

Impact Orientation in Early-Stage Entrepreneurs: Understanding Its Socio-Economic Determinants through a Cross-Country Analysis

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1. Introduction

In recent decades, entrepreneurship has come to be widely recognized as a powerful driver of economic growth, innovation, and social change (Acs et al., 2008; Autio et al., 2014). Yet, while traditional entrepreneurship scholarship has predominantly emphasized profit-maximizing and growth-oriented ventures, a growing stream of research highlights the importance of impact orientation, entrepreneurial activity that prioritizes social or environmental value alongside, or even above, financial returns (Mair & Marti, 2006; Shepherd et al., 2019). This shift reflects broader societal expectations that entrepreneurship should address pressing global challenges such as climate change, inequality, and governance failures (Sternberg et al., 2022). Particularly in contexts characterized by weak formal institutions, impact-oriented entrepreneurship may emerge not merely as a value-driven choice but as a pragmatic response to structural voids and unmet societal needs.

The motivation for this paper lies in the intersection of institutional quality, social progress, and impact orientation. Institutional theory suggests that the quality of governance and the strength of regulatory frameworks shape entrepreneurial intentions and outcomes (North, 1990; Bruton et al., 2010). In well-functioning institutional contexts, entrepreneurs may

pursue conventional growth-oriented ventures, as supportive structures reduce uncertainty and lower transaction costs. However, where governance systems are weak, manifested in corruption, ineffective regulation, or poor rule of law, entrepreneurs often encounter “institutional voids” (Khanna & Palepu, 2010). These voids can hinder conventional business models but simultaneously create opportunities for socially oriented ventures that step in to fill governance gaps (Mair & Marti, 2009; Desa, 2012).

At the same time, social progress, measured in terms of human well-being, access to basic needs, and opportunities for individuals to thrive, is increasingly seen as both an outcome and a determinant of entrepreneurial ecosystems (Porter et al., 2017; Stern et al., 2023). Where social progress is lacking, entrepreneurs may be motivated to orient their ventures toward addressing unmet social and environmental challenges (Stephan et al., 2015). Conversely, higher levels of social progress may reduce the urgency for impact orientation, encouraging more traditional business models. Despite this, there remains limited empirical evidence connecting institutional voids, social progress, and the emergence of impact-oriented entrepreneurship across countries.

This paper addresses this gap by investigating how institutional voids in governance influence the impact orientation of early-stage entrepreneurs, mediated through levels of social progress. Specifically, we develop and empirically test a model using cross-country data from the Global Entrepreneurship Monitor (GEM) 2024/2025 Adult Population Survey (APS), covering 51 countries. By constructing an Institutional Quality Index based on World Governance Indicators (WGI) - “Control of Corruption,” “Government Effectiveness,” “Regulatory Quality,” and “Rule of Law”- and linking it with the Social Progress Index (SPI), we examine whether weak institutional quality indirectly fosters impact orientation among entrepreneurs through its adverse effects on social progress.

This study contributes to three streams of literature. First, it advances research on institutional voids and entrepreneurship by exploring how governance deficiencies do not merely constrain entrepreneurial activity but may also redirect it toward impact-oriented goals (Bruton et al., 2021). Second, it adds to the emerging body of work on social progress and entrepreneurship, positioning SPI as a mediating mechanism that connects institutional quality to entrepreneurial orientation (Sternberg et al., 2022). Finally, it informs the debate on impact-oriented entrepreneurship, showing how structural conditions at the country level shape entrepreneurs’ prioritization of social and environmental value creation (Stephan et al., 2022; Alvarez & Barney, 2014).

The structure of this paper is as follows. Section 2 lays out the theoretical foundation and hypothesis development, drawing from institutional theory and prior research on social progress. Section 3 describes the data and methodology, including details on GEM APS data, the construction of key variables, and the causal mediation analysis employed. Section 4 presents the results, reporting mediation path coefficients and robustness checks. Section 5 offers discussion, implications, and limitations, highlighting theoretical and policy contributions

as well as avenues for future research. Finally, Section 6 provides the conclusion, summarizing the study's findings and their significance for entrepreneurship research and practice.

By focusing on the interplay between institutional voids, social progress, and entrepreneurial orientation, this study responds to calls for more nuanced, cross-country analyses of the socio-institutional foundations of entrepreneurship (Autio et al., 2014; Bruton et al., 2021). It offers a timely contribution to understanding how entrepreneurs navigate structural challenges and, in doing so, how they may act as critical agents of social change in contexts where both governance and progress remain uneven.

2. Theoretical Foundation and Hypothesis development

Institutional environments play a decisive role in shaping the nature of entrepreneurial activity. In contexts characterized by strong governance, effective legal systems, and supportive institutions, entrepreneurs can rely on predictable structures that lower uncertainty and reduce transaction costs (North, 1990; Acemoglu & Robinson, 2012). Conversely, when institutional voids emerge - defined as the absence or weakness of formal market-supporting institutions - entrepreneurs face barriers such as regulatory inefficiencies, weak enforcement of contracts, and limited access to reliable information (Khanna & Palepu, 1997; Mair & Marti, 2009). These voids not only hinder the efficiency of entrepreneurial ecosystems but also influence the orientation of entrepreneurs' goals, particularly in balancing commercial and social objectives.

2.1 Institutional voids in governance and social progress

The concept of institutional voids originates in the study of emerging markets, where scholars observed that weak governance structures and underdeveloped institutions limit the functioning of markets (Khanna & Palepu, 2010). These voids are evident in deficiencies such as corruption, ineffective public services, poor regulatory quality, and lack of rule of law. For entrepreneurs, institutional voids create transaction costs, restrict market efficiency, and reduce access to finance, thereby shaping the structure of entrepreneurial opportunities (Bruton et al., 2010; Webb et al., 2020).

At a societal level, the consequences of institutional voids extend beyond markets to affect social progress. Social progress, as conceptualized by the Social Progress Index, encompasses basic human needs, well-being, and opportunity dimensions (Porter et al., 2017; Stern et al., 2023). Strong institutions are essential to delivering these outcomes because they ensure fair allocation of resources, access to justice, and the protection of rights (Acemoglu & Robinson, 2012). Where governance is weak, public services deteriorate, corruption erodes trust, and regulatory failures exacerbate inequalities (Kaufmann, Kraay, & Mastruzzi, 2011). This limits societal progress in domains such as healthcare, education, personal rights, and environmental sustainability.

Empirical evidence supports the link between institutional quality and social development. Rodrik et al. (2004) demonstrated that governance indicators are strong predictors of cross-country differences in economic performance and social well-being. Similarly, Kaufmann et al. (2011) showed that countries with stronger rule of law and control of corruption

achieve better human development outcomes. More recently, Stern et al. (2023) found that improvements in governance quality significantly raise a country's Social Progress Index scores. This literature suggests that institutional voids in governance are directly linked to lower levels of social progress.

For entrepreneurs, these institutional deficiencies translate into operating within contexts of weak social safety nets, poor infrastructure, and low levels of trust in public institutions. In turn, these conditions create a backdrop of unmet societal needs, where entrepreneurial activity is embedded within contexts of fragility rather than prosperity (Webb et al., 2020). Thus, governance voids not only hinder conventional entrepreneurship but also erode the very fabric of social progress that underpins long-term development. Given, the centrality of public policy in shaping the incentives and resources available to startups, we propose the following hypothesis:

H1: Institutional voids in governance are negatively associated with social progress

2.2. Social progress and impact orientation in entrepreneurship

The relationship between social progress and entrepreneurial orientation is complex. Societies that achieve higher levels of social development generally reduce the burden on entrepreneurs to compensate for systemic gaps in welfare and inclusion. In contexts where education, healthcare, and equality are adequately addressed through public or institutional means, entrepreneurs may prioritize profit-maximizing strategies rather than social or environmental impact (Austin et al., 2006; Zahra et al., 2009). Conversely, when social progress is lacking, entrepreneurial actors are often compelled to direct their efforts toward impact-oriented solutions to address unmet needs (Mair & Marti, 2009; Shepherd et al., 2020). However, a counterintuitive argument can also be made: as social progress improves, niches for impact-driven entrepreneurship may shrink, thereby reducing the proportion of entrepreneurs motivated primarily by social outcomes. Empirical evidence suggests that the prevalence of social entrepreneurship is often higher in countries with acute social challenges, whereas it tends to plateau in more developed ecosystems (Hoogendoorn, 2016; Ganco & Cunningham, 2022). Hence, higher levels of social progress may reduce the need for entrepreneurs to pursue impact-oriented objectives. Based on this reasoning, we propose the following hypothesis:

H2: Social progress is negatively associated with the likelihood of entrepreneurs adopting an impact orientation.

2.3 Institutional voids in governance and impact orientation in early-stage entrepreneurs

Beyond this indirect pathway, institutional voids can also exert a direct influence on entrepreneurial orientation. Entrepreneurs embedded in weak institutional environments are often exposed to pervasive social and environmental problems that established institutions fail to address (Mair et al., 2012; Roundy et al., 2018). In such contexts, gaps in public service delivery and weak governance may create opportunities for entrepreneurs to step in with impact-driven solutions, positioning themselves as substitutes for missing institutional support (Webb et al., 2009; Bruton et al., 2010). Recent studies suggest that institutional weaknesses

can, paradoxically, stimulate prosocial entrepreneurship by making social needs more salient and entrepreneurial responses more urgent (Pathak & Muralidharan, 2021; Liu et al., 2024). Thus, institutional voids are expected to directly encourage entrepreneurs to pursue socially oriented goals.

H3: Institutional voids are positively associated with the likelihood of entrepreneurs adopting an impact orientation (direct effect)

Taken together, these hypotheses propose a dual pathway through which institutional voids influence impact orientation: an indirect path mediated by social progress (H1 and H2) and a direct path (H3). By testing these mechanisms, this study contributes to the growing literature on institutional theory and social entrepreneurship, highlighting how broader governance and societal structures shape the orientation of early-stage entrepreneurs. Figure 2 illustrates the proposed conceptual model. It shows how institutional voids shape entrepreneurial impact orientation both directly and indirectly through social progress. Specifically, the model captures the positive link between institutional voids and social progress (H1), the negative influence of social progress on impact orientation (H2), and the direct positive effect of institutional voids on impact orientation (H3).

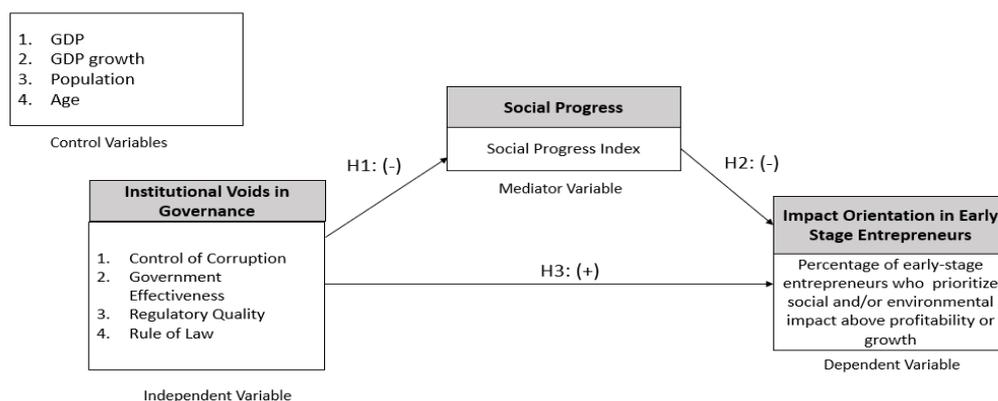


Figure 1: Conceptual research model

In the next section, we operationalize these constructs and test the proposed mediation model across 51 countries using GEM 2024/2025 data.

3. Data and methodology

3.1. Data

This study employs a cross-country dataset combining information from the Global Entrepreneurship Monitor (GEM) 2024/2025 Global Report: Entrepreneurship Reality Check, the World Bank's Worldwide Governance Indicators (WGI), the Social Progress Index (SPI), and macroeconomic indicators from the International Monetary Fund (IMF), the World Bank, and the Central Intelligence Agency (CIA). By integrating entrepreneurship, institutional, social, and demographic indicators, the study provides a comprehensive empirical setting for analysing

how institutional voids and social progress shape the impact orientation of early-stage entrepreneurs.

The primary source of entrepreneurship data is the GEM Adult Population Survey (APS), which collects responses from at least 2,000 individuals in each participating economy (GEM, 2025). The APS provides unique cross-national comparability on early-stage entrepreneurship, attitudes, and aspirations, making it particularly suitable for studying impact orientation. In total, the GEM 2024/2025 APS covers 54 countries. For this study, we exclude South Africa, Japan, and Indonesia, due to missing data on the target dependent variable (impact orientation). The final analytical sample consists of 51 countries.

The dependent variable in this study is Impact Orientation, which is measured as the share of early-stage entrepreneurs who report prioritizing social and/or environmental impact above profitability or business growth. This measure is drawn directly from GEM 2024/2025 APS (GEM, 2025). The operationalization aligns with recent efforts to assess prosocial and impact-driven motivations within entrepreneurship ecosystems (Stephan et al., 2022). Figure 2 displays the impact orientation (% of early-stage entrepreneurs surveyed who report prioritizing social and or environmental impact over profitability or business growth).

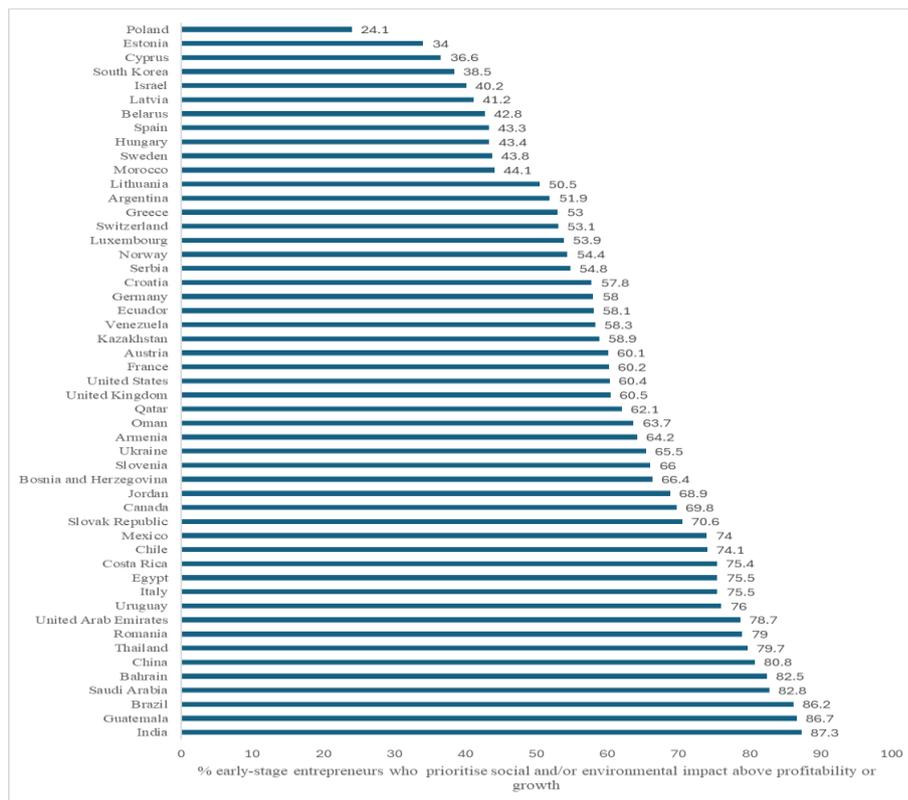


Figure 2- Countries by % of early stage entrepreneurs who would prioritize social and/or environmental impact above profitability or growth

The independent variable in this study is the institutional quality, which is measured through a composite index constructed from four governance indicators obtained from the Worldwide Governance Indicators (WGI) dataset (World Bank, 2023):

1. Control of Corruption - capturing the extent to which public power is exercised for private gain.
2. Government Effectiveness - reflecting the quality of public services, civil service, and policy implementation.
3. Regulatory Quality - measuring the ability of the state to design and enforce sound regulatory frameworks.
4. Rule of Law - reflecting confidence in legal systems, contract enforcement, and property rights.

These indicators have been widely used to assess governance quality across countries (Kaufmann et al., 2011; Acemoglu & Robinson, 2012). For this study, they were standardized and aggregated into a composite Institutional Quality Index, with higher scores representing stronger governance and lower scores indicating governance voids.

The mediating variable is the Social Progress Index (SPI), developed by the Social Progress Imperative (2025). The SPI evaluates the extent to which societies meet citizens' essential needs, ensure well-being, and create opportunities for individuals to flourish. It is based on 57 social and environmental outcome indicators across dimensions such as health, education, safety, rights, and environmental sustainability. The 2025 edition provides cross-national data for 170 countries, based on 2024 outcomes. SPI is considered a complementary measure to economic performance, providing insights into societal development beyond GDP (Porter et al., 2017; Stern et al., 2023).

Several control variables are incorporated to account for macroeconomic and demographic factors that may influence entrepreneurial orientation:

1. GDP (current prices, USD billions) - sourced from IMF's World Economic Outlook (WEO) (IMF, 2024)
2. GDP Growth (annual % for 2023) - from the World Bank's World Development Indicators (World Bank, 2023). Data for Venezuela was supplemented using IMF figures
3. GDP per capita (current prices, USD) - sourced from IMF WEO (IMF, 2024)
4. Population (millions) - from IMF WEO (IMF, 2024)
5. Median Age - based on CIA World Factbook estimates for 2024 (CIA, 2024)

These controls capture differences in economic development, growth trajectories, population structure, and entrepreneurial ecosystems, which prior research has shown to significantly affect both entrepreneurial activity and social orientation (Autio et al., 2014; Stephan et al., 2015).

The choice of variables reflects both theoretical grounding and empirical robustness. First, GEM's APS provides a uniquely valid cross-national measure of impact orientation, not readily available in other datasets. Second, the WGI indicators are widely used proxies for institutional quality and governance effectiveness (Kaufmann et al., 2011). Third, the SPI provides a multidimensional and outcome-based measure of societal well-being, superior to GDP alone for capturing societal development (Stern et al., 2023). Finally, macroeconomic and demographic controls reduce omitted variable bias by accounting for structural factors known to influence entrepreneurial behaviour.

Table 2 below displays the descriptive statistics and the correlation coefficient between the variables.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Impact Orientation	61.32	15.4	1.00 (-)									
2. GDP	1624.6	4586	0.13	1.00 (-)								
3. GDP Growth	2.07	2.25	0.36 ***	0.14	1.00 (-)							
4. Population	89.59	277.4	0.33 **	0.55 ***	0.43 ***	1.00 (-)						
5. Age	38.74	6.77	- 0.36 **	0.05	- 0.31 **	- 0.13	1.00 (-)					
6. Control of Corruption	0.4	0.91	- 0.26 *	0.11	- 0.56 ***	- 0.15	0.42 ***	1.00 (-)				
7. Government Effectiveness	0.53	0.81	- 0.21	0.17	- 0.45 ***	0	0.34 **	0.92 ***	1.00 (-)			
8. Regulatory Quality	0.54	0.83	- 0.24 *	0.09	- 0.53 ***	-0.2	0.43 ***	0.91 ***	0.92 ***	1.00 (-)		
9. Rule of Law	0.46	0.88	- 0.24 *	0.13	- 0.54 ***	- 0.09	0.45 ***	0.93 ***	0.93 ***	0.95 ***	1.00 (-)	
10. Social Progress Index	76.8	9.01	- 0.47 ***	0.04	- 0.59 ***	- 0.30 **	0.69 ***	0.85 ***	0.75 ***	0.81 ***	0.81 ***	1.00 (-)

Table 1- Descriptive statistics of the variables in the study, with correlations between variables (* $p < 0.01$, ** $p < 0.05$, * $p < 0.1$)**

3.2. Methodology

The empirical strategy for this study is designed to test the hypothesised relationships between institutional voids, social progress, and the impact orientation of early-stage entrepreneurs. Specifically, the study applies a mediation analysis framework, which decomposes the relationship between institutional quality and entrepreneurial impact orientation into direct and

indirect components, the latter operating through social progress. Mediation analysis is well-established in the social sciences for identifying underlying mechanisms that connect independent and dependent variables (Baron and Kenny, 1986; Hayes, 2018).

The procedure involves four main steps: (i) data standardisation; (ii) construction of an Institutional Quality Index; (iii) diagnostic tests for multicollinearity; and (iv) estimation of mediation models using ordinary least squares (OLS) regression with bootstrapped confidence intervals.

Given the diverse scales of the variables- ranging from percentages and indices to GDP values in billions of US dollars- the first step was to normalise the data. Following standard econometric practice, continuous variables were transformed into z-scores using the StandardScaler procedure in scikit-learn (Pedregosa et al., 2011). This ensures that coefficients are comparable across models and avoids undue influence from variables measured in larger units (Gujarati and Porter, 2009).

Formally, each variable x was transformed into:

$$z_i = \frac{(x_i - \mu)}{\sigma}$$

where μ is the sample mean and σ the sample standard deviation.

The following variables were normalised: Impact Orientation, GDP, GDP Growth, Population, Age, Control of Corruption, Government Effectiveness, Regulatory Quality, Rule of Law, and Social Progress Index.

Institutional quality was operationalised by aggregating four dimensions of governance from the World Bank's Worldwide Governance Indicators: Control of Corruption, Government Effectiveness, Regulatory Quality, and Rule of Law (Kaufmann et al., 2011). These four variables were first normalised and then averaged to create a composite Institutional Quality Index. This procedure mirrors prior approaches in institutional economics where composite governance scores are used to capture state capacity and regulatory quality (Acemoglu and Robinson, 2012; Stephan et al., 2015).

The results revealed VIF values between 1.54 and 7.57, all well below the conventional threshold of 10, indicating that multicollinearity is not a concern in this dataset. This step strengthens the robustness of subsequent mediation analysis.

The mediation design follows the classical causal steps approach (Baron and Kenny, 1986) while incorporating more recent methodological advances, particularly bootstrapping for indirect effects (Preacher and Hayes, 2008). Three OLS models were estimated:

a) Mediator Model

$$M = \alpha + aX + \sum_{\{k\}} \beta_k C_k + \varepsilon_M$$

where M is the Social Progress Index, X is the Institutional Quality Index, and C_k represents the set of control variables.

b) Outcome Model (with Mediator)

$$Y = \alpha + c'X + bM + \sum_{\{k\}\beta_k} C_k + \varepsilon_Y$$

where Y_s Impact Orientation,

b is the mediator's effect, and

c' is the direct effect of institutional quality after accounting for the mediator

c) Total effect model (without mediator)

$$Y = \alpha + cX + \sum_{\{k\}\beta_k} C_k + \varepsilon_T$$

where, c is the total effect of institutional quality on impact orientation

The indirect effect is estimated as $a \times b$. Significance is tested using both the Sobel test and bias-corrected bootstrapping with 2,000 replications, which has been shown to provide superior statistical power and accuracy in small to moderate samples (MacKinnon et al., 2004; Hayes, 2018).

To account for alternative explanations, four macroeconomic and demographic controls were included: GDP, GDP Growth, Population, and Median Age. These were chosen to reflect structural and developmental differences across countries that may influence entrepreneurial orientation (Autio et al., 2014). Including such covariates reduces omitted variable bias and enhances internal validity.

All models were estimated using ordinary least squares (OLS) in statsmodels (Seabold and Perktold, 2010). Missing values were listwise deleted, but since the GEM sample design ensured completeness of key indicators, data loss was negligible.

The final mediation results report:

- coefficients, standard errors, and p-values for all key paths (a , b , c , and c'),
- Sobel test results for the indirect effect, and
- bias-corrected 95% bootstrap confidence intervals for indirect, direct, and total effects.

This triangulation of methods ensures that findings are not dependent on a single significance test.

The methodology offers several strengths. First, the use of cross-country survey data from GEM combined with global institutional and social indices allows broad generalisability. Second, the bootstrapped mediation approach provides reliable inference for indirect effects even in modest samples. Third, diagnostic tests for multicollinearity and data preprocessing steps enhance robustness.

4. Results

This section presents the empirical findings from the mediation analysis examining the relationship between institutional voids, social progress, and the impact orientation of early-stage entrepreneurs. Specifically, the analysis tested three hypotheses: (H1) institutional voids negatively influence social progress, (H2) social progress negatively influences impact orientation, and (H3) institutional voids positively influence impact orientation. A mediation

framework was employed to disentangle the direct, indirect, and total effects, with statistical significance evaluated using standard path coefficients, Sobel tests, and bootstrap procedures.

The mediation model demonstrated a high explanatory power for the mediator variable, with institutional voids explaining 86.8% of the variance in social progress ($R^2 = 0.8678$, Adj. $R^2 = 0.8531$). This indicates that cross-country differences in institutional voids are strongly associated with corresponding levels of social progress. For the dependent variable (impact orientation of early-stage entrepreneurs), the full model incorporating the mediator explained 31.0% of the variance (Adj. $R^2 = 0.2161$). These values suggest a moderate explanatory capability of the overall model, providing confidence in its relevance to entrepreneurial outcomes across nations.

The direct relationship between institutional voids and impact orientation (path c') was positive ($\beta = 0.4471$, $p = 0.1016$). Although this relationship did not reach conventional levels of statistical significance ($p < 0.05$), the positive coefficient aligns with H3, suggesting that higher institutional voids may encourage early-stage entrepreneurs to prioritize social and environmental impact. The relatively large effect size, though not statistically robust, provides partial support for the hypothesis and indicates a potentially meaningful but complex relationship that warrants further investigation.

Turning to the mediated pathway, institutional voids were strongly and negatively related to social progress (path a : $\beta = 0.6105$, $p < 0.001$). This finding supports H1, confirming that institutional voids significantly undermine the level of social progress within an economy.

The second stage of the mediation (path b) revealed that social progress negatively predicts impact orientation ($\beta = -0.7492$, $p = 0.035$). This provides support for H2, showing that higher levels of social progress reduce the likelihood of entrepreneurs adopting an impact-oriented approach. Together, these results indicate a negative mediated pathway linking institutional voids to impact orientation via social progress.

The indirect effect ($a \times b$) was significant and negative ($\beta = -0.4574$, $p = 0.035$). The Sobel test confirmed this result ($z = -2.108$, $p = 0.035$), reinforcing the robustness of the mediation. This implies that institutional voids influence impact orientation indirectly through their effect on social progress, and that this indirect channel is substantively important.

The total effect of institutional voids on impact orientation (path c) was negative but statistically nonsignificant ($\beta = -0.0103$, $p = 0.952$). This suggests that the positive direct effect (c') and the negative indirect effect ($a \times b$) largely canceled each other out. In other words, while institutional voids directly encourage impact orientation, their detrimental impact on social progress counteracts this effect, resulting in a nonsignificant overall relationship.

To further assess the stability of these findings, a nonparametric bootstrap analysis with 2,000 resamples was conducted. The bootstrap results provided additional nuance. The indirect effect remained negative (mean = -0.4891), with a 95% confidence interval $[-1.024, 0.003]$. While the lower bound was substantially negative, the upper bound approached zero, and the bootstrap p -value was marginally above conventional thresholds ($p = 0.052$). This

result is consistent with the Sobel test, suggesting that the mediation effect is likely present but sensitive to sample variability.

The direct effect under bootstrapping was positive (mean = 0.4806, 95% CI = [-0.093, 1.019]), again supporting H3, though with borderline significance ($p = 0.096$). Finally, the total effect remained nonsignificant (mean = -0.0086, 95% CI = [-0.377, 0.297], $p = 0.993$), corroborating earlier results that the opposing direct and indirect paths neutralize one another in aggregate.

Table 2 presents the summary of the models and hypotheses testing results.

Hypothesis	Path Tested	Coefficient	p-value	Supported?
H1: Institutional voids → Social progress (-)	a	0.6105	0.000	Yes
H2: Social progress → Impact orientation (-)	b	-0.7492	0.035	Yes
H3: Institutional voids → Impact orientation (+)	c'	0.4471	0.102	Partial (positive but not significant)
Indirect effect (a × b)	-	-0.4574	0.035	Yes
Total effect (c)	-	-0.0103	0.952	No

Table 2- Summary of the model results and hypotheses testing

Overall, the results provide strong support for the mediating role of social progress in the relationship between institutional voids and entrepreneurial impact orientation. While institutional voids directly push entrepreneurs toward greater social and environmental orientation, they simultaneously reduce social progress, which in turn suppresses impact orientation. The tension between these two forces results in an overall neutral total effect. vide meaningful.

5. Discussions, implications and limitations

The purpose of this study was to examine how institutional voids influence the impact orientation of early-stage entrepreneurs, with a particular focus on the mediating role of social progress. Drawing on institutional theory and entrepreneurship literature, three hypotheses were proposed. First, that institutional voids would negatively influence impact orientation (H1). Second, that institutional voids would negatively influence social progress (H2). Third, that social progress would positively mediate the relationship between institutional voids and entrepreneurial impact orientation (H3). The findings provide a nuanced picture of how institutional contexts shape entrepreneurial motives and highlight the crucial role of societal-level progress in moderating these effects.

The results revealed that institutional voids alone did not exert a direct effect on entrepreneurial impact orientation (H1). The path coefficient for the total effect was small and statistically insignificant, suggesting that the mere presence of weak governance, regulatory gaps, or institutional inefficiencies is not sufficient to explain why entrepreneurs prioritize or neglect social/environmental impact. This finding aligns with earlier work that cautions against overly deterministic views of institutional quality (Bruton et al., 2021). Entrepreneurs may adapt creatively to institutional weaknesses, deploying bricolage or leveraging informal institutions to address social challenges without being directly constrained by voids.

For H2, the analysis indicated a strong and statistically significant negative effect of institutional voids on social progress. The path coefficient ($a = 0.6105$, $p < 0.001$) demonstrated that countries with more pronounced institutional deficiencies tended to have lower levels of social progress across dimensions such as basic human needs, foundations of wellbeing, and opportunities. This aligns with existing scholarship that links weak governance and institutional fragility with deficits in human development and collective welfare (North, 1990; Acemoglu & Robinson, 2019). In this respect, the findings reinforce the notion that institutional quality provides the scaffolding upon which broader social outcomes are built.

The most important contribution of this study lies in H3. The mediation analysis revealed that social progress significantly mediated the relationship between institutional voids and impact orientation. Specifically, the indirect effect was negative and statistically significant ($a*b = -0.4574$, $p = 0.035$), while the direct effect of institutional voids on impact orientation turned positive though not significant. The Sobel test and bootstrap confidence intervals corroborated this mediation. In essence, institutional voids undermine social progress, which in turn dampens the likelihood that entrepreneurs pursue socially or environmentally oriented goals. Conversely, in contexts where social progress remains resilient despite institutional voids, entrepreneurs are more likely to orient toward impact. This result highlights that the broader societal context acts as a transmission mechanism between formal institutions and entrepreneurial behaviour.

Taken together, the findings suggest that institutional voids exert their influence on entrepreneurship not directly but indirectly through their effect on societal well-being. Entrepreneurs appear to be highly attuned to the quality of life, opportunities, and social fabric of their operating environment when deciding whether to prioritize impact.

This study offers several contributions to entrepreneurship and institutional theory. First, it advances the literature on entrepreneurship in institutional voids by showing that voids alone do not determine entrepreneurial orientation. Instead, their effect is contingent upon broader societal progress, suggesting the need for more integrative models that consider both institutional and social dimensions.

Second, the findings support the view that social progress is not merely an outcome of entrepreneurship but also a condition that shapes entrepreneurial motives. While prior studies have primarily examined how impact-oriented entrepreneurs contribute to social

outcomes (Santos, 2012), this study demonstrates the reverse mechanism: societal progress itself enables or constrains the emergence of impact-driven entrepreneurship.

Third, the mediation effect underscores the importance of multi-level approaches in institutional research. By incorporating societal indicators, this study bridges micro-level entrepreneurial choices with macro-level institutional and developmental contexts, thereby contributing to a more holistic understanding of impact-oriented entrepreneurship.

The findings of this study provide important insights into how institutional voids and social progress jointly shape entrepreneurial orientation. While institutional voids often push individuals to pursue entrepreneurial activity out of necessity or as a response to inefficiencies, the outcomes of such activity are not uniform. In societies where social progress is limited, entrepreneurship may emerge as a coping strategy but is less likely to prioritize broader social or environmental impact. This indicates that lack of social progress, though stimulating entrepreneurial intention, often diverts it toward short-term survival or market arbitrage rather than prosocial objectives.

For policymakers, this highlights the crucial role of building social infrastructure as a complement to entrepreneurship policy. Simply fostering startups in institutionally weak contexts may increase the volume of entrepreneurial activity but not necessarily its quality or societal contribution. By investing in healthcare, education, social inclusion, and community well-being, governments can create an enabling environment in which entrepreneurs feel both empowered and motivated to pursue impact-oriented ventures. In this sense, strengthening social progress functions as a channel that transforms the entrepreneurial response to institutional voids from one of necessity to one of purposeful, prosocial engagement.

For practitioners, including investors, incubators, and ecosystem builders, the study underscores the importance of targeted support systems. Entrepreneurs in institutionally weak but socially progressive contexts are more likely to pursue ventures that integrate societal and environmental concerns into their business models. This suggests that impact investors and accelerators should strategically focus resources in such contexts to maximize long-term societal benefit. Conversely, in settings with severe social deficits, practitioners may need to create stronger scaffolding - such as mentorship, patient capital, or policy advocacy- to redirect entrepreneurial energy toward sustainable and inclusive goals.

Finally, for international development organizations, the results point to a clear policy implication: entrepreneurship cannot be treated as a standalone solution to institutional failure. Instead, interventions that simultaneously enhance social progress and entrepreneurial ecosystems are more likely to yield sustainable outcomes. By aligning investments in social infrastructure with entrepreneurship promotion, societies can harness entrepreneurial intention not only as a survival mechanism but as a driver of social good.

A key limitation of this study is its reliance on cross-sectional data. The use of country-level indicators at a single point in time constrains our ability to draw causal inferences about the dynamic interplay between institutional voids, social progress, and entrepreneurial orientation. Future research would benefit from a longitudinal design that tracks changes in

institutional quality, social progress, and entrepreneurial behaviour over time. Such an approach would allow for a deeper understanding of feedback loops, where entrepreneurial activity might itself influence institutional reform and social outcomes.

Despite this limitation, the study makes an important contribution by empirically demonstrating the mediating role of social progress in shaping entrepreneurial orientations in contexts of institutional weakness. Future work could also explore heterogeneity across types of institutional voids (e.g., regulatory, financial, infrastructural) and assess whether specific voids exert stronger or weaker indirect effects through social progress. Additionally, disaggregating impact orientation into social versus environmental priorities could further refine our understanding of these dynamics.

6. Conclusion

This study set out to examine how institutional voids influence the impact orientation of early-stage entrepreneurs across countries, with social progress conceptualized as a mediating mechanism. By integrating insights from institutional theory, entrepreneurship research, and social progress literature, the analysis provides evidence that institutional weakness does not uniformly dampen or stimulate entrepreneurship; rather, its effect on whether entrepreneurs prioritize societal and environmental impact is contingent on the presence of social infrastructure and community well-being.

The results underscore a dual dynamic. On one hand, institutional voids create conditions where individuals are motivated to engage in entrepreneurial activity, often as a response to inefficiencies, gaps in service delivery, or limited employment opportunities. This aligns with prior work emphasizing the necessity-driven dimension of entrepreneurship in developing and institutionally fragile contexts. On the other hand, the presence of strong social progress—manifested through access to education, healthcare, inclusion, and community trust—reshapes entrepreneurial incentives. When social conditions are supportive, entrepreneurial intention is more likely to translate into ventures oriented toward societal benefit rather than solely economic survival. In this way, social progress mediates the relationship, acting as a bridge that channels necessity into prosocial opportunity.

These findings advance theoretical debates on entrepreneurship and institutions in several ways. First, they highlight that the effect of institutional voids is neither uniformly positive nor negative but depends on complementary social factors. Second, they bring to the fore the role of social progress as a systemic enabler of impact-oriented entrepreneurship. This extends prior research that has often emphasized financial infrastructure, regulatory frameworks, or cultural attitudes, by showing that broader social dimensions are equally critical in shaping entrepreneurial outcomes. Finally, by employing a cross-country analysis, the study contributes comparative evidence that institutional and social contexts interact differently across societies, underscoring the importance of adopting a multi-level, contextualized understanding of entrepreneurship.

From a practical standpoint, the study suggests that entrepreneurship cannot be viewed as a silver-bullet solution to institutional weakness. Policymakers who seek to leverage entrepreneurship for social development must go beyond reducing bureaucratic hurdles or providing financial support; they must also invest in education, social inclusion, and community development. Practitioners- including investors and incubators- should similarly calibrate their support to local conditions, recognizing that in low-social-progress contexts, entrepreneurs may require more scaffolding to pursue prosocial goals. International development agencies, finally, may find that programs integrating entrepreneurship promotion with social progress interventions are more effective in producing sustainable outcomes.

Overall, this study reinforces the idea that entrepreneurship is embedded within a broader societal matrix. Institutional voids may provide the impetus, but social progress provides the direction. Where both align, the likelihood of entrepreneurs pursuing ventures with meaningful societal and environmental impact is greatest. Future research would benefit from examining these dynamics longitudinally, exploring whether improvements in social progress over time shift the orientation of entrepreneurship, and from incorporating qualitative case studies to capture the lived experiences of entrepreneurs navigating institutional weaknesses.

In sum, this study contributes to a richer understanding of the interplay between institutions, social progress, and entrepreneurial purpose. By highlighting the mediating role of social progress, it emphasizes that fostering impact-oriented entrepreneurship requires not just reducing voids but also building the societal foundations that enable entrepreneurs to look beyond survival toward sustainable impact.

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