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GOVERNANCE AND ENTREPRENEURSHIP: A CROSS-NATIONAL STUDY OF BUSINESS START-UP INTENTIONS

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Abstract. The research explores how governance quality affects business start-up intentions across 43 countries. Drawing on institutional theory, it examines how governance dimensions, compared to national income and geographic region, influence entrepreneurial intentions. A hierarchical regression analysis was conducted on a sample of 43 countries using secondary data from the Global Entrepreneurship Monitor (GEM) and the World Bank's Worldwide Governance Indicators (WGI). The regression analysis revealed that national income and regions significantly influence start-ups (R^2=0.697), and governance dimensions contribute significantly to explaining start-ups (ΔR^2=0.151). Among six governance dimensions (regulatory quality, government effectiveness, political stability, control of corruption, rule of law, and voice and accountability) tested, government effectiveness and regulatory quality were the most potent predictors of start-ups. These results raise questions about traditional assumptions about income-driven entrepreneurship and highlight specific institutional mechanisms that policymakers may leverage to encourage entrepreneurship. The results contribute to a more nuanced understanding of governance and entrepreneurial dynamics in a variety of economic contexts.

Keywords: entrepreneurial intentions; governance quality; institutional theory; hierarchical regression; national income; regional differences; start-up activity

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1. Introduction

Productive entrepreneurship contributes significantly to positive economic outcomes such as innovation, job creation, poverty reduction and economic development (Pittaki, 2018; Si et al., 2019; Urbano et al., 2024; Mirvis, 2024). However, the prevalence of entrepreneurial activity varies markedly within and between countries (Nikolaev et al., 2018; Sayed & Abedelrahim, 2024a). Still, it is not only geography that influences entrepreneurial activity; the unique circumstances within a country also have an impact (Demirdag & Eraydin, 2022). While many of these disparities are driven by marked spatial differences, institutional frameworks also affect entrepreneurial activity (Su et al., 2017; Garmroudesfandiari et al., 2025). Recent research focusing on institutional frameworks highlights the quality of governance, a dimension of the institutional environment, as an important determinant of entrepreneurial intentions and behavior (Méndez-Picazo et al., 2012; Mahmalat & Sumpf, 2020; Abegaz et al., 2023; Kromidha et al., 2024; Ogbuabor et al., 2024).

Clarifying how different aspects of governance influence entrepreneurial intentions and actions might serve to enrich institutional and entrepreneurship theories. Insights into governance dimensions, such as regulatory quality, rule of law and government effectiveness, are particularly valuable for understanding how institutions shape entrepreneurial behavior (North, 1990; Bruton et al., 2010). Identifying which governance factors have the strongest influence on entrepreneurship is crucial for policymakers seeking to create environments that foster

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entrepreneurial activity. This need is especially pressing in contexts where governance deficiencies may suppress entrepreneurial aspirations and limit broader economic potential (Acs et al., 2015).

Prior studies have established preliminary connections between governance environments and entrepreneurial activity. For instance, Munemo (2021) demonstrates how unfavourable regulations constrain export entrepreneurship, while Méndez-Picazo et al. (2012) underscore the positive nexus between governance, entrepreneurship, and economic growth. Similarly, Goltz et al. (2020) found that the combination of women's political empowerment and a robust rule of law in a country enhances women's participation in entrepreneurship. Nonetheless, much of the extant literature has either examined governance dimensions in isolation (Chen & Cheng, 2019; Angulo-Guerrero et al., 2024) or aggregated them into broad governance indices without unpacking the differential effects of specific dimensions (Méndez-Picazo et al., 2012). In addition, much of the existing literature remains geographically skewed towards high-income countries, such as those within the Organisation for Economic Co-operation and Development, with relatively limited systematic investigations across broader income contexts. Moreover, prior studies have often prioritised observable entrepreneurial actions such as new firm formation/venture creation (Dove, 2017; Goltz et al., 2020) over the antecedent stage of entrepreneurial intention, which is a precursor to action. Against this background, several gaps remain despite the important advances already made in the field.

This study addresses these gaps by (i) testing/affirming the differential effects of the geographical area of a country and country income on entrepreneurial aspirations, (ii) linking governance quality and six dimensions thereof to individual entrepreneurial intentions and (iii) demonstrating the contribution of governance to entrepreneurial activity, controlling for regional and national income levels, to isolate its distinct influence. The study is also (iv) broad in scope, utilising cross-national samples drawn from the Global Entrepreneurship Monitor (2022) survey data, matched with macro-level governance indicators from the World Bank.

2. Literature review

The review discusses institutional theory and its impact on entrepreneurial activity. It then examines the study's three main variables, i.e., geographical region, national income and governance, and their roles in shaping entrepreneurial activity. These prior works provide the foundation upon which this research is built.

Institutional theory and entrepreneurial activity

Institutional theory, proposed by North (1990), explains how institutions are crucial determinants of economic performance and change. In other words, it explains how formal and informal institutions shape economic issues such as entrepreneurial opportunities and challenges. The theory underscores entrepreneurial success factors beyond organisational resources. Bruton et al. (2010) characterise institutions as formal rules, agreements, shared interaction sequences and assumptions. Many studies confirm the influence of formal institutions, such as government regulations and policies, financial institutions, and national culture, on entrepreneurial activities (Gimenez-Jimenez et al., 2020; Omri, 2020; Brzozowski et al., 2021; Menshikov et al., 2024). Some studies (e.g., Williams & Kosta, 2019; Nguyen, 2021; Shava & Chinyamurindi, 2022) underscore the critical role of normative and cultural factors, as informal institutions, in shaping expectations and defining 'acceptable' actions for organisations and individuals.

Institutional theory encompasses a range of dimensions and applications. Bruton et al. (2010) identify three major research streams in the field: how macro-level governance enables or hinders entrepreneurship; how entrepreneurs gain social acceptance in environments lacking formal structures; and how actors reshape or modernise institutions. These themes highlight the intricate and pervasive connection between institutional theory and entrepreneurship. Institutional theory provides a foundation for this study by explaining how formal governance structures systematically shape entrepreneurial intentions. As entrepreneurship is embedded in broader socio-

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political and economic systems (North, 1990), this perspective sheds light on how institutional elements influence risk perception, resource availability, and opportunity recognition, ultimately determining the likelihood of entrepreneurial engagement.

Regions and entrepreneurship

Fawn (2009) describes a region as a geographically defined area that is examined for its specific characteristics. There are, however, definitional inconsistencies in the literature regarding the concept of region. The GLOBE (Global Leadership and Organizational Behavior Effectiveness) study defines 10 regions based on cultural and leadership similarities across nations (House et al., 2004), while the World Bank divides countries into six primary geographical regions more strictly based on geographic and economic factors. The regions include East Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, South Asia, and Sub-Saharan Africa (World Bank, 2024), which will be used in this study.

Regional classification facilitates the comparisons, some of which demonstrate that entrepreneurial activity varies across regions due to a complex interplay of regional institutional, cultural, economic and social factors (Si et al., 2019; Demirdag & Eraydin, 2022). Fernández-Serrano and Liñán (2014) found that cultural values, economic development, education systems and institutional support vary by region and influence individuals' entrepreneurial propensity. More specifically, the Global Entrepreneurship Monitor (GEM, 2022) reports that Sub-Saharan Africa has some of the highest rates of entrepreneurial activity, often driven by necessity rather than opportunity. The same report highlights that North America and Western Europe have more opportunity-driven entrepreneurship because of stronger innovation ecosystems and institutions. The Global Entrepreneurship Monitor - GEM (2022) notes that opportunity-driven entrepreneurship thrives in dynamic economies with expanding markets, substantial resources and robust innovation ecosystems. This demonstrates that regional dynamics significantly influence the motivations and patterns of entrepreneurial activity across the globe.

National incomes and entrepreneurship

National incomes, entrepreneurial aspirations, and activities have been extensively studied in various contexts to understand the processes of economic development. Results from such studies suggest that income affects entrepreneurship in distinct ways, depending on the level of analysis (individual versus macro-level income) and the motivation for entrepreneurship (necessity compared to opportunity-driven) (Doran et al., 2018; Dvouletý & Orel, 2019; Mostaghel et al., 2022; Zarkua et al., 2025).

Individual and household research yields two different perspectives regarding the income level-entrepreneurship nexus. Reduced personal or household income is associated with heightened necessity-driven entrepreneurial intentions and activities. Individuals lacking stable wage employment or job opportunities often resort to self-employment for survival or income generation, driven by various factors. However, extremely low-income levels can impede opportunity-driven entrepreneurship because of insufficient start-up capital, the absence of financial safety nets, a lack of relevant networks, and inadequate education. In contrast, increased individual income or wealth correlates with opportunity-driven entrepreneurial intentions and the potential for business growth in start-ups (Evans & Jovanovic, 1989). This is linked to the presence of personal savings as initial capital, a financial safety net, and improved access to formal financing and influential networks.

The literature focusing on a macro-level analysis of income (i.e., such as GDP per capita) reveals varying predominant forms of entrepreneurship in countries at different stages of development. Generally, lower-income economies exhibit elevated levels of entrepreneurial activity. However, this activity is predominantly necessity-driven and frequently comprises small, low-growth informal sector enterprises (GEM, 2022). With an increase in national income, a decline in necessity-driven entrepreneurship and a rise in opportunity-driven entrepreneurship are observed (Wennekers et al., 2007). High-income economies exhibit lower rates of entrepreneurial activity

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compared to numerous developing economies; however, their enterprises tend to be more innovative, growth-oriented and effective in job creation (GEM, 2022).

Another research stream challenges the assumption of a linear relationship between income and entrepreneurship, arguing instead for a more complex and non-linear relationship. Even necessity-driven entrepreneurship at very low-income levels is hindered by systemic barriers, including a lack of capital, education, and market access. This creates a paradoxical situation where people are pushed into entrepreneurship but are structurally excluded from participating meaningfully due to deep-seated poverty. Consequently, scholars propose a non-linear, potentially U-shaped or inverted U-shaped relationship between national income and total entrepreneurial activity rates, reflecting the interaction of necessity and opportunity dynamics.

Existing evidence indicates that while higher income levels generally foster opportunity entrepreneurship, the broader relationship remains highly context-dependent. More context-specific and intersectional analyses are needed, particularly in low- and middle-income countries where informal entrepreneurship is prevalent and institutional voids may distort traditional theoretical expectations.

Governance quality and entrepreneurship

In national and cross-national research, a precise definition of governance has proved elusive, with some scholars using it in overlapping ways with related concepts such as "business environment" and "ecosystem". While business environments broadly include regulatory frameworks, social and macro-economic conditions, among other factors, ecosystems extend this view to emphasise interdependence between actors that together enable or constrain entrepreneurial activity. Governance, in turn, relates to institutional quality and processes by which authority is exercised, laws are enforced, and accountability is ensured. Governance thus impacts both the business environment and the functionality of an entrepreneurial ecosystem.

For Kaufmann et al. (2010), the term subsumes qualities such as the rule of law, regulatory effectiveness, corruption control, political stability and government accountability. These indicators provide a standardised metric for cross-national comparisons, but they are perception-based and therefore potentially biased. Furthermore, the aggregate nature of the WGI may obscure subtle differences. Nonetheless, they remain a popular and practical operationalisation of this complex concept. The quality of governance can either enable or constrain entrepreneurial behaviour, thus potentially influencing the decision to start a business or its ability to survive.

Scholars have, over the years, expanded this line of research by demonstrating how governance quality affects various entrepreneurial outcomes in diverse settings. For instance, Ullah et al. (2024) demonstrate strong longitudinal links between governance and entrepreneurship-driven growth. In contrast, Gaies et al. (2025) show that institutional quality has a disproportionate influence on opportunity entrepreneurship in OECD countries. Similarly, Gawel and Toikko (2023) identify governance and welfare generosity as institutional predictors of entrepreneurship in Europe. In developing countries, governance interacts with political processes and ecosystem structures to shape entrepreneurial opportunities (Kromidha et al., 2024; Abdulai & Hussain, 2024). Furthermore, new evidence suggests that technology can mediate the governance-entrepreneurship link, particularly in instances of corruption and weak democratic institutions (Avnimelech & Zelekha, 2025).

Stronger governance contributes to a stable institutional environment due to the resultant lower transaction costs, increased trust, and protection guarantees for entrepreneurial endeavours (North, 1990). Thus, empirical evidence suggests that opportunity-driven entrepreneurship is more prevalent in countries with strong governance institutions (Phillips & Tracey, 2007; Nikolaev et al., 2018). In contrast, weak governance entrenches higher barriers to entry, widespread informality and limited access to resources (Omri, 2020). Such an environment has the effect of suppressing entrepreneurial intentions or shifting them towards necessity-based or informal

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entrepreneurship, as was observed by Pittaki (2018) in the study of the entrepreneurship-institutions linkage in post-Second World War Greece.

The preceding analysis suggests a scholarly consensus that government effectiveness and regulatory quality play a crucial role in determining the ease and cost of starting and operating a business. The studies suggest that regions with efficient bureaucracies and streamlined regulations have a lower barrier to entry for new firms, which promotes entrepreneurial activity.

Similarly, perceived ease of doing business, which is strongly related to regulatory quality, has been shown to positively influence entrepreneurial intentions, as individuals are more likely to pursue a venture if they believe the administrative burden is manageable. Political stability is also crucial, as instability increases perceived risks (Kromidha et al., 2024; Sayed & Abedelrahim, 2024a, 2024b). Other studies highlight the deterrent effects of corruption and bureaucracy on firm creation, as well as their impact on distorting market competition and innovation dynamics (Andrews et al., 2019; Chen & Cheng, 2019; Bawole & Langnel, 2021).

However, the relationship between governance and other contextual factors exhibits mixed effects. For instance, the relative importance of different governance dimensions may vary depending on the specific stage of economic development or the prevailing institutional environment (Liu et al., 2018; Ogbuabor et al., 2024). Also, some studies suggest that informal governance elements (like social trust or informal networks) can interact with or partially substitute for formal governance, particularly in contexts where formal institutions are weak (Rottig, 2016; Gërxhani & Cichocki, 2023). This highlights the need for a nuanced understanding of governance that includes both formal and informal institutional dimensions.

Notwithstanding the insights from the literature, some knowledge gaps remain. Firstly, some scholars still treat governance as a single monolithic variable, which clouds the differential effects of its constituent elements on the critical antecedent stage of entrepreneurial intention. Furthermore, most of these studies focus on business creation, leaving the nuanced effects on formative intentions unexplored. Secondly, the extent to which these governance effects persist after controlling for confounding influences such as national income and, more importantly, geographical region, a proxy for deep-seated cultural and historical institutional differences, has received insufficient attention. As a result, it is unclear whether governance quality has a distinct impact on start-up intentions at various levels of economic development and in different regions. Addressing these gaps requires a comparative, cross-national investigation that disentangles the effects of governance dimensions while controlling for country income and regional variation. This study responds to that need.

3. Research design and methodology

Target population

This quantitative study uses secondary data from the World Bank (2020), specifically the governance indicators (Kaufmann et al., 2011), and data from the 2020 GEM Adult Population Survey, aggregated to the country level. The World Bank data provides information on governance quality and national income levels, while the GEM data provides information on business start-up intentions.

The target population comprised all countries. Countries were included based on data availability across all selected variables (i.e., governance indicators, start-up intentions and income/region classifications). In total, 43 countries were included. This approach of selecting all available cases is well-established in cross-national institutional research and is considered acceptable given the data constraints typical of such studies. Regarding respondent profiles, the study used aggregated country-level data; thus, individual respondent characteristics were not analysed. Countries were selected based on data availability for all key variables (i.e., governance indicators, start-up intentions, income/region classifications). The sample comprises 43 countries classified by the World

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Bank into low-, middle- and high-income groups, and covers four geographic regions according to the Global Entrepreneurship Monitor, namely, the Middle East and Africa, Central and East Asia, Latin America and the Caribbean, Europe and North America.

Measures

GEM (Global Entrepreneurship Monitor) measures entrepreneurial or business start-up intentions using the variable coded Futsup20, which serves as the dependent variable in this study. It represents the percentage of adults planning to start a business within the next three years. This GEM measure is widely used in entrepreneurship research and provides a standardised metric that is comparable across nations (Bosma & Kelley, 2019).

World Bank's Worldwide Governance Indicators (WGI) (Kaufmann et al., 2011) provided the governance measures used as independent variables in this study. These included regulatory quality, government effectiveness, political stability, control of corruption, rule of law, and voice and accountability. The WGI indicators are widely regarded as the gold standard for objective governance metrics, having been empirically validated and extensively cited in governance and development research (Arndt & Oman, 2006; Langbein & Knack, 2010; Thomas, 2010).

National income and region were measured using World Bank income groups and geographic regions. World Bank income groups are low, middle and high. Regions were categorised broadly as per Global Entrepreneurship Monitor standards, i.e., Africa and the Middle East, Asia and Oceania, Europe, and North and South America. This approach was preferred as it allowed for the identification of global entrepreneurial trends without complicating comparisons.

Ethical considerations

This desk research involved no human participants, utilising publicly available secondary data. However, ethical clearance was granted by the authors' institution of affiliation, with GSBL CRERC - 2022_SBL_AC_001_SD.

Data analysis

One-way ANOVA (Welch's) was used to assess whether national income or region affects start-up intentions. ANOVA was chosen as the standard statistical method for comparing group means. At the same time, Welch's variant was applied because it could adjust for unequal variances (Field, 2018), which were believed to be present in this dataset. Post hoc comparisons using Tukey's HSD will be conducted following the analyses to identify specific group differences.

Hierarchical multiple regression was used to assess the contribution of national income, world region and governance to variations in start-up intentions. Variables were entered in blocks to evaluate the incremental explanatory power of each predictor set. This method was chosen for its ability to control for potential confounding variables. The analyses were conducted using Jamovi 2.4.14 statistical software. To ensure the validity of the regression models, diagnostic checks were performed to assess key assumptions, including normality, homoscedasticity, autocorrelation and multicollinearity. All statistical tests were conducted at the α=0.05 significance level.

To ensure the appropriateness of linear regression, standard diagnostic criteria were applied: normality was evaluated using the Shapiro-Wilk ($p > .05$) and Kolmogorov-Smirnov ($p > .05$); homoscedasticity was assessed using the Breusch-Pagan ($p > .05$); independence of errors was verified using the Durbin-Watson test (values between 1.5 and 2.5 were considered acceptable); and multicollinearity was examined using the variance inflation factor (VIF), with values below 5 indicating no concern (Hair et al., 2019).

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4. Results

Results are presented under two headings: (1) the relationship between national income, geographical region and business start-up intentions, and (2) the combined influence of income, region and governance on start-up intentions.

The relationship between national income (low, middle, high) and region (East Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, South Asia and Sub-Saharan Africa), and business start-up intentions (Futsup20)

Descriptive statistics showed that low-income countries had the highest mean start-up intention scores (M=52.9, SD=19.5), followed by middle-income countries (M=38.6, SD=18.0) and then high-income countries (M=24.3, SD=17.4). The ANOVA revealed a statistically significant difference in mean business start-up intentions between at least two of the income groups, $F(2, 29.63)=6.13$, $p=0.019$ (See Table 1).

Descriptive statistics indicated the following mean start-up intentions for each region: the Middle East and Africa (M=48.9, SD=17.3), Central and East Asia (M=32.9, SD=17.8), Latin America and the Caribbean (M=48.3, SD=6.9), and Europe and North America (M=13.8, SD=6.7). The results revealed a statistically significant difference in mean business start-up intentions between at least two of the world regions, F(3, 11.1)=43.83, p<0.001 (see Table 1).

Table 1. Combined Welch's ANOVA Results for National Income and Region vs. Business Start-Up Intentions

Factor	Group	N	Mean	SD	SE	Welch's F (df1, df2), p
National Income	Low income	6	52.9	19.5	7.95	F=6.13(2, 9.63), p=0.019
	Middle income	7	38.6	18.0	6.79	
	High income	30	24.3	17.4	3.17	
Region	Middle East & Africa	12	48.9	17.32	5.00	F=43.8(3, 11.1), p<0.001
	Central & East Asia	5	32.9	17.79	7.96	
	Latin America & Caribbean	6	48.3	6.89	2.81	
	Europe & North America	20	13.8	6.67	1.49	

Source: Authors' own work

The results above suggest that, in general, significant differences exist between income levels and the levels of start-up intentions, as well as that geographical regions differ in start-up intentions. Reflected in Table 2 there is Tukey's post hoc comparisons test, which indicates which variables differ from each other.

Table 2. Post Hoc Comparisons (Tukey HSD)

	Comparison	Mean Difference	p-value
Income	Low vs. Middle income	14.4	0.324
	Low vs. High income	28.6	0.002
	Middle vs. High income	14.3	0.148
Region	Middle East & Africa vs. Central & East Asia	16.0	0.075
	Middle East & Africa vs. Europe & North America	35.1	<0.001
	Central & East Asia vs. Europe & North America	19.1	0.015
	Latin America & Caribbean vs. Europe & North America	34.5	<0.001

Source: Author's own work

Post hoc comparisons using Tukey's HSD test indicated a statistically significant difference in start-up intentions between low-income and high-income countries ($p=0.002$) (see Table 2). Low-income countries reported significantly higher start-up intentions than high-income countries. Business start-up intentions were significantly

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higher in the Middle East and Africa compared to Europe and North America ($p < 0.001$). Start-up intentions were also significantly higher in Central and East Asia compared to Europe and North America ($p=0.015$). Similarly, start-up intentions were significantly higher in Latin America and the Caribbean compared to Europe and North America ($p < 0.001$).

The relationship between national income and business start-up intentions: Income classification (low, middle, high) and business start-up intentions (Futsup20)

A multiple linear regression analysis was conducted to examine the relationship between region and income classification (which we indicated above has differential relationships with start-ups), as well as elements of governance (regulatory quality, government effectiveness, political stability, control of corruption, rule of law, voice and accountability), and their effects on business start-up intentions (Futsup20). Two models were tested. Model 1 uses region and income level as predictors. Model 2 expanded upon Model 1 by adding governance measures. The results of the analysis are summarised in Table 3.

Table 3. Hierarchical linear regression predicting business start-up intentions

	Model 1 R=0.835, R^2=0.697, F(5, 37)=17.1, p<.001					**Model 2** R=0.921, R^2=0.849, ΔR^2=0.151, F(11, 31)=15.8, p<.001.				
Predictor	**B**	**SE**	**t**	**p**	**β**	**B**	**SE**	**t**	**p**	**β**
Intercept	55.27	4.97	11.13	<.001	—	58.69	5.83	10.07	<.001	—
Central & East Asia[a]	-14.03	6.63	-2.12	.041	-0.693	5.50	8.21	0.67	.508	0.272
Latin America & Caribbean [a]	3.48	6.72	0.52	.608	0.172	15.55	8.65	1.80	.082	0.768
Europe & North America[a]	-30.43	5.08	-5.99	<.001	-1.503	-12.82	7.76	-1.65	.109	-0.633
Middle income[b]	-9.82	7.58	-1.30	.203	-0.485	-20.37	6.90	-2.95	.006	-1.006
High income[b]	-11.08	6.28	-1.77	.086	-0.547	-18.11	7.45	-2.43	.021	-0.895
Control	—	—	—	—	—	-0.26	0.22	-1.19	.245	-0.333
Government Effectiveness	—	—	—	—	—	-0.89	0.26	-3.41	.002	-1.067
Political Stability	—	—	—	—	—	0.32	0.12	2.76	.010	0.397
Regulatory Quality	—	—	—	—	—	0.82	0.28	2.94	.006	0.934
Rule of Law	—	—	—	—	—	0.22	0.28	0.77	.446	0.274
Voice and Accountability	—	—	—	—	—	-0.34	0.12	-2.72	.011	-0.513

[a]Reference: Middle East & Africa [b]Reference: Low income

Source: Authors' own work

Model 1 met normality assumptions with non-significant results on the Shapiro-Wilk test (W=0.956, p=.097) and Kolmogorov-Smirnov test (D=0.101, p=0.737). The Breusch-Pagan (χ^2=11.6, p=0.040) and Harrison-McCabe tests (F=0.238, p=0.011) all revealed heteroskedasticity. There was no significant autocorrelation (Durbin-Watson=2.35, p=0.436). Multicollinearity was not a concern, with VIF values for predictors (Region=1.10; Income level=1.16) well below the conventional threshold of 10 and tolerances greater than 0.2.

The overall model was statistically significant, $F(7, 35)=17.15$, $p<0.001$, explaining 69.7% of the variance in business start-up intentions (R^2=0.697). Being located in Europe and North America was significant with lower business start-up intentions compared to the Middle East and Africa (β=-1.503, p<.001). Similarly, respondents from Central and East Asia reported significantly lower intentions (β=-0.693, p=.041). High-income countries (β=-0.547, p=.086) and middle-income countries (β=-0.485, p=.203) reported lower intentions than low-income countries, but these effects were not statistically significant in Model 1.

In Model 2, normality tests yielded non-significant results, i.e., Shapiro-Wilk W=0.971, p=.348 and Kolmogorov-Smirnov D=0.122, p=0.509. The Breusch-Pagan and Harrison-McCabe tests were not (p>.05) significant. There was no indication of autocorrelation (Durbin-Watson=2.34, p=0.542). Collinearity diagnostics revealed moderate

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multicollinearity for some governance indicators, with VIFs ranging from 1.52 (Region) to 5.09 (Rule of Law), and tolerance values still above the minimum acceptable level of 0.1.

The overall model was statistically significant, $F(13, 29)=15.81$, $p<.001$, explaining 84.9% of the variance in business start-up intentions ($R^2=0.849$). The inclusion of these variables significantly improved the model, $\Delta R^2=.151$, $F(6,31)=5.17$, $p<.001$. Government effectiveness (β=-1.067, $p=.002$), regulatory quality (β=0.934, $p=.006$), political stability (β=0.397, $p=.010$), and voice and accountability (β=-0.513, $p=.011$) emerged as significant predictors. Control of corruption and rule of law were not significant. Interestingly, the direction of the effect for Central and East Asia reversed and became non-significant, suggesting suppression or mediation by the newly added governance variables. Similarly, the coefficients for income level became stronger and statistically significant, with both high-income (β=-0.895, $p=.021$) and middle-income (β=-1.006, $p=.006$) countries showing significantly lower start-up intentions compared to low-income countries. These results suggest that, beyond regional and income differences, perceptions of governance quality (particularly effectiveness, regulatory quality, and voice and accountability) play a significant role in shaping entrepreneurial intentions.

5. Discussion

Prior research often links economic development to entrepreneurial opportunity (Obschonka & Audretsch, 2019; Urbano et al., 2020). Based on incomes, countries differed significantly in their adoption of start-ups (F=6.13(2, 9.63), p=0.019), but not in the manner expected. The study reveals that low-income countries exhibit significantly higher start-up intentions (M=52.9) than high-income countries (M=24.3). This challenges the assumption that higher-income economies naturally foster greater entrepreneurial activity (Schott et al., 2015). This suggests that necessity-driven entrepreneurship may be the primary driver of start-ups (in less developed contexts), rather than in developed or high-income countries, resulting in significantly fewer start-up intentions.

Another important finding relates to regional disparities in individual entrepreneurial intentions beyond GDP. Specifically, the results reveal regional clustering of entrepreneurial intentions independent of income levels. For instance, the Middle East and Africa (M=48.9), and Latin America (M=48.3) show similar entrepreneurial intentions despite differing income profiles. Similarly, Europe and North America (M=13.8) lag significantly, even though they include high-income nations. Unlike some cross-national studies that emphasise the role of GDP (Dvouletý & Orel, 2019; Mostaghel et al., 2022), these findings underscore possible region-specific cultural and/or institutional factors, such as social norms and risk tolerance, that may override economic explanations of entrepreneurial intentions. The results of this study also emphasise governance quality as a differentiator in terms of the regional distribution of entrepreneurial intentions.

The study also managed to isolate specific governance indicators, not just broad institutional quality, which matter most for entrepreneurship intentions. Specifically, it demonstrates that government effectiveness and regulatory quality are the strongest predictors. Contrary to common assumptions (Goltz et al., 2020; Bawole & Langnel, 2021), control of corruption and rule of law were non-significant. Some prior work often treats governance as monolithic. This study views governance as multidimensional, therefore allowing for a more focused approach to increasing start-ups. This strategy allowed recommendations such as that policymakers should prioritise, for instance, streamlining regulations over anti-corruption campaigns.

Theoretical contribution of the study

The results of this study offer a nuanced perspective on the contributions of institutional theory to our understanding of entrepreneurial activity, demonstrating that not all governance dimensions equally influence entrepreneurship. Institutional theory proposes that formal rules shape economic behaviour (North, 1990), but it does not specify which rules matter most for entrepreneurship. Based on the data used in this study, the influence of governance effectiveness and regulatory quality outweighs that of corruption control and the rule of law,

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contrary to common assumptions. This suggests the idea of hierarchical institutional effects (where governance effectiveness and regulatory quality are first-order effects directly impacting entrepreneurial intentions and entry, while corruption control and rule of law are second-level effects where they may affect later stages of the entrepreneurship life cycle but matter less for start-up intentions.

In line with institutional theory, the results also underscore regional institutional logics, rather than national incomes, as underlying the emergence and thriving of entrepreneurship across various world regions. The evidence from the study suggests that regional differences in entrepreneurial intentions persist beyond income differences, as shown by the Latin America and Middle East regions having similar start-up rates despite differing income levels. Moreover, Europe and North America lag, suggesting cultural or institutional path dependencies. Given this, region-specific norms, such as collectivism in Latin America (House et al., 2004) and risk aversion in Europe (e.g., Wennekers et al., 2007), may influence how governance impacts entrepreneurship intentions and activity. However, this was not empirically tested in this study and could be an area of interest for future research.

Another key contribution of the study is its methodological advancements. Many prior studies rely on subjective surveys or aggregate governance indices. This study combines objective institutional data (World Bank metrics) with entrepreneurial intent data from GEM using robust statistical controls (i.e., Welch's Anova for heteroscedasticity and multiple regression models). This strengthens causal inferences on the impact of governance.

Policy implications

This study has implications for policy and practice, especially for developing and high-income countries. Given the findings on the importance of government effectiveness and regulatory quality, governments in low- and middle-income countries should prioritise reducing bureaucratic barriers through measures such as digitising permits and simplifying tax compliance, rather than solely investing in anti-corruption campaigns. High-income countries, on the other hand, need to reassess red tape to encourage opportunity-driven entrepreneurship, given that they have lower entrepreneurial intentions despite having strong institutions. Furthermore, because start-up intentions vary significantly by region, there is a need to tailor regional development programs to address possible context-specific barriers. The study found that political stability increased start-up intentions, while increased voice and accountability had a negative effect. To address this, nations need to balance democratic participation with efficient decision-making to avoid policy paralysis. Lastly, it is essential to note that the high start-up intentions in low-income countries reflect a form of survivalist entrepreneurship. Hence, there is a need to provide microloans, vocational training (McKenzie & Woodruff, 2014) and informal sector protections to enhance the sustainability of such activities.

Conclusions

The results of this study complicate simplistic narratives about institutions and entrepreneurship by disaggregating the effects of governance, testing the regional versus income effects, and unravelling the corruption paradox. Against this background, the study offers researchers and policymakers a deeper understanding of the various relationships examined. More specifically, it emphasises that not all governance aspects are equally impactful, regional context can override income effects, and corruption effects are context-specific.

A key limitation of the study lies in the reliance on the worldwide indicators, which, despite their widespread use, have been critiqued for potential misuse and oversimplification. Arndt and Oman (2006) caution that governance indicators, including the WGI, may be applied inappropriately in policy contexts without sufficient attention to their methodological constraints. Additionally, as Thomas (2010) highlights, interpreting causal

relationships between governance and development outcomes using WGI data can be complex, given the subjective nature of perception-based measures and the challenge of disentangling correlation from causation.

Future researchers, while building on contextual factors included in this study, should address key limitations that remain. These include complementing WGI data with qualitative insights, using multiple governance measures, applying more rigorous methods to establish causality, accounting more fully for country-specific contexts and critically engaging with the methodological constraints of perception-based indicators.

This study raises new questions for future research. For example, why does corruption seem less of a deterrent to entrepreneurship in low-income countries? Could informal networks offset weak governance? Are regional differences in start-up intentions stemming from cultural norms or government policy? Lastly, longitudinal research should examine whether governance effectiveness and regulatory quality drive entrepreneurship or simply reflect underlying endogeneity.

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