies are combined with strong informal gender equality, a more positive outcome for women in entrepreneurship is observed. This delineates the intricate interaction between national entrepreneurial policies and gendered contexts. The nuanced dynamics between formal gender equality, informal gender equality, and entrepreneurship policies underscore the complex relationship that influences women's entrepreneurship. It suggests that while formal gender equality and supportive entrepreneurship policies provide foundational support, it is the nuanced interplay with informal gender equality that significantly shapes entrepreneurial inclinations (Mead, 1934; Blumer, 1969). This emphasizes the importance of a comprehensive perspective on gender dynamics in policy formulation.

Our research contributes to the symbolic interactionism discourse by extending the understanding of how societal norms and perceptions interact with policy frameworks to influence entrepreneurial activities. While formal gender equality has been established as beneficial for women entrepreneurs, our study reveals how specific policies can accentuate or temper this relationship, suggesting that entrepreneurship policies, entangled with gender dynamics, can either heighten or assuage the challenges faced by women entrepreneurs (Ahl, 2006; Ahl and Marlow, 2012). Furthermore, the study illuminates how environments with robust entrepreneurial policies, when coupled with informal gender equality, offer a more encouraging picture for women in entrepreneurship. This highlights the critical role of societal norms and perceptions in shaping entrepreneurial opportunities, underlining the need for not just policy initiatives but also the transformation of societal attitudes towards gender roles in entrepreneurship.

This vantage point furnishes fresh insights into not just the challenges women entrepreneurs face but also how these challenges are sculpted by the intricate interplay of policy and gender contexts. Previous research has outlined numerous challenges women entrepreneurs confront—from gender-role biases to limitations in accessing resources (Heilman et al., 1988; Henry and Kennedy, 2003; Woldie and Adersua, 2004). These barriers, as our study highlights, don't function in isolation. Entrepreneurial policies, entangled with gender dynamics, can either heighten or assuage these challenges (Kolvereid, Shane, and Westhead, 1993). The distinct contribution of our work lies in illuminating this interaction.

The prominence of formal gender equality institutions on women's entrepreneurial activity underscores the importance of crafting and reinforcing gendered institutional support (Calás et al., 2009). Feminist critique caution that without challenging patriarchal societies, women entrepreneurs are likely to continue facing challenges in competing with their male counterparts (Calas et al., 2009). Even in highly developed countries, as long as gender bias is ingrained in the entrepreneurial landscape, which values men over women, female entrepreneurs will encounter significant institutional, social, and political barriers to starting businesses (Ahl, 2006; Calas et al., 2009). The empowerment and protection of women's rights are essential aspects of the post-2015 agenda (UN Task Report, 2012). Therefore, the global development agenda should prioritise enhancing the social status of women by promoting their greater and more equitable representation in the power structure of institutional hierarchy, as well as ensuring their social, political, and economic empowerment. Such empowerment can positively impact economic growth and generate social change that can alter gender inequalities, discrimination, and unequal developmental progress between women and men (Htun and Weldon, 2011).

To achieve greater levels of productive women's entrepreneurial activity, it is critical for researchers and policymakers to develop a better understanding of how to generate gendered institutional support for women entrepreneurs. This approach aligns with the post-2015 agenda of empowering women and girls and protecting their rights, which is essential for achieving social change and altering gender inequalities and discrimination (Htun and Weldon, 2011; UN Task Report, 2012). Ultimately, promoting women's economic empowerment can have a positive impact on economic growth and development, as well as on the lives of women and their communities.

This study contributes to the entrepreneurship research agenda by exploring how gender, as a social construct, interacts with the process of entrepreneurship. Specifically, we apply the symbolic interactionism discourse to examine the differentiated, multifaceted, and diverse influence of gender characterization on both men and women in the broader field of entrepreneurial activities, behaviour, and ambitions (Ahl, 2006; Ahl and Marlow, 2012). By doing so, we move beyond the conventional focus on women entrepreneurs to a more comprehensive understanding of the gendered institutional support needed to promote women's entrepreneurship.

Implications

This study offers an intricate analysis of how institutional arrangements, deeply rooted in gender equality, influence women's entrepreneurial activity. This insight significantly enriches the current literature and provides crucial guidelines for policymakers aiming to foster a nurturing environment for women entrepreneurs, irrespective of the country's development stage.

A primary takeaway from our study is the paramount importance of promoting gender equality. Policymakers should ardently champion policies that bolster gender equality in both formal and informal realms. Our findings highlight that gender equality initiatives can be pivotal in shaping

women's entrepreneurial endeavors. This becomes even more significant in nations where formal gender equality might be compromised. In such contexts, strategies that directly advocate for women's entrepreneurship should be introduced and heavily supported.

Moreover, understanding the nuanced interplay between gender equality and entrepreneurship policies emerges as a core consideration. Policymakers must be attuned to this dynamic, ensuring that they craft policies that optimize the positive correlation between informal gender equality and women's entrepreneurial aspirations. This is particularly critical in environments where the foundation of entrepreneurial policies might be less robust.

While our research primarily delves into women's entrepreneurship, it's worth noting that the findings may also be pertinent to men's entrepreneurial ventures. The relationship between policies and gendered institutions could have ramifications for men's entrepreneurship that either mirror or differ from those observed for women. For instance, entrepreneurial policies, such as easing regulatory constraints or offering financial support, might resonate just as strongly with men's entrepreneurial aspirations.

Furthermore, the complex interplay of entrepreneurial policies with gendered institutions offers a compelling avenue for future exploration. It would be beneficial for upcoming research to investigate how men's entrepreneurial responses might align with or deviate from those of women, especially in contexts with pronounced gender imbalances. We advocate for future studies to juxtapose men's and women's entrepreneurial trajectories within this framework. This endeavor can provide a holistic understanding of gendered influences on entrepreneurship, and subsequently guide the development of more comprehensive, gender-sensitive policies that stimulate entrepreneurial growth across the board.

Limitations and future research

While our study sheds light on several aspects of women's entrepreneurial activity (WEA) and gender equality institutions, it comes with certain limitations that, in turn, open avenues for future research. Owing to the cross-sectional nature of our dataset, we couldn't establish a definitive causal relationship between gender equality institutions and WEA. Although we postulate that WEA emerges from enhanced women's empowerment and diminishing traditional gender-role attitudes, an alternate hypothesis, grounded in North (1990), suggests a possible virtuous circle wherein WEA promotes women's empowerment and diminishes these traditional attitudes. To thoroughly decipher these intricate causal connections between women's societal standing and entrepreneurship-propelled economic prosperity, future researchers should utilize longitudinal cross-country examinations, gender-segregated panel datasets, versatile methodologies, and robust multi-level models (as suggested by Brush et al., 2019).

Building on our findings of gendered normative institutions' direct and indirect effects, upcoming research adopting a gendered lens can delve into the intricate interplays among various gendered institutions, including economic, cognitive, and regulatory, in tandem with national cultures. It might be enlightening to probe if specific religions (like Christianity, Islam, Judaism, Hinduism, etc.) inherently foster more traditional gender-role perspectives.

Our focus remained predominantly on women's entrepreneurial activity, with a sideline evaluation of opportunity-based entrepreneurial ventures. It would be worth venturing into how predictor variables influence other entrepreneurial variants, such as growth-oriented, innovation-driven, international, technology-based ventures, and various entrepreneurial phases like nascent, new, and established ones (Acs et al., 2018). A promising avenue would be to study the quality of entrepreneurship affected significantly by gender, a domain which can provide comprehensive

insights into not just women's entry maneuvers but their broader entrepreneurial engagements as well (Brush et al., 2019).

Finally, our robustness checks, as presented in Table 6, offer intriguing insights for future research directions. The role of non-OECD countries in our sample, for instance, presents a compelling area for further exploration. Investigating the disparities in formal/informal gender equality levels between OECD and non-OECD countries, or considering levels of economic development (developed versus developing countries), could yield valuable contributions to the existing body of knowledge on gender and entrepreneurship.

CONCLUSION

Our expansive research across 66 countries underscores the profound influence of gender dynamics and entrepreneurship policies on women's entrepreneurial endeavors. Notably, in nations that prioritize entrepreneurship policies coupled with formal gender equality, women's inclination towards self-employment is anticipated to be less pronounced in comparison to men. Conversely, in regions where entrepreneurship policies intersect with informal gender equality, women demonstrate a heightened inclination towards self-employment relative to their male counterparts. These findings spotlight the intricate balance and interplay between formal and informal gendered structures in influencing entrepreneurial behavior. Beyond facilitating entry, our insights emphasize the importance of fostering an environment conducive to women's sustained success and evolution within the entrepreneurial landscape. As we move forward, this study beckons policymakers and academia to deeply contemplate the multifaceted nature of gender dynamics, thus paving the way for a more equitable entrepreneurial future.

References

Achtenhagen, L. and Welter, F. (2003), "New Perspectives on Women Entrepreneurs" In: Butler, JE, Ed. *Female entrepreneurship in Germany*, Information Age Publishing: Greenwich, CT, USA, pp.71-100.

Acs, Z.J., Arenius, P., Hay, M. and Minniti, M. (2004), "Global entrepreneurship monitor.

Acs, Z.J., Estrin, S., Mickiewicz, T. and Szerb, L. (2018), "Entrepreneurship, institutional economics, and economic growth: an ecosystem perspective", Small Business Economics, Vol. 51, pp.501-514.

Afshan, G., Shahid, S. and Tunio, M.N. (2021), "Learning experiences of women entrepreneurs amidst COVID-19", *International Journal of Gender and Entrepreneurship*, Vol. 13 No. 2, pp.162-186.

Ahl, H. (2006), "Why research on women entrepreneurs needs new directions", *Entrepreneurship theory and practice*, Vol. 30 No. 5, pp.595-621.

Ahl, H. and Marlow, S. (2012), "Exploring the dynamics of gender, feminism and entrepreneurship: advancing debate to escape a dead end? ", *Organization*, Vol. 19 No. 5, pp.543-562.

Ahl, H. and Nelson, T. (2015), "How policy positions women entrepreneurs: A comparative analysis of state discourse in Sweden and the United States", *Journal of Business Venturing*, Vol. 30 No. 2, pp.273-291.

Allen, I. E., A. Elam, N. Langowitz, and M. Dean (2008). *2007 Global Entrepreneurship Monitor Report on Women and Entrepreneurship*. Boston, MA: Babson College—The Centre for Women's Leadership.

Alvarez, C., Urbano, D., Coduras, A. and Ruiz-Navarro, J. (2011), "Environmental conditions and entrepreneurial activity: a regional comparison in Spain", *Journal of Small Business and Enterprise Development*, Vol. 18 No 1, pp.120-140.

Amoros, J.E., Ciravegna, L., Mandakovic, V. and Stenholm, P. (2019), "Necessity or opportunity? The effects of state fragility and economic development on entrepreneurial efforts", *Entrepreneurship Theory and Practice*, Vol. 43 No. 4, pp.725-750.

Anderson, B.S., Wennberg, K. and McMullen, J.S. (2019), "Enhancing quantitative theory-testing entrepreneurship research", *Journal of Business Venturing*, Vol. 34 No. 5, p.105928.

Arenius, P. and Minniti, M. (2005), "Perceptual variables and nascent entrepreneurship", *Small business economics*, Vol. 24, pp.233-247.

Autio, E., Pathak, S. and Wennberg, K. (2013), "Consequences of cultural practices for entrepreneurial behaviors", *Journal of International Business Studies*, Vol. 44, pp.334-362.

Baughn, C.C., Chua, B.L. and Neupert, K.E. (2006), "The normative context for women's participation in entrepreneruship: A multicountry study", *Entrepreneurship theory and practice*, Vol. 30 No. 5, pp.687-708.

Baumol, W.J. (1990), "Entrepreneurship: productive, unproductive, and destructive", *Journal of Political Economy*. Vol. 98 (5, Part 1), 893–921.

Bianchi, S.M., Milkie, M.A., Sayer, L.C. and Robinson, J.P. (2000), "Is anyone doing the housework? Trends in the gender division of household labor", Social forces, Vol. 79 No. 1, pp.191-228.

Bittman, M., England, P., Sayer, L., Folbre, N. and Matheson, G. (2003), "When does gender trump money? Bargaining and time in household work", American Journal of sociology, Vol. 109 No. 1, pp.186-214.

Blumberg, R.L. (2004), "Extending Lenski's schema to hold up both halves of the sky: a theory guided way of conceptualizing agrarian societies that illuminates a puzzle about gender stratification" *Sociological Theory,* Vol. 22 No. 2, pp. 278-291.

Blumer, H. (1969). *Symbolic interactionism: Perspectives and method*. Englewood Cliffs, NJ: Prentice-Hall.

Boudreaux, C.J., Nikolaev, B.N. and Klein, P. (2019), "Socio-cognitive traits and entrepreneurship: The moderating role of economic institutions", *Journal of Business Venturing*, 34 No. 1, pp.178-196.

Brush, C., Edelman, L.F., Manolova, T. and Welter, F. (2019), "A gendered look at entrepreneurship ecosystems", Small Business Economics, Vol. 53, pp.393-408.

Brush, C.G., De Bruin, A. and Welter, F. (2009), "A gender-aware framework for women's *entrepreneurship", International Journal of Gender and entrepreneurship.*

Bruton, G.D. and Ahlstrom, D. (2003), "An institutional view of China's venture capital industry: Explaining the differences between China and the West", Journal of business venturing, Vol. 18 No. 2, pp.233-259.

Bui, H.T., Kuan, A. and Chu, T.T. (2018), "Female entrepreneurship in patriarchal society: motivation and challenges", *Journal of Small Business & Entrepreneurship*, Vol. 30 No. 4, pp.325-343.

Butler, J. (1993) *Bodies That Matter: The Discursive Limits of 'Sex'*, London: Routledge.

Calás, M.B., Smircich, L. and Bourne, K.A. (2009), "Extending the boundaries: Reframing "entrepreneurship as social change" through feminist perspectives", Academy of Management Review, Vol. 34 No. 3, pp.552-569.

Carter, N.M., Gartner, W.B., Shaver, K.G. and Gatewood, E.J. (2003), "The career reasons of nascent entrepreneurs", *Journal of Business venturing*, Vol. 18 No. 1, pp.13-39.

Chang, J.H. (2004), "Mead's theory of emergence as a framework for multilevel sociological inquiry. Symbolic Interaction 27 No. 3, 405–427.

Cheraghi, M., Adsbøll Wickstrøm, K. and Klyver, K. (2019), "Life-course and entry to entrepreneurship: embedded in gender and gender-egalitarianism", *Entrepreneurship & Regional Development*, Vol. 31, No. 3-4, pp.242-258.

Cislaghi, B. and Heise, L. (2019), "Using social norms theory for health promotion in low-income countries", *Health promotion international*, Vol. 34 No. 3, pp.616-623.

Cislaghi, B., Bhatia, A., Hallgren, E.S.T., Horanieh, N., Weber, A.M. and Darmstadt, G.L. (2022), "Gender norms and gender equality in full-time employment and health: A 97-country analysis of the world values survey", *Frontiers in Psychology*, Vol. 13, pp.689 - 815.

Cumming, D. (2007), "Government policy towards entrepreneurial finance: Innovation investment funds", *Journal of Business Venturing*, Vol. 22 No. 2, pp.193-235.

Cumming, D.J. and Fischer, E. (2012), "Publicly funded business advisory services and entrepreneurial outcomes", *Research Policy*, Vol. 41 No. 2, pp.467-481.

Darnihamedani, P. and Terjesen, S. (2022), "Male and female entrepreneurs' employment growth ambitions: The contingent role of regulatory efficiency", *Small Business Economics*, pp.1-20.

Datta, P.B. and Gailey, R. (2012), "Empowering women through social entrepreneurship: Case study of a women's cooperative in India", *Entrepreneurship theory and Practice*, 36 No. 3, pp.569-587.

De Vita, L., Mari, M. and Poggesi, S. (2014), "Women entrepreneurs in and from developing countries: Evidences from the literature", *European Management Journal*, Vol. 32 No. 3, pp.451-460.

Dheer, R.J., Li, M. and Treviño, L.J. (2019), "An integrative approach to the gender gap in entrepreneurship across nations", *Journal of World Business*, Vol. 54 No. 6, p.101004.

Elam, A. and Terjesen, S. (2010), "Gendered institutions and cross-national patterns of business creation for men and women", *The European Journal of Development Research*, Vol. 22, pp.331-348.

Estrin, S., Korosteleva, J. and Mickiewicz, T. (2022), "Schumpeterian entry: innovation, exporting, and growth aspirations of entrepreneurs", *Entrepreneurship Theory and Practice*, Vol. 46 No. 2, pp.269-296.

Ford, J., Atkinson, C., Harding, N. and Collinson, D. (2021), "You just had to get on with it': exploring the persistence of gender inequality through women's career histories", *Work, Employment and Society*, Vol. 35 No. 1, pp.78-96.

Foss, L., Henry, C., Ahl, H. and Mikalsen, G.H. (2019), "Women's entrepreneurship policy research: a 30-year review of the evidence", *Small Business Economics*, Vol. 53, pp.409-429.

Friedland, R., Alford, R.R., Powell, W.W. and DiMaggio, P.J. (1991), "The new institutionalism in organizational analysis",*The new institutionalism in organizational analysis*, pp.232-263.

GEM Global Entrepreneurship Monitor. (2020). Retrieved October 18, 2022, from https://www. gemconsortium.org/

Gilbert, P. (1997), "The evolution of social attractiveness and its role in shame, humiliation, guilt and therapy", *British Journal of Medical Psychology,* Vol. 70 No. 2, pp. 113–147.

Goltz, S., Buche, M.W. and Pathak, S. (2015), "Political empowerment, rule of law, and women's entry into entrepreneurship", *Journal of Small Business Management*, Vol. 53 No. 3, pp.605-626.

Greig, F., Hausmann, R., Tyson, L.D. and Zahidi, S. (2006), "The gender gap index 2006: A new framework for measuring equality", *The Global Gender Gap Report 2006*, pp.3-5.

Grunow, Daniela, Florian Schulz, and Hans-Peter Blossfeld. (2007), "Was Erklaert Die Traditionalisierungsprozesse Haeuslicher Arbeitsteilung Im Eheverlauf: Soziale Normen Oder Oekonomische Ressourcen? - Sowiport." *GESIS: Sowiport*

Hechavarría, D.M. and Ingram, A.E. (2019), "Entrepreneurial ecosystem conditions and gendered national-level entrepreneurial activity: A 14-year panel study of GEM", *Small Business Economics*, Vol. 53, pp.431-458.

Heilman, M.E., Martell, R.F. and Simon, M.C. (1988), "The vagaries of sex bias: Conditions regulating the undervaluation, equivaluation, and overvaluation of female job applicants", Organizational Behavior and Human Decision Processes, Vol. 41 No. 1, pp.98-110.

Henry, C. and Kennedy, S. (2003), "In search of a new Celtic tiger", New perspectives on women entrepreneurs, Vol. 3, p.203.

Henry, C., Foss, L. and Ahl, H. (2016), "Gender and entrepreneurship research: A review of methodological approaches", *International Small Business Journal*, Vol. 34 No. 3, pp.217-241.

Henry, C., Orser, B., Coleman, S., Foss, L. and Welter, F. (2017), "Women's entrepreneurship policy: a 13-nation cross-country comparison. In *Entrepreneurial ecosystems and growth of women's entrepreneurship* (pp. 244-278). Edward Elgar Publishing.

Hiller, V. (2014), "Gender inequality, endogenous cultural norms, and economic development", *The Scandinavian Journal of Economics*, Vol. 116 No. 2, pp.455-481.

Hmieleski, K.M., Corbett, A.C. and Baron, R.A. (2013), "Entrepreneurs' improvisational behavior and firm performance: A study of dispositional and environmental moderators", *Strategic Entrepreneurship Journal*, Vol. 7 No 2, pp.138-150.

Hofmann, D.A., Griffin, M.A., Gavin, M.B. (2000) The application of hierarchical linear modeling to organizational research. In: Klein, K.J., Kozlowski, S.W.J. (Eds.), Multilevel Theory, Research, and Methods in Organizations: Foundations, Extensions, and New Directions. Jossey-Bass, San Francisco, CA, pp. 467–511.

Hopkins, T. (2017), "*The official guide to success*. Made For Success Publishing.

Hosken, M., 1994. Determination of budgetary expertise among public school library media specialists in the state of Florida.

Hox, J.J., Moerbeek, M., van de Schoot, R. (2018). *Multilevel Analysis: Techniques and Applications, 3rd ed. In: Quantitative Methodology Series.* Routledge Taylor & Francis Group, New York, London.

Htun, M. and Weldon, S.L. (2011), "State power, religion, and women's rights: A comparative analysis of family law", Indiana Journal of Global Legal Studies, Vol. 18 No. 1, pp.145-165.

Inglehart, R., Haerpfer, A., Welzel, C., Kizilova, K., Diez-Medrano, J., Lagos, M., et al. (eds) (2014a). World Values Survey: Round Six - Country-Pooled Datafile Version. Madrid: JD Systems Institute.

Inglehart, R., Haerpfer, C., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., et al. (2014b). World Values Survey: All Rounds - Country-Pooled Datafile Version. Madrid: JD Systems Institute.

Jennings, J.E. and Brush, C.G. (2013), "Research on women entrepreneurs: challenges to (and from) the broader entrepreneurship literature?", *Academy of Management Annals*, Vol. 7 No. 1, pp.663-715.

Johnsen, G.J. and McMahon, R.G. (2005), "Owner-manager gender, financial performance and business growth amongst SMEs from Australia's business longitudinal survey", *International Small Business Journal*, Vol. 23 No 2, pp.115-142.

Kantor, P. (2002), "Gender, microenterprise success and cultural context: The case of South Asia", *Entrepreneurship Theory and Practice,* Vol. 26 No. 4, pp. 131–143.

Karim, S., Kwong, C., Shrivastava, M. and Tamvada, J.P. (2023), "My mother-in-law does not like it: resources, social norms, and entrepreneurial intentions of women in an emerging economy", *Small Business Economics*, Vol. 60 No. 2, pp.409-431.

Kelley, D.J., Baumer, B.S., Brush, C., Greene, P.G., Mahdavi, M., Majbouri, M., Cole, M., Dean, M. and Heavlow, R. (2017), "Women's entrepreneurship 2016/2017 report", *Global Entrepreneurship Research Association*, Vol. 9 No. 19, p.2017.

Klyver, K., Nielsen, S.L. and Evald, M.R. (2013), "Women's self-employment: An act of institutional (dis) integration? A multilevel, cross-country study", *Journal of Business Venturing*, Vol. 28 No. 4, pp.474-488.

Kolvereid, L., Shane, S. and Westhead, P. (1993), "Is it equally difficult for female entrepreneurs to start businesses in all countries?", Journal of Small Business Management, Vol. 31 No. 4, p.42.

Krueger, R.F., Caspi, A. and Moffitt, T.E. (2000), "Epidemiological personology: the unifying role of personality in population-based research on problem behaviors", *Journal of personality*, Vol. 68 No. 6, pp.967-998.

Kwon, S.W. and Arenius, P. (2010), "Nations of entrepreneurs: A social capital perspective", *Journal of Business Venturing*, Vol. 25 No. 3, pp.315-330.

Levesque, M. and Minniti, M. (2006), "The effect of aging on entrepreneurial behavior", *Journal of business venturing*, Vol. 21 No 2, pp.177-194.

Lihn, J. and Bjørnskov, C. (2017), "Economic freedom and veto players jointly affect entrepreneurship", *Journal of Entrepreneurship and Public Policy*, Vol. 6 No. 3, pp.340-358.

Link, A.N. and Strong, D.R. (2016), "Gender and entrepreneurship: An annotated bibliography", *Foundations and Trends in Entrepreneurship*, Vol. 12 No. 4–5, pp.287-441.

Malmström, M., Johansson, J. and Wincent, J. (2017), "Gender stereotypes and venture support decisions: How governmental venture capitalists socially construct entrepreneurs' potential", *Entrepreneurship Theory and Practice*, Vol. 41 No. 5, pp.833-860.

Mandel, H. (2009), "Configurations of gender inequality: the consequences of ideology and public policy 1", *The British journal of sociology*, Vol. 60, No 4, pp.693-719.

Marlow, S. (2002), "Women and self-employment: A part of or apart from theoretical construct?", *International Journal of Entrepreneurship and Innovation,* Vol. 3 No. 2, pp. 83–91.

Marlow, S. and McAdam, M. (2013), "Gender and entrepreneurship: Advancing debate and challenging myths; exploring the mystery of the under-performing female entrepreneur", *International Journal of Entrepreneurial Behavior & Research*, Vol. 19 No. 1, pp.114-124.

Marques, C.S., Leal, C.T., Santos, G., Marques, C.P. and Alves, R. (2017), "Why do some women micro-entrepreneurs decide to formalise their businesses?", *International Journal of Entrepreneurship and Small Business*, Vol. 30 No. 2, pp.241-258.

Mazzarol, T. (2014), "Growing and sustaining entrepreneurial ecosystems: what they are and the role of government policy. Seaanz, Australia: Seaanz White Paper.

Mead, G.H., 1934. *Mind, self, and society* (Vol. 111). Chicago: University of Chicago press.

Minniti, M. and Nardone, C. (2007), "Being in someone else's shoes: the role of gender in nascent entrepreneurship", *Small business economics*, pp.223-238.

Mitchell, R.K., Busenitz, L.W., Bird, B., Marie Gaglio, C., McMullen, J.S., Morse, E.A. and Smith, J.B. (2007), "The central question in entrepreneurial cognition research 2007", *Entrepreneurship theory and practice*, Vol. 31 No. 1, pp.1-27.

Naldini, M., Pavolini, E. and Solera, C. (2016), "Female employment and elderly care: The role of care policies and culture in 21 European countries", *Work, employment and society*, Vol. 30 No. 4, pp.607-630.

North, D. 1994. "Economic performance over time", *American Economic Review,* Vol. 84 No. 3, pp. 359 – 368.

North, D.C., (1990), "Institutions, Institutional Change and Economic Performance. Cambridge University Press.

Nziku, D.M. and Struthers, J.J. (2018), "Female entrepreneurship in Africa: Strength of weak ties in mitigating principal-agent problems", *Journal of Small Business and Enterprise Development*, Vol. 25 No. 3, pp.349-367.

Olson, M. 2000. Power and Prosperity New York: Basic Books.

Pathak, S., Laplume, A.O. and Xavier-Oliveira, E. (2012), "Informal institutions and technology entrepreneurship in emerging markets: A multi-level model".

Paxton, P., Hughes, M.M. and Green, J.L. (2006), "The international women's movement and women's political representation, 1893–2003", *American Sociological Review*, Vol. 71 No. 6, pp.898-920.

Peterson, M.F. and Castro, S.L. (2006), "Measurement metrics at aggregate levels of analysis: Implications for organization culture research and the GLOBE project", *The Leadership Quarterly*, Vol. 17 No. 5, pp.506-521.

Peterson, M.F., Arregle, J.L. and Martin, X. (2012), "Multilevel models in international business research", *Journal of International Business Studies*, Vol. 43, pp.451-457.

Phan, P.H., Siegel, D.S. and Wright, M. (2005), "Science parks and incubators: observations, synthesis and future research", *Journal of business venturing*, Vol. 20 No. 2, pp.165-182.

Ramirez, F.O., Soysal, Y. and Shanahan, S. (1997), "The changing logic of political citizenship: Cross-national acquisition of women's suffrage rights, 1890 to 1990", *American sociological review*, pp.735-745.

Raza, A., Saeed, S., Yousafzai, S., Shahid, M.U. and Muffatto, M. (2020), "Institutional adversity, external knowledge sources, and new ventures' innovation: An institutional polycentrism theory perspectiv", *Industrial Marketing Management*, Vol. 90, pp.633-647.

Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., Lopez-Garcia, P. and Chin, N. (2005), "Global entrepreneurship monitor: Data collection design and implementation 1998–2003", *Small business economics*, Vol. 24, pp.205-231.

Rigby, J. and Ramlogan, R. (2013), "Access to finance: Impacts of publicly supported venture capital and loan guarantees. *London: Nesta*.

Robinson, W.S. (1950), "Ecological correlations and the behavior of individuals", *Am. Sociol. Rev*, Vol. 15, No 3, pp. 351–357.

Saeed, S., Yousafzai, S.Y., Yani-De-Soriano, M. and Muffatto, M. (2015), "The role of perceived university support in the formation of students' entrepreneurial intention", *Journal of small business management*, Vol. 53 No. 4, pp.1127-1145.

Schade, P. and Schuhmacher, M.C. (2022), "Digital infrastructure and entrepreneurial action-formation: A multilevel study", *Journal of Business Venturing*, Vol. *37* No 5, pp.106 - 232.

Sheridan, A. (2004), "Chronic Presenteeism: The Multiple Dimensions to Men's Absence from Part Time Work", *Gender, Work and Organization,* Vol. 11 No. 2, pp. 207-225

Spigel, B., Kitagawa, F. and Mason, C. (2020), "A manifesto for researching entrepreneurial ecosystems", *Local Economy*, Vol. 35 No. 5, pp.482-495.

Stel, A.V., Carree, M. and Thurik, R. (2005), "The effect of entrepreneurial activity on national economic growth", *Small business economics*, Vol. 24, pp.311-321.

Stenholm, P., Z. J. Acs, and Wuebker, R. (2013), "Exploring Country-Level Institutional Arrangements on the Rate and Type of Entrepreneurial Activity", *Journal of Business Venturing,* Vol. 28 No. 1, pp. 176–193.

Strawser, J.A., Hechavarría, D.M. and Passerini, K. (2021), "Gender and entrepreneurship: Research frameworks, barriers and opportunities for women entrepreneurship worldwide", *Journal of Small Business Management*, Vol. 59(sup1), pp.S1-S15.

Stryker, S., 1980. Symbolic Interactionism: A Social Structural Version. Benjamin/Cummings Publishing Company, Menlo Park, CA.

Toh, S.M. and Leonardelli, G.J. (2012), "Cultural constraints on the emergence of women as leaders", *Journal of World Business*, Vol. 47 No. 4, pp.604-611.

UN Task Report. 2012. "MDG Gap Task Force Report 2012: The Global Partnership for Development: Making Rhetoric a Reality" United Nations. Accessed April 18.

Welter, F. (2004), "The environment for female entrepreneurship in Germany", *Journal of Small Business and Enterprise Development*, Vol. 11 No. 2, pp.212-221.

Welter, F., Brush, C. and De Bruin, A. (2014), "The gendering of entrepreneurship context", *Institut für Mittelstandsforschung Bonn (Hrsg.): Working Paper*, *1*, p.14.

Welter, Friederike, D. Smallbone, E. Aculai, N. Isakova, and N. Schakirova. (2003), "Female Entrepreneurship in Post Soviet Countries,'' in John Butler, ed. New Perspectives on Women Entrepreneurs. pp. 243 – 69. Greenwich: Information Age.

Williams, R.Y. (2004), *The politics of public housing: Black women's struggles against urban inequality*. Oxford University Press.

Williamson, O.E. (2000), "The new institutional economics: taking stock, looking ahead" *Journal of economic literature*, Vol. 38 No. 3, pp.595-613.

Woetzel, Jonathan. (2023), "*How Advancing Women's Equality Can Add $12 Trillion to Global Growth | McKinsey*. Accessed April 30. https://www.mckinsey.com/featured-insights/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth

Woldie, A. and Adersua, A. (2004), "Female entrepreneurs in a transitional economy: Businesswomen in Nigeria", International journal of social economics.

World Bank. (2023), "World Could Achieve 'Gender Dividend' of $172 Trillion from Closing Lifetime Earnings Gaps." Text/HTML. *World Bank*. Accessed April 21 2023.

World Values Survey (2019). "Integrated EVS/WVS 1981-2008 Information". http://www.worldvaluessurvey.org/WVSContents.jsp.

Yousafzai, S.Y., Saeed, S. and Muffatto, M. (2015), "Institutional theory and contextual embeddedness of women's entrepreneurial leadership: Evidence from 92 countries", *Journal of Small Business Management*, Vol. 53 No. 3, pp.587-604.

Zhang, J., van Gorp, D. and Kievit, H. (2022), "Digital technology and national entrepreneurship: An ecosystem perspective", *The Journal of Technology Transfer*, pp.1-29.

Table 1. Main Entrepreneurial Policy Measure (Source: Zhang *et al.* 2022)

Variable (Description)	Question in Survey*	Source
Financing for entrepreneurs in my country (There is sufficient, funding types available for new and growing firms.)	There is sufficient equity funding available for new and growing firms.	GEM - NES
	There is sufficient debt funding available for new and growing firms.	
	There are sufficient government subsidies available for new and growing firms.	
	There is sufficient funding available from private individuals (other than founders) for new and growing firms.	
	There is sufficient venture capitalist funding available for new and growing firms.	
	There is sufficient funding available through initial public offerings (IPOs) for new and growing firms.	
Government Support and Policies in my country (It reflects the specific entrepreneurship policy conditions targeted towards enhancing the creation of new ventures and fostering entrepreneurial endeavours within a country).	Government policies (e.g., public procurement) consistently favour new firms.	GEM - NES
	The support for new and growing firms is a high priority for policy at the national government level.	
	The support for new and growing firms is a high priority for policy at the local government level.	
Burden of taxes and bureaucracy on entrepreneurship activities in my country (It illustrates the impact of taxes and various regulatory burden faced by entrepreneurs in a country).	New firms can get most of the required permits and licenses in about a week.	GEM - NES
	The amount of taxes is <u>NOT</u> a burden for new and growing firms.	
	Taxes and other government regulations are applied to new and growing firms in a predictable and consistent way.	
	Coping with government bureaucracy, regulations, and licensing requirements it is not unduly difficult for new and growing firms.	
Government programmes to support entrepreneurship in my country (A wide range of government support such as science parks, incubators, government agencies, and programmes supporting new firms).	A wide range of government assistance for new and growing firms can be obtained through contact with a single agency.	GEM - NES
	Science parks and business incubators provide effective support for new and growing firms.	
	There are an adequate number of government programs for new and growing businesses.	
	The people working for government agencies are competent and effective in supporting new and growing firms.	
	Almost anyone who needs help from a government program for a new or growing business can find what they need.	
	Government programs aimed at supporting new and growing firms are effective.	

Note: *(1 – 5 Likert scale)* - Completely True (5), Somewhat True (4), Neither True Nor False (3), Somewhat False (2), Completely False (1).

Table 2. Sample Description

Country		N	%EE	FGE	IGE	EP
1.	Algeria	5904	8.52	0.6	1.24	4.59
2.	Argentina	10770	17.21	0.72	1.65	3.63
3.	Australia	7843	13.32	0.73	1.25	3.88
4.	Austria	9049	9.21	0.73	1.29	4.68
5.	Belgium	9219	5.52	0.75	1.07	4.41
6.	Bosnia And Herzegovina	689	4.06	0.7	1.3	3.83
7.	Brazil	41830	17.25	0.69	1.21	3.62
8.	Bulgaria	3576	4.39	0.73	1.1	3.86
9.	Burkina Faso	5985	31.04	0.65	1.36	4.67
10.	Canada	8499	15.35	0.75	0.92	4.53
11.	Chile	49649	22.81	0.69	1.67	4.68
12.	China	22393	14.28	0.68	1.1	4.4
13.	Colombia	43335	21.71	0.7	1.3	4.35
14.	Croatia	15692	9.22	0.7	1.06	3.43
15.	Cyprus	2916	9.67	0.68	1.68	3.96
16.	Czech Republic	7226	8.15	0.68	1.31	3.64
17.	Denmark	13077	5.16	0.76	0.48	4.86
18.	Ecuador	15177	28.74	0.73	1.53	3.78
19.	Egypt	10525	11.54	0.6	0.72	3.53
20.	Estonia	8127	14.56	0.72	1.4	4.66
21.	Ethiopia	2868	13.28	0.62	0.99	4.99
22.	Finland	16044	7.11	0.83	0.85	4.92
23.	France	10572	5.27	0.72	0.84	5.19
24.	Georgia	2657	8.02	0.68	1.55	5.23
25.	Germany	33686	6.60	0.76	1.16	4.82
26.	Ghana	5134	32.94	0.68	1.36	4.12
27.	Greece	17187	7.45	0.68	1.41	3.54
28.	Guatemala	14312	19.95	0.65	1.5	3.28
29.	Hungary	14380	8.11	0.67	0.91	3.46
30.	Iceland	4498	14.70	0.81	0.57	5.03
31.	India	19046	9.29	0.66	0.99	4.3
32.	Indonesia	20982	17.89	0.67	1.13	4.72
33.	Iran	22830	13.64	0.59	0.76	3.43
34.	Ireland	15342	8.82	0.78	1.55	4.63
35.	Italy	11619	4.64	0.69	1.03	3.77
36.	Japan	4724	4.53	0.66	0.85	4.11
37.	Jordan	1766	8.15	0.6	1.04	3.81
38.	Kazakhstan	5578	13.66	0.71	1.23	4.66
39.	Latvia	12266	12.09	0.75	1.31	4.21
40.	Lithuania	6156	10.67	0.72	1.39	3.97
41.	Luxembourg	6364	9.29	0.73	1.11	5.39
42.	Macedonia	7983	8.12	0.7	1.37	4.21
43.	Mexico	22506	14.55	0.68	1.08	4.72
44.	Morocco	5646	7.07	0.6	1.39	3.91
45.	Netherlands	15831	10.44	0.76	1.07	4.82
46.	Nigeria	6045	38.78	0.63	1.05	3.61
47.	Norway	12065	8.05	0.84	0.62	4.41
48.	Peru	17532	28.90	0.69	1.49	3.77
49.	Poland	12476	9.34	0.71	1.74	4.12
50.	Portugal	8655	8.39	0.72	1.4	4.27
51.	Romania	7059	9.32	0.69	1.38	3.76
52.	Russia	13137	4.38	0.7	1.07	3.78
53.	Slovakia	10744	11.53	0.68	1.47	3.83
54.	Slovenia	15568	6.38	0.73	1.35	4.03
55.	South Africa	21247	8.50	0.75	0.89	3.89
56.	Spain	186752	6.06	0.74	1.14	4.33
57.	Sweden	13051	7.55	0.81	0.7	4.15
58.	Switzerland	14297	7.28	0.76	0.99	5.29
59.	Thailand	18627	17.67	0.7	1.44	4.28
60.	Trinidad & Tobago	6050	17.16	0.72	1.67	4.01
61.	Tunisia	1955	9.67	0.63	1.19	4.18
62.	Turkey	38741	10.78	0.6	1.14	4.55
63.	United Kingdom	73073	8.08	0.74	0.87	4.66
64.	United States	21197	13.38	0.73	1.04	4.38
65.	Uruguay	13140	15.34	0.69	1.62	4.39
66.	Zambia	4611	41.18	0.63	1.45	3.87

N = complete observations from each country participating in this study; %EE = Average score of Entrepreneurial Entry (Source: APS GEM 2006-2017); FGE = Formal Gender Equality (Global Gender Gap Index 2006-2017); IGE = Informal Gender Equality (Source: Cislaghi, Bhatia, Hallgren, et al., 2022); EP = Entrepreneurship Policy (GEM NES 2006-2017).

Table 3. Correlation Matrix, Descriptive Statistics and Multicollinearity Test

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
Individual-level variables													
1. Entrepreneurial Entry	1.00												
2. Gender	-.06**	1.0											
3. Age	-.08**	.01**	1.00										
4. Education	.01**	-.02**	-.08**	1.00									
5. Household Income	.06**	-.09**	-.02**	.26**	1.00								
6. Social Capital	.19**	-.08**	-.11**	.08**	.12**	1.00							
7. Self-efficacy	.24**	-.13**	-.02**	.07**	.11**	.24**	1.00						
8. Fear of Failure	-.10**	.08**	.01**	-.01**	-.04**	-.05**	-.16**	1.00					
Country-level variables													
9. Human Development Index	-.13**	.00**	.19**	.29**	.01**	-.11**	-.11**	.07**	1.00				
10. GDP per capita PPP	-.12**	0.00	.17**	.26**	.00**	-.08**	-.10**	.05**	.85**	1.00			
11. Formal Gender Equality	-.08**	.03**	.14**	.17**	.03**	-.05**	-.08**	.04**	.65**	.66**	1.00		
12. Informal Gender Equality	.10**	.010**	-.05**	-.09**	.04**	.03**	.10**	0.00	-.20**	-.32**	-.20**	1.00	
13. Entrepreneurship Policy	-.03**	-.01**	.06**	.12**	-.02**	.01**	-.03**	-.02**	.29**	.43**	.32**	-.12**	1.00
Descriptive Statistics													
Mean	0.12	1.49	40.33	2.09	2.04	0.38	0.52	0.41	0.82	30462.32	0.71	1.17	4.29
Std. Dev.	0.32	0.50	12.81	1.08	0.82	0.49	0.50	0.49	0.10	16909.45	0.05	0.26	0.54
Min	0	1	18	0	1	0	0	0	0.41	1437.38	0.58	0.48	2.92
Max	1	2	64	4	3	1	1	1	0.96	116283.70	0.85	1.74	5.80
Multicollinearity Test													
VIF		1.03	1.07	1.22	1.1	1.1	1.13	1.04	4.19	4.69	1.9	1.15	1.27
Tolerance		0.97	0.94	0.82	0.91	0.91	0.89	0.96	0.24	0.21	0.53	0.87	0.79

Note: N = 1,107,480 individual level observations; 468 country-level observations; Significant at *p* < 0.05; **p* <0; Variance inflation factor (VIF) value higher than 10 indicate multicollinearity is concern among variables; Tolerance value lower than 0.1 alerts multicollinearity is concern; Collinearity is not a concern for our study.

Table 4. Mixed-effects multilevel logistic regression on Entrepreneurial Entry

	Model 1	Model 2	Model 3	Model 4	Model 5
Individual level control variables					
Age	-0.01***(0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)
Education	0.03*** (0.00)	0.03*** (0.00)	0.03*** (0.00)	0.04*** (0.00)	0.04***(0.00)
Household Income	0.09*** (0.01)	0.08*** (0.01)	0.08*** (0.01)	0.08*** (0.01)	0.08*** (0.01)
Social Capital	0.82*** (0.01)	0.82*** (0.01)	0.82*** (0.01)	0.82*** (0.01)	0.82*** (0.01)
Self-efficacy	1.47** (0.01)	1.45*** (0.01)	1.44*** (0.01)	1.44*** (0.01)	1.44*** (0.01)
Fear of Failure	-0.37*** (0.01)	-0.36*** (0.01)	-0.37*** (0.01)	-0.37*** (0.01)	-0.37*** (0.01)
Country level control variables					
Human Development Index	0.27*** (0.04)	0.16*** (0.04)	0.25***(0.04)	0.10***(0.04)	0.19***(0.04)
GDP Per Capita PPP	0.47***(0.04)	0.39***(0.04)	0.36***(0.04)	0.39***(0.04)	0.36***(0.04)
Individual level main variable					
Gender		-0.18***(0.01)	-0.17***(0.01)	-0.21***(0.01)	-0.20***(0.01)
Country level main variables					
Formal Gender Equality		0.09***(0.01)	0.10***(0.01)	0.10***(0.01)	0.10***(0.01)
Informal Gender Equality		0.31**(0.10)	0.33**(0.10)	0.22**(0.10)	0.25**(0.10)
Entrepreneurship Policy		0.04***(0.01)	0.06***(0.01)	0.01(0.01)	0.01(0.01)
Two-way Interaction Terms					
Formal Gender Equality X Entrepreneurship Policy			0.11***(0.01)		0.09***(0.01)
Gender X Formal Gender Equality			-0.00(0.01)		-0.00(0.01)
Gender X Entrepreneurship Policy			.01(0.01)	0.01(0.01)	0.00(0.01)
Informal Gender Equality X Entrepreneurship Policy				0.11***(0.01)	0.11***(0.01)
Gender X Informal Gender Equality				0.06***(0.01)	0.05***(0.01)
Three-way Interaction Terms					
Gender X Formal Gender Equality X Entrepreneurship Policy (**H1**)			-0.05***(0.01)		-0.02***(0.01)
Gender X Informal Gender Equality X Entrepreneurship Policy (**H2**)				0.03***(0.01)	0.03***(0.01)
Random part estimates					
Variance of intercept	0.99(0.09)	0.85(0.08)	0.88(0.08)	0.80(0.07)	0.83(0.08)
Number of observations	1,107,480	1,107,480	1,107,480	1,107,480	1,107,480
Number of group (countries)	66	66	66	66	66
Model fit statistics					
Degree of freedom (variables)	8	12	16	16	19
Chi-square	65,453	66,120	66,218	66,302	66,373
Prob > Chi-square	***	***	***	***	***
Log likelihood	-340,911	-340,459	-340,404	-340,347	-340,303
LR test for goodness of fit	***	***	***	***	***

Notes: Standard errors were reported in parentheses. All models were reported in beta coefficient. All significances are reported at two-tailed test, *** $p < 0.001$, ** $p < 0.01$, * $< p\ 0.05$, $+ < p\ 0.1$.

Table 5. Mixed-effects multilevel logistic regression on Women's and Men's Entrepreneurial Entry

	Entrepreneurial Entry (Female)		Entrepreneurial Entry (Male)	
	Model 1	Model 2	Model 3	Model 4
Individual level control variables				
Age	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)
Education	0.03*** (0.01)	0.03*** (0.01)	0.05*** (0.01)	0.05*** (0.01)
Household Income	0.05*** (0.01)	0.05*** (0.01)	0.10*** (0.01)	0.10*** (0.01)
Social Capital	0.82*** (0.01)	0.82*** (0.01)	0.81*** (0.01)	0.81*** (0.01)
Self-efficacy	1.49*** (0.02)	1.49*** (0.02)	1.39*** (0.02)	1.39*** (0.02)
Fear of Failure	-0.37*** (0.01)	-0.37*** (0.01)	-0.37*** (0.01)	-0.37*** (0.01)
Country level control variables				
Human Development Index	0.08 (0.06)	0.05 (0.06)	0.31*** (0.05)	0.14** (0.05)
GDP Per Capita PPP	0.25*** (0.06)	0.28*** (0.06)	0.30*** (0.05)	0.33*** (0.05)
Country level main variables				
Formal Gender Equality	0.11*** (0.02)	0.12*** (0.02)	0.09*** (0.01)	0.09*** (0.01)
Informal Gender Equality	0.30** (0.09)	0.28*** (0.10)	0.31** (0.10)	0.28** (0.09)
Entrepreneurship Policy	0.05*** (0.01)	0.01 (0.01)	0.04*** (0.01)	0.01 (0.01)
Interaction Terms				
Formal Gender Equality X Entrepreneurship Policy	0.04*** (0.01)		0.06*** (0.01)	
Informal Gender Equality X Entrepreneurship Policy		0.07*** (0.01)		0.05*** (0.01)
Random part estimates				
Variance of intercept	0.74 (0.08)	0.69 (0.07)	0.84 (0.08)	0.74 (0.07)
Number of observations	547,779	547,779	559,701	547,801
Number of group (country)	66	66	66	66
Model fit statistics				
Degree of freedom	12	12	12	12
Chi-square	29,185	29,213	33,509	33,514
Prob > Chi-square	***	***	***	***
Log likelihood	-146,196	-146,179	193,682	-193,678
LR test for goodness of fit	***	***	***	***

Notes: Standard errors were reported in parentheses. All models were reported in beta coefficient. All significances are reported at two-tailed test, *** p < 0.001, ** p < 0.01, * < p 0.05, + < p 0.1.
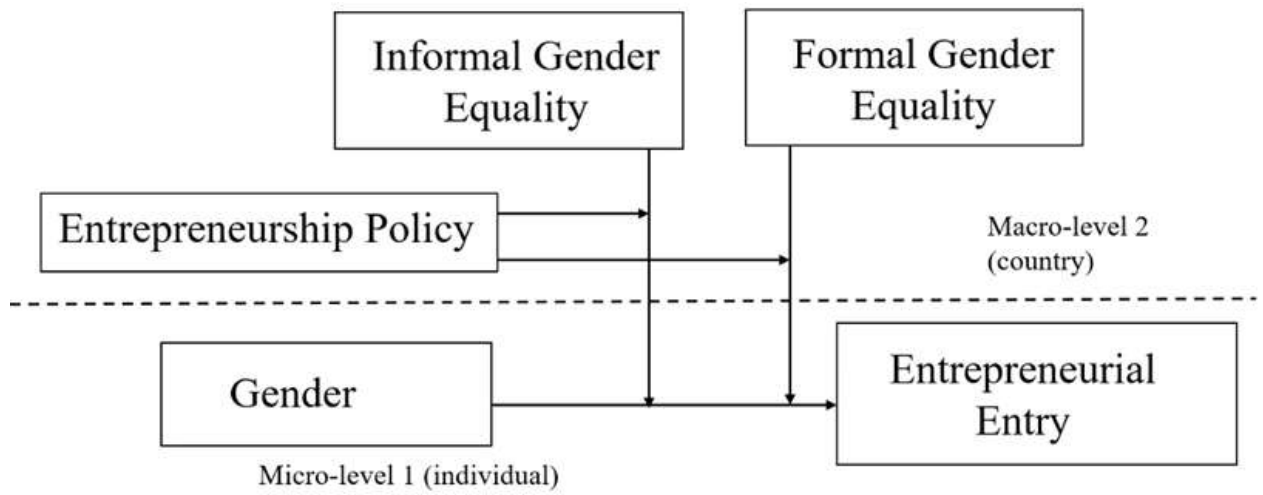
Table 6. Robustness check for Mixed-effects multilevel logistic regression on Entrepreneurial Entry

	2006-2013		Data excluding Spain		OECD Countries		Alternative measure of Entrepreneurship Policy	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Individual level control variables								
Age	-0.01***(0.00)	-0.01***(0.00)	-0.01***(0.00)	-0.01***(0.00)	-0.02***(0.00)	-0.02***(0.00)	-0.01***(0.00)	-0.01***(0.00)
Education	0.04***(0.00)	0.04***(0.00)	0.03***(0.00)	0.03***(0.00)	0.07***(0.00)	0.07***(0.00)	0.05***(0.00)	0.05***(0.00)
Household Income	0.09***(0.01)	0.08***(0.01)	0.08***(0.01)	0.08***(0.01)	0.07***(0.01)	0.07***(0.01)	0.9***(0.01)	0.9***(0.01)
Social Capital	0.76***(0.01)	0.76***(0.01)	0.82***(0.01)	0.82***(0.01)	0.95***(0.01)	0.95***(0.01)	0.83***(0.01)	0.83***(0.01)
Self-efficacy	1.43***(0.01)	1.44***(0.01)	1.39***(0.01)	1.39***(0.01)	1.69***(0.01)	1.69***(0.01)	1.46***(0.01)	1.46***(0.01)
Fear of Failure	-0.37***(0.01)	-0.37***(0.01)	-0.34***(0.01)	-0.34***(0.01)	-0.48***(0.01)	-0.48***(0.01)	-0.39***(0.01)	-0.39***(0.01)
Country level control variables								
Human Development Index	0.06(0.07)	-0.17**(0.06)	0.29***(0.07)	0.17***(0.07)	0.35***(0.07)	0.21**(0.06)	0.29***(0.07)	0.21**(0.05)
GDP Per Capita PPP	0.32***(0.04)	0.33***(0.04)	0.25***(0.04)	0.26***(0.04)	0.26***(0.04)	0.27***(0.04)	0.54***(0.04)	0.61***(0.04)
Individual level main variable								
Gender	-0.19***(0.01)	-0.23***(0.01)	-0.17***(0.01)	-0.21***(0.01)	-0.27***(0.01)	-0.26***(0.01)	-0.17***(0.01)	-0.24***(0.01)
Country level main variables								
Formal Gender Equality	0.2(0.02)	0.04*(0.02)	0.10**(0.02)	0.11**(0.02)	0.08**(0.02)	0.13***(0.02)	0.06**(0.02)	0.10**(0.02)
Informal Gender Equality	0.33**(0.10)	0.19(0.08)	0.30**(0.10)	0.19(0.09)	0.20*(0.10)	0.22*(0.10)	0.43***(0.12)	0.31***(0.12)
Entrepreneurship Policy	0.17***(0.01)	0.10***(0.02)	0.05***(0.01)	0.02*(0.01)	0.02(0.01)	0.03+(0.01)	0.08**(0.03)	-0.01(0.03)
Two-way Interaction Terms								
Formal Gender Equality X Entrepreneurship Policy	0.08***(0.01)		0.10***(0.01)		0.06**(0.01)		0.19***(0.02)	
Gender X Formal Gender Equality	0.01(0.01)		0.00(0.00)		0.02+(0.01)		0.03***(0.01)	
Gender X Entrepreneurship Policy	-.03**(0.01)	0.00(0.01)	-0.02*(0.01)	0.01(0.01)	.05***(0.01)	.05***(0.01)	-0.04**(0.01)	0.00(0.01)
Informal Gender Equality X Entrepreneurship Policy		0.14***(0.01)		0.12***(0.01)		0.01(0.01)		0.08***(0.02)
Gender X Informal Gender Equality		0.07***(0.01)		0.06***(0.01)		-0.03*(0.01)		0.07***(0.01)
Three-way Interaction Terms								
Gender X Formal Gender Equality X Entrepreneurship Policy	-0.02**(0.01)		-0.05***(0.01)		-0.01(0.01)		-0.09***(0.01)	
Gender X Informal Gender Equality X Entrepreneurship Policy		0.04***(0.01)		0.03***(0.01)		0.02+(0.01)		0.02**(0.01)
Random part estimates								
Variance of intercept	0.76(0.09)	0.63(0.07)	0.82(0.08)	0.74(0.07)	0.60(0.08)	0.58(0.08)	1.05(0.10)	1.05(0.10)
Number of observations	675,360	675,360	920,728	920,728	666,327	666,327	831,858	831,858
Number of group (countries)	59	59	65	65	31	31	63	63
Model fit statistics								
Degree of freedom (variables)	16	16	16	16	16	16	16	16
Chi-square	37,259	37,371	57,862	58,003	40,429	40,433	50,668	50,673
Prob > Chi-square	***	***	***	***	***	***	***	***
Log likelihood	-204,827	-204,751	-303,437	-303,351	-161,033	-161,034	-250,797	-250,798
LR test for goodness of fit	***	***	***	***	***	***	***	***

Notes: Standard errors were reported in parentheses. All models were reported in beta coefficient. All significances are reported at two-tailed test, *** p < 0.001, ** p < 0.01, * < p 0.05, + < p 0.1.

Table 7. Alternative Entrepreneurship Policy Measure

Sub Dimensions (Source) - *Description*	Questions
Venture capital availability (Stenholm *et al.*, 2013; Murdock, 2012; WEF – GCR) *Availability of venture capital indicates how easy it is for entrepreneurs with innovative but risky projects to find venture capital.*	In your country, how easy is it for start-up entrepreneurs with innovative but risky projects to obtain equity funding? [1 = extremely difficult; 7 = extremely easy]
Starting a Business (van Stel, Storey and Thurik, 2007; EDB – WBDB, category Starting a Business) *It assesses the procedures, time, and cost associated with establishing a commercial or industrial enterprise employing up to 50 individuals, along with start-up capital equivalent to 10 times the per-capita gross national income of the economy.*	*Procedures* - The number of different procedures that a start-up has to comply with in order to obtain a legal status, i.e., to start operating as a legal entity. A procedure is defined as any interaction of the company founder with external parties (government agencies, lawyers, auditors, notaries) *Time* - The time it takes to obtain legal status to operate a firm, in calendar days. Time captures the median duration that incorporation lawyers indicate is necessary to complete all necessary procedures. *Cost* - The cost of obtaining legal status to operate a firm as a percentage of per capita income. It includes all identifiable official expenses (fees, costs of procedures and forms, photocopies, fiscal stamps, legal and notary charges, etc.) *Minimum capital -* The paid-in minimum capital requirement reflects the amount that the entrepreneur needs to deposit in a bank before registration starts. This variable is measured as a percentage of per capita income. (For details: https://archive.doingbusiness.org/en/methodology/starting-a-business).
Burden of taxes (Kantis, Federico, and García, 2020 EDB - WBDB) *The taxes and mandatory contributions that a firm must have paid or withheld in a given year, as well as the administrative burden of paying taxes and contributions.*	*Payments (number per year)* - The tax payments indicator captures the total taxes and contributions paid, payment method, payment and filing frequency, and involved agencies. It encompasses company-withheld taxes like sales tax, VAT, and employee labour taxes. These are collected by the company for tax agencies and, while not impacting the company's income statements, they heighten the administrative compliance load and are counted in the tax payments measure. *Time (hours per year)* - Time is recorded in hours annually, measuring the duration to prepare, file, and pay three key tax types: corporate income tax, value added or sales tax, and labour taxes, inclusive of payroll taxes and social contributions. Preparation entails collecting data to compute and calculate payable tax. If separate books or calculations are required for taxes, the associated time is counted only when standard accounting doesn't meet tax requirements. Filing time covers the completion and submission of tax returns, while payment time accounts for online or in-person payments, incorporating any in-person waiting delays. *Total tax and contribution rate (% of profit)* - The total tax and contribution rate indicates the taxes and mandatory contributions a business shoulders in its second operational year, represented as a commercial profit percentage. This amount encompasses all taxes and contributions, considering allowable deductions and exemptions. Exclusions include taxes like personal income tax held by the company or remitted taxes not carried by the business, such as VAT. The inclusive taxes span five categories: corporate income tax, employer-paid social contributions and labour taxes (covering all mandatory contributions, even those to private entities like pension funds), property taxes, turnover taxes, and other levies like municipal fees and vehicle taxes. (For details: https://archive.doingbusiness.org/en/methodology/paying-taxes).
Government procurement of advanced tech products (Porter and Stern, 2001; WEF - GCR) *As main tool of government innovation policy it measures government purchasing decisions to foster technological innovation.*	In your country, to what extent do government purchasing decisions foster innovation? [1 = not at all; 7 = to a great extent] weighted average

Figure 1. Research Framework

Online Appendices

Table 1A: Mixed-effects multilevel logistic regression on Entrepreneurial Entry

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Individual level control variables							
Age	-0.01***(0.00)	-0.01*** (0.00)	-0.01***(0.00)	-0.01*** (0.00)	-0.01***(0.00)	-0.01*** (0.00)	-0.01*** (0.00)
Education	0.03*** (0.00)	0.03*** (0.00)	0.03***(0.00)	0.03*** (0.00)	0.04***(0.00)	0.04*** (0.00)	0.04***(0.00)
Household Income	0.09*** (0.01)	0.08*** (0.01)	0.08***(0.01)	0.08*** (0.01)	0.08***(0.01)	0.08*** (0.01)	0.08*** (0.01)
Social Capital	0.82*** (0.01)	0.82*** (0.01)	0.82***(0.01)	0.82*** (0.01)	0.82***(0.01)	0.82*** (0.01)	0.82*** (0.01)
Self-efficacy	1.47** (0.01)	1.45*** (0.01)	1.44***(0.01)	1.44*** (0.01)	1.44***(0.01)	1.44*** (0.01)	1.44*** (0.01)
Fear of Failure	-0.37*** (0.01)	-0.36*** (0.01)	-0.37***(0.01)	-0.37*** (0.01)	-0.37***(0.01)	-0.37*** (0.01)	-0.37*** (0.01)
Country level control variables							
Human Development Index	0.27*** (0.04)	0.16*** (0.04)	0.25***(0.04)	0.25***(0.04)	0.09***(0.04)	0.10***(0.04)	0.19***(0.04)
GDP Per Capita PPP	0.47***(0.04)	0.39***(0.04)	0.36***(0.04)	0.36***(0.04)	0.39***(0.04)	0.39***(0.04)	0.36***(0.04)
Individual level main variable							
Gender		-0.18***(0.01)	-0.18***(0.01)	-0.17***(0.01)	-0.20***(0.01)	-0.21***(0.01)	-0.20***(0.01)
Country level main variables							
Formal Gender Equality		0.09***(0.01)	0.09***(0.01)	0.10***(0.01)	0.10***(0.01)	0.10***(0.01)	0.10***(0.01)
Informal Gender Equality		0.31**(0.10)	0.33**(0.10)	0.33**(0.10)	0.22*(0.10)	0.22**(0.10)	0.25**(0.10)
Entrepreneurship Policy		0.04***(0.01)	0.05***(0.01)	0.06***(0.01)	0.01(0.01)	0.01(0.01)	0.01(0.01)
Two-way Interaction Terms							
Formal Gender Equality X Entrepreneurship Policy			0.07***(0.01)	0.11***(0.01)			0.09***(0.01)
Gender X Formal Gender Equality			-0.00(0.01)	-0.00(0.01)			-0.00(0.01)
Gender X Entrepreneurship Policy			.01(0.01)	.01(0.01)	0.01(0.01)	0.01(0.01)	0.00(0.01)
Informal Gender Equality X Entrepreneurship Policy					0.06***(0.01)	0.11***(0.01)	0.11***(0.01)
Gender X Informal Gender Equality					0.06***(0.01)	0.06***(0.01)	0.05***(0.01)
Three-way Interaction Terms							
Gender X Formal Gender Equality X Entrepreneurship Policy **(H1)**				-0.05***(0.01)			-0.02***(0.01)
Gender X Informal Gender Equality X Entrepreneurship Policy **(H2)**						0.03***(0.01)	0.03***(0.01)
Random part estimates							
Variance of intercept	0.99(0.09)	0.85(0.08)	0.85(0.08)	0.88(0.08)	0.80(0.7)	0.80(0.07)	0.83(0.08)
Number of observations	1,107,480	1,107,480	1,107,480	1,107,480	1,107,480	1,107,480	1,107,480
Number of group (countries)	66	66	66	66	66	66	66
Model fit statistics							
Degree of freedom	8	12	11	16	11	16	19
Chi-square	65,453	66,120	66,170	66,218	66,278	66,302	66,373
Prob > Chi-square	***	***	***	***	***	***	***
Log likelihood	-340,911	-340,459	-340,427	-340,404	-340,363	-340,347	-340,303
LR test for goodness of fit	***	***	***	***	***	***	***

Notes: Standard errors were reported in parentheses. All models were reported in beta coefficient. All significances are reported at two-tailed test, *** p < 0.001, ** p < 0.01, * < p 0.05, + < p 0.1.

**Table 2A: Mixed-effects multilevel logistic regression on Entrepreneurial Entry (Odd Ratios)**

	Model 2	Model 4
Individual level control variables		
Age	0.98***(0.00)	0.99***(0.00)
Education	1.03**(0.00)	1.03***(0.00)
Household Income	1.08***(0.00)	1.08***(0.00)
Social Capital	2.26***(0.01)	2.26***(0.01)
Self-efficacy	4.25***(0.03)	4.25***(0.03)
Fear of Failure	0.69***(0.01)	0.69***(0.00)
Country level control variables		
Human Development Index	1.28***(0.05)	1.10**(0.05)
GDP Per Capita PPP	1.43***(0.05)	1.48***(0.06)
Individual level main variable		
Gender	0.84***(0.01)	0.81***(0.01)
Country level main variables		
Formal Gender Equality	1.10***(0.01)	1.10***(0.01)
Informal Gender Equality	1.39***(0.14)	1.25*(0.12)
Entrepreneurship Policy	1.06***(0.01)	1.00(0.01)
Two-way Interaction Terms		
Formal Gender Equality X Entrepreneurship Policy	1.12***(0.01)	
Gender X Formal Gender Equality	0.99(0.01)	
Gender X Entrepreneurship Policy	0.99(0.01)	1.00(0.01)
Informal Gender Equality X Entrepreneurship Policy		1.11***(0.01)
Gender X Informal Gender Equality		1.06***(0.01)
Three-way Interaction Terms		
Gender X Formal Gender Equality X Entrepreneurship Policy	0.94***(0.01)	
Gender X Informal Gender Equality X Entrepreneurship Policy		1.07***(0.01)
Random part estimates		
Variance of intercept	0.88(0.08)	0.80(0.07)
Number of observations	1,107,480	1,107,480
Number of group (countries)	66	66
Model fit statistics		
Degree of freedom (variables)	12	12
Chi-square	66,216	66,300
Prob > Chi-square	***	***
Log likelihood	-340,404	-340,347
LR test for goodness of fit	***	***

Notes: Standard errors were reported in parentheses. Models 1 and 3 were reported in beta coefficient. Models 2 and 4 were shows in ORs, above 1 represent a positive relationship, ORs below 1 represent a negative relationship. All significances are reported at two-tailed test, *** $p < 0.001$, ** $p < 0.01$, * $< p\ 0.05$, $+ < p\ 0.1$.

Table 3A. Mixed-effects multilevel logistic regression on Women's and Men's Entrepreneurial Entry (Odd Ratios)

	Women's Entrepreneurial Entry			Men's Entrepreneurial Entry		
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Individual level control variables						
Age	0.98***	0.98***	0.98***	0.98***	0.98***	0.98***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Education	1.02***	1.02***	1.02***	1.04***	1.04***	1.04***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Household Income	1.05***	1.05***	1.05***	1.11***	1.11***	1.11***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Social Capital	2.26***	2.26***	2.26***	2.25***	2.25***	2.25***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Self-efficacy	4.45***	4.45***	4.45***	4.04***	4.04***	4.04***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Fear of Failure	0.69***	0.69***	0.69***	0.69***	0.69***	0.69***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Country level control variables						
Human Development Index	1.03	1.09	0.95	1.22***(0.06)	1.36***(0.06)	1.14**(0.06)
	(0.06)	(0.06)	(0.06)			
GDP Per Capita PPP	1.32***	1.29***	1.32***	1.40***(0.06)	1.35***(0.06)	1.40***(0.06)
	(0.06)	(0.06)	(0.06)			
Country level main variables						
Formal Gender Equality	1.11***	1.12***	1.12***	1.10***	1.10***	1.10***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Informal Gender Equality	1.33**	1.35**	1.33**	1.34** (0.09)	1.37** (0.09)	1.33** (0.09)
	(0.09)	(0.09)	(0.09)			
Entrepreneurship Policy	1.04***	1.05***	1.01	1.04***	1.04***	1.00 (0.01)
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	
Interaction Terms						
Formal Gender Equality X Entrepreneurship Policy		1.04***			1.06***	
		(0.01)			(0.01)	
Informal Gender Equality X Entrepreneurship Policy			1.07***			1.05***
			(0.01)			(0.01)
Random part estimates						
Variance of intercept	0.74	0.74	0.69	0.80 (0.08)	0.84 (0.08)	0.74 (0.07)
	(0.08)	(0.08)	(0.07)			
Number of observations	547,779	547,779	547,779	559,701	559,701	547,801
Number of group (countries)	66	66	66	66	66	66
Model fit statistics						
Degree of freedom (variables)	11	12	12	11	12	12
Chi-square	29,174	29,185	29,213	33,465	33,509	33,514
Prob > Chi-square	***	***	***	***	***	***
Log likelihood	-146,203	-146,196	-146,179	193,710	193,682	-193,678
LR test for goodness of fit	***	***	***	***	***	***

Notes: Standard errors were reported in parentheses. Models 1 and 6 were shows in ORs, above 1 represent a positive relationship, ORs below 1 represent a negative relationship. All significances are reported at two-tailed test, *** $p < 0.001$, ** $p < 0.01$, * $< p\ 0.05$, + $< p\ 0.1$.
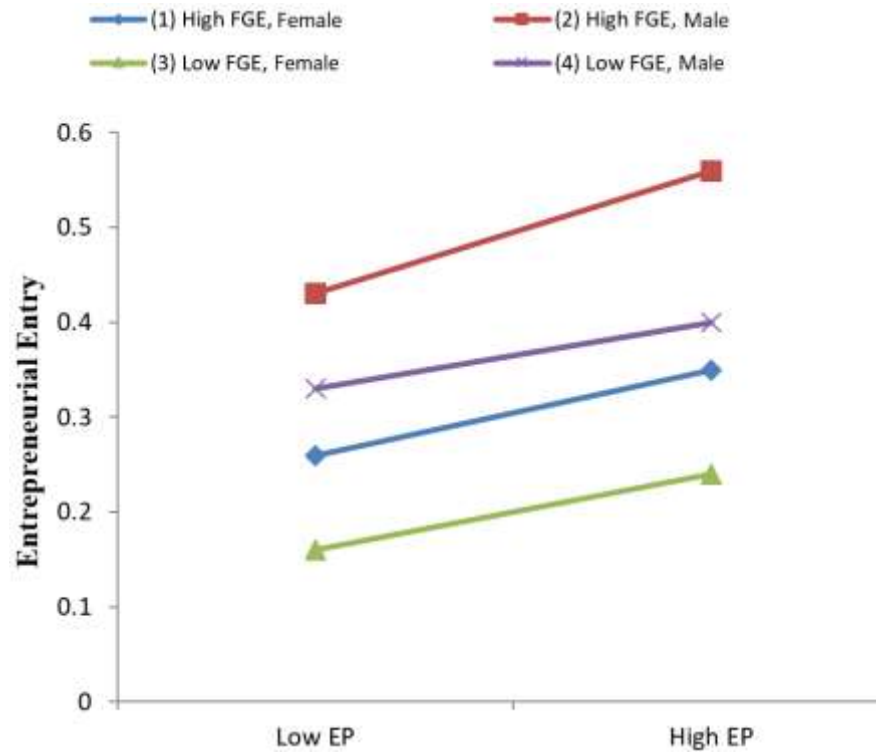
Figure 1A. Three-way interaction between Gender, Formal gender equality and Entrepreneurship policy.
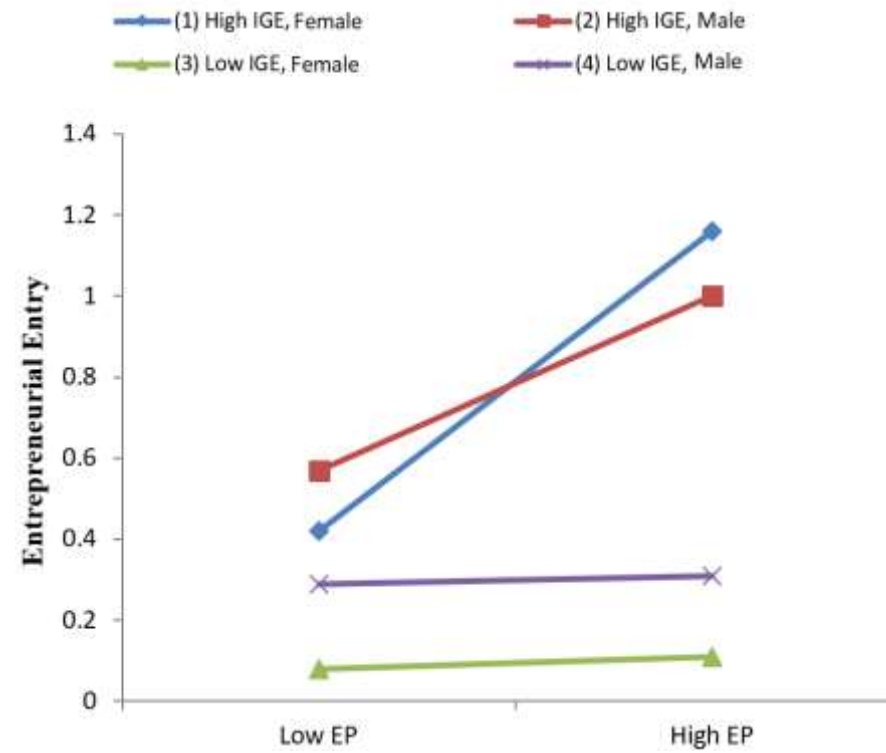
Figure 2A. Three-way interaction between Gender, Informal gender equality and Entrepreneurship Policy.