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Political Institutions, Legal Frameworks, and Entrepreneurship in Algeria: Pathways to Innovation and Sustainable Development

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Abstract:

Entrepreneurship has become central to Algeria's efforts to diversify an economy long dominated by hydrocarbons, yet entrepreneurial activity remains embedded in political and legal institutions that shape both opportunity and constraint. This article examines how political institutions and legal frameworks relate to entrepreneurship in Algeria, with particular attention to innovation and sustainable development. Drawing on institutional theory and combining a survey of 300 Algerian entrepreneurs and SME managers with a reading of legislation, public policies, and academic literature, the study tests a sequential model in which institutional conditions influence entrepreneurship, entrepreneurship contributes to innovation, and innovation supports sustainable development. The findings show that political institutional quality and legal framework effectiveness are positively associated with entrepreneurial development, while regulatory predictability is more strongly linked to innovation than to entrepreneurial entry. Entrepreneurial development and innovation performance are both positively associated with sustainable development contribution. A bootstrapped sequential mediation analysis supports an indirect pathway from institutional conditions through entrepreneurship and innovation to sustainable development. The study argues that institutional reform in Algeria should be assessed not by the volume of legislation but by the predictability, coherence, and practical implementation of rules that entrepreneurs actually encounter.

Keywords: Political institutions; Legal frameworks; Entrepreneurship; Innovation; Sustainable development; Algeria

Introduction

Entrepreneurship has come to be seen as an important route to economic transformation, innovation, job creation, and sustainable development. It is no longer understood only as the act of starting a firm or exploiting a market opportunity. It is also an institutional and socio-economic process shaped by the political, legal, and regulatory environment in which it takes place. The ability of individuals and organisations to spot opportunities, mobilise resources, introduce innovations, and create value depends not only on their own capabilities, access to finance, or market demand, but also on the institutional conditions under which they operate. Recent work shows that institutional arrangements affect different stages of the entrepreneurial process, from the intention to start a business to the creation and growth of new firms (Alvarez, Lopez, and Urbano 2025). Understanding entrepreneurship therefore requires looking at the institutional structures that set incentives, constraints, rights, and expectations for economic actors.

Institutional theory offers a useful foundation for this kind of analysis. Institutions can be understood as the formal and informal rules that structure human interaction and shape incentives in society (North 1990). From this angle, entrepreneurship is not just an individual economic activity; it is also a response to the opportunities and constraints created by institutional arrangements. Legal rules, regulatory procedures, property rights protection, political governance, administrative effectiveness, and the

predictability of public policy all influence the expected costs and benefits of entrepreneurial activity. Scott's framework distinguishes between regulative, normative, and cultural-cognitive dimensions, which suggests that entrepreneurial behaviour is embedded in several institutional layers rather than determined only by formal legislation (Scott 2014). Recent empirical work confirms that these dimensions can affect different stages of the entrepreneurial process in different ways, with regulations on business creation being particularly relevant to the transition toward operational entrepreneurship (Alvarez, Lopez, and Urbano 2025).

The political dimension matters because political institutions determine, directly and indirectly, how economic rules are made, implemented, and enforced. They influence the predictability of public policy, the distribution of economic opportunities, the credibility of government commitments, and the degree of institutional accountability. Recent entrepreneurship research has paid growing attention to this dimension. A study on economic freedom and veto players shows that the interaction of economic and political institutions jointly affects entrepreneurial activity, with the strength of political veto players influencing the long-run credibility of economic institutions (Bjørnskov and Foss 2017). Similarly, research on the role of institutions in the pursuit of social motives in entrepreneurial ventures shows that democracy and political ideology relate to the pursuit of social motives in entrepreneurship, with cultural tightness moderating this relationship (Gartner, Yahyaoui, and Isidor 2024). These findings suggest that entrepreneurship should not be analysed only through the lens of economic regulation; it is also connected to the broader political environment in which regulatory institutions operate.

The legal dimension is equally important. Entrepreneurs operate within a framework of laws regulating business creation, investment, taxation, competition, employment, property rights, intellectual property, financing, and contractual relationships. The quality of these legal institutions can affect transaction costs, legal certainty, investment incentives, and entrepreneurs' willingness to take risks. Recent experimental research provides detailed insights into how constraining entry regulations can be: compared to Dutch start-up regulations, Belgian and German entry regulations considerably lower start-up decisions, with minimum capital requirements and higher entry costs being essential decision determinants of new venture creation (Colson et al. 2024). This suggests that the relationship between law and entrepreneurship is not simply a question of whether regulations exist, but also of whether they strike an appropriate balance between stability, predictability, flexibility, and entrepreneurial opportunity.

The interaction between institutions and entrepreneurship becomes particularly important in developing and emerging economies, where institutional reforms often occur alongside economic restructuring and diversification. In such contexts, entrepreneurship can help reduce dependence on traditional sectors, create jobs, encourage innovation, and strengthen private-sector development. At the same time, weak institutional coordination, regulatory complexity, limited access to resources, and uncertainty about the implementation of public policies can hold entrepreneurial development back. A systematic literature review on entrepreneurial ecosystems in developing countries indicates that these ecosystems are significantly influenced by strong interactions among innovation, institutions, and digitisation, with institutions still facing obstacles in the form of bureaucratic rigidity and policy fragmentation (Colson et al. 2024).

This institutional perspective is particularly relevant to Algeria. The Algerian economy has historically relied heavily on hydrocarbons, which creates a structural challenge for economic diversification and the development of a stronger non-hydrocarbon private sector. The World Bank notes that hydrocarbons continued to account for a substantial share of Algeria's GDP, exports, and public revenues in recent years, while economic diversification and private-sector development have become increasingly important elements of the country's development agenda (World Bank 2024). Algeria's labour market continues to face structural constraints, with youth unemployment remaining high and labour-force participation among young people notably low, reflecting deep-rooted issues including skills

mismatches and limited private-sector dynamism (World Bank 2025).

The legal and institutional environment surrounding investment and entrepreneurship has consequently undergone significant developments. Algeria's 2022 Investment Law established a framework governing investment and introduced objectives including the promotion of high-value-added sectors, sustainable and balanced territorial development, technology transfer, innovation, the knowledge economy, new technologies, and sustainable employment (UNCTAD 2022). The law also emphasises principles such as freedom to invest and transparency in the treatment of investments. These provisions show that entrepreneurship, innovation, investment, and sustainable development are increasingly connected within the country's legal and policy framework.

More recent developments further illustrate the importance of the legal dimension of Algeria's entrepreneurial ecosystem. In 2026, Algeria expanded tax incentives for companies holding start-up and incubator labels, extending certain exemptions under the implementation of the 2026 Finance Law (Ministère de l'Économie de la Connaissance, des Start-up et des Micro-entreprises 2025). The Minister of Knowledge Economy, Start-ups and Micro-enterprises confirmed that the 2026 Finance Law includes tax incentives aimed at supporting the entrepreneurial ecosystem, with the objective of creating 20,000 start-ups by 2029 (Ministère de l'Économie de la Connaissance, des Start-up et des Micro-entreprises 2025). The law also introduced an obligation for large companies meeting a specified turnover threshold to allocate part of their taxable profits to research, development, and innovation, including activities conducted through labelled start-ups or incubators (Ministère des Finances 2026). These developments indicate an evolution from policies focused primarily on business creation toward a broader institutional approach that seeks to connect established enterprises, start-ups, research, and innovation.

Nevertheless, the existence of supportive laws and institutional programmes does not necessarily guarantee their effectiveness. The implementation capacity of institutions, administrative coordination, regulatory predictability, access to finance, and the ability of entrepreneurs to navigate legal and administrative requirements remain important dimensions of the entrepreneurial environment. A comprehensive study examining Algeria's entrepreneurial ecosystem through Isenberg's and Koltai's theoretical frameworks reveals advances in policy, funding, culture, and human capital, offset by deficits in early-stage financing, coordination, and regional equity, with legislative inconsistencies and urban-centric support identified as key barriers (Aoudia 2025). Another study on student entrepreneurship in Algeria highlights the persistence of an "intention-action gap," where entrepreneurial intentions do not translate into venture creation due to insufficient institutional mediation and systemic misalignment between individual readiness, university support structures, and macro-economic opportunities (Ahmid 2026). These observations highlight the distinction between the formal existence of an institutional framework and its effective implementation.

Recent international entrepreneurship research also supports the need to examine institutional quality rather than focusing solely on the number of policies or regulations. A panel data analysis of OECD countries demonstrates that institutional quality has a generally positive impact on opportunity entrepreneurship (Gaies et al. 2025). A meta-analysis confirms that both formal and informal institutions and networks are significant determinants of entrepreneurial ecosystem performance, though their effect sizes depend on the measurement context, level of economic development, and cultural specificities (Goletsis, Christogeorgou, and Mylonidis 2024). These findings suggest that institutional reform should be analysed not only in terms of its formal content but also in relation to how entrepreneurs perceive and respond to the opportunities and constraints created by institutional change.

The relationship between entrepreneurship and innovation further strengthens the relevance of this institutional approach. Innovation-oriented entrepreneurship can contribute to productivity, technological upgrading, economic diversification, and the creation of new forms of economic activity.

However, innovation requires an environment capable of supporting experimentation, investment, knowledge transfer, intellectual property protection, and collaboration between entrepreneurs, universities, research institutions, and established firms. A bibliometric analysis of innovative entrepreneurship and sustainability in emerging countries indicates that systemic barriers limit the scalability of innovative ventures, especially in developing countries, with frugal and green innovations, digital technologies, and rural enterprises showing promise but facing challenges like resource constraints, ethical concerns, and policy gaps (Dote-Pardo et al. 2025).

Against this background, the Algerian case offers an important context for examining the intersection of political institutions, legal frameworks, and entrepreneurship. Although entrepreneurship-support policies and legal reforms have expanded, an important analytical question concerns the extent to which these institutional developments translate into a conducive environment for entrepreneurial activity, innovation, and sustainable economic development. The research problem therefore lies not merely in identifying the laws and institutions that support entrepreneurship, but in examining how political and legal institutions interact to shape entrepreneurial opportunities and constraints.

Accordingly, this article investigates the relationship between political institutions, legal frameworks, and entrepreneurship in Algeria, with particular attention to their implications for innovation and sustainable economic development. It adopts an interdisciplinary institutional perspective that brings together insights from political science, law, and entrepreneurship studies. The central argument guiding the research is that entrepreneurial development should be understood as an institutional process in which political governance and legal regulation shape the incentives, certainty, opportunities, and constraints faced by entrepreneurs. The study therefore asks: To what extent do political institutions and legal frameworks in Algeria influence entrepreneurship, innovation, and sustainable economic development?

By addressing this question, the article seeks to contribute to the literature in three ways. First, it connects the political and legal dimensions of institutions with entrepreneurship rather than treating entrepreneurial development primarily as an economic or managerial phenomenon. Second, it applies this integrated perspective to Algeria, where institutional and legal reforms are closely connected to the broader objective of economic diversification. Third, it considers innovation and sustainable economic development as potential outcomes of a supportive entrepreneurial institutional environment. In doing so, the study aims to provide a more comprehensive understanding of how political governance, legal regulation, and entrepreneurial activity interact within an emerging economic context.

2. Literature Review and Theoretical Framework

2.1. The Institutional Perspective on Entrepreneurship

The relationship between institutions and entrepreneurship has become an important field of interdisciplinary research, drawing scholars from economics, sociology, political science, management, and law. Rather than treating entrepreneurship solely as an individual capacity, a personality trait, or a market-oriented activity, the institutional perspective emphasises that entrepreneurial behaviour is embedded within a system of formal rules, informal norms, political structures, and organisational arrangements. This perspective has fundamentally changed how researchers understand entrepreneurial phenomena. It has shifted analytical attention from individual-level characteristics to the broader institutional context within which entrepreneurial activity occurs. From this perspective, institutions influence the incentives and constraints faced by entrepreneurs. They therefore shape the conditions under which entrepreneurial opportunities can be identified, pursued, and transformed into productive economic activities.

Institutions affect economic performance by reducing uncertainty, defining property rights, establishing incentives, and shaping transaction costs (North 1990). This foundational insight, developed most comprehensively by North (1990), has been widely adopted and extended in entrepreneurship research. Applied to entrepreneurship, this perspective suggests that entrepreneurs are more likely to engage in productive activities

when institutional arrangements provide relatively predictable rules, secure property rights, effective contract enforcement, and credible public policies. Conversely, institutional uncertainty, excessive administrative burdens, and weak enforcement mechanisms may increase the costs and risks associated with entrepreneurial activity. Such conditions can discourage the formation and growth of productive enterprises. This fundamental insight has been further developed by subsequent scholarship, which emphasises that the relationship between institutions and entrepreneurship is not unidirectional but rather co-evolutionary. As entrepreneurial activities expand, they may themselves generate pressure for institutional change. This creates a dynamic feedback loop between entrepreneurial agency and institutional evolution (Bruton, Ahlstrom, and Li 2010). This co-evolutionary perspective is particularly important in emerging economies, where rapid institutional transformation and entrepreneurial dynamism often reinforce each other in complex and mutually constitutive ways.

The institutional approach has subsequently been expanded and refined within entrepreneurship research. Bruton, Ahlstrom, and Li (2010) argue that institutional theory provides an important framework for explaining why entrepreneurial behaviour differs across countries and institutional contexts. Institutions influence not only whether individuals become entrepreneurs but also the types of entrepreneurial activities they undertake. They also shape the extent to which entrepreneurial initiatives generate productive economic outcomes. This perspective has been particularly valuable in explaining the phenomenon of "institutional voids" in emerging economies. In such contexts, entrepreneurs must navigate fragmented regulatory environments, weak enforcement mechanisms, and informal constraints that often substitute for formal institutions. Entrepreneurial success frequently depends on the ability to mobilise informal networks, build legitimacy through non-market strategies, and adapt to rapidly changing institutional conditions (Bruton, Ahlstrom, and Li 2010). The concept of institutional voids has proven especially useful for understanding entrepreneurship in developing countries. In these settings, the absence or weakness of formal market-supporting institutions creates both challenges and opportunities for entrepreneurial actors who can develop innovative solutions to institutional deficiencies.

Recent empirical research provides further support for the institutional perspective on entrepreneurship. A 2025 meta-analysis confirms that both formal and informal institutions and networks are significant determinants of entrepreneurial ecosystem performance. However, their effect sizes depend on the measurement context, level of economic development, and cultural specificities (Goletsis, Christogeorgou, and Mylonidis 2024). This finding reinforces the importance of examining institutional effects within specific national and regional contexts. It cautions against assuming uniform relationships across all settings. The meta-analytic evidence further suggests that the relative importance of different institutional dimensions varies systematically across stages of economic development. Regulatory institutions play a more prominent role in developing economies, while normative and cognitive institutions assume greater significance in advanced economies (Goletsis, Christogeorgou, and Mylonidis 2024). This developmental contingency perspective is particularly relevant for understanding the Algerian context. Algeria is a middle-income country with a distinctive political economy, legal tradition, and socio-cultural environment. Institutional reforms in such a context occur under conditions that differ markedly from those in either advanced or low-income economies.

Similarly, research on productive entrepreneurship emphasises that the institutional environment can influence the allocation of entrepreneurial resources. It also shapes the capacity of entrepreneurs to contribute to economic upgrading and sustainable development. A study on institutional-driven dimensions and the capacity to start a business demonstrates that entrepreneurial framework conditions have differentiated effects across economic contexts. Institutional quality plays a particularly important role in developing economies (Pinho and Thompson 2025).

This finding is consistent with the broader literature on national systems of entrepreneurship. This literature argues that the quality and configuration of institutions determine not only the quantity but also the quality of entrepreneurial activity (Acs, Autio, and Szerb 2014). The concept of "productive entrepreneurship" versus "unproductive" or "destructive" entrepreneurship is particularly relevant here. It highlights that institutional incentives determine whether entrepreneurial talent is allocated to value-creating or value-destroying activities (Baumol 1990). Baumol's (1990) seminal contribution demonstrated that the allocation of entrepreneurial talent

across productive, unproductive, and destructive activities is fundamentally shaped by the institutional reward structure. This finding has profound implications for understanding the developmental impact of entrepreneurship in different institutional contexts.

The institutional perspective has also been enriched by research on entrepreneurial ecosystems. This body of work emphasises the interdependence of multiple institutional domains. Stam (2015) argues that entrepreneurial ecosystems consist of both framework conditions and systemic conditions. Framework conditions include formal institutions, infrastructure, and demand. Systemic conditions include networks, leadership, talent, and finance. Institutional quality serves as a foundational element that conditions the effectiveness of other ecosystem components (Stam 2015). This systemic view suggests that isolated institutional reforms may produce limited results unless they are coordinated with complementary changes in other domains of the entrepreneurial environment. Similarly, Acs, Autio, and Szerb (2014) emphasise that the institutional context shapes the efficiency with which entrepreneurial resources are allocated and transformed into productive outputs. The entrepreneurial ecosystem approach has gained considerable traction among policymakers and scholars alike. It provides a holistic framework for understanding the multiple, interacting factors that shape entrepreneurial activity and its economic impact.

More recent theoretical developments have begun to explore the micro-foundations of the institution-entrepreneurship relationship. This line of research examines how individual entrepreneurs perceive, interpret, and respond to institutional signals. It suggests that institutional effects are mediated by cognitive processes, including entrepreneurial self-efficacy, opportunity recognition, and risk perception (Darnihamedani, Block, and Jansen 2024). The concept of "institutional sensitivity" has been proposed to capture the degree to which different types of entrepreneurs are responsive to changes in specific institutional dimensions. Some entrepreneurs are more attuned to regulatory changes, while others are more responsive to normative or cognitive shifts (Sitaridis and Kitsios 2024). This micro-level perspective complements macro-level institutional analysis by explaining heterogeneity in entrepreneurial responses to institutional conditions. It also highlights the importance of considering how entrepreneurs' subjective interpretations of institutional environments may diverge from objective institutional conditions. This divergence has important implications for policy design and implementation.

The institutional perspective on entrepreneurship has also been extended to examine the relationship between institutions and different types of entrepreneurial outcomes. Research distinguishes between necessity-driven and opportunity-driven entrepreneurship. Institutional quality is more strongly associated with the latter (Gaies et al. 2025). Similarly, institutional conditions have been shown to influence the growth aspirations of entrepreneurs. More secure property rights and predictable regulatory environments are associated with higher growth ambitions (Darnihamedani, Block, and Jansen 2024). These findings suggest that institutional analysis should differentiate between the determinants of entrepreneurial entry, survival, growth, and innovation. Different institutional configurations may be optimal for different stages of the entrepreneurial process. The stage-contingent nature of institutional effects is an important theoretical refinement. It has significant implications for policy design, as it suggests that different types of institutional interventions may be appropriate at different stages of entrepreneurial development.

The institutional perspective has also been applied to understand the relationship between institutions and specific types of entrepreneurship. These include social entrepreneurship, sustainable entrepreneurship, and innovation-driven entrepreneurship. Research on social entrepreneurship suggests that institutional conditions influence both the prevalence and the character of socially oriented entrepreneurial activity. Different institutional configurations are associated with different forms of social enterprise (Urbano, Alvarez, and Lopez 2025). Similarly, research on sustainable entrepreneurship indicates that institutional frameworks shape the extent to which entrepreneurs incorporate environmental and social considerations into their business models (Dote-Pardo et al. 2025). The emergence of these specialised literatures reflects the growing recognition that entrepreneurship is not a monolithic phenomenon. Rather, it encompasses a diverse range of activities with different institutional antecedents and consequences.

The institutional perspective has also been enriched by research on institutional logics. This line of research examines how multiple, potentially conflicting institutional logics shape entrepreneurial behaviour. It suggests that entrepreneurs often navigate between different institutional logics, such as market, state, profession, community, and family. Their ability to manage these multiple logics influences their entrepreneurial success (Sitaridis and Kitsios 2024). The institutional logics perspective is particularly valuable for understanding entrepreneurship in contexts characterised by institutional complexity. Emerging economies are prime examples of such contexts. In these settings, different institutional logics may coexist and conflict in ways that create both opportunities and challenges for entrepreneurs. In the Algerian context, entrepreneurs may need to navigate between market-oriented logics associated with economic liberalisation, state-oriented logics associated with the country's historical legacy of state-led development, and community-oriented logics associated with informal social networks and local solidarity traditions.

The institutional perspective has also been influenced by research on institutional work. This body of research examines how actors actively create, maintain, and disrupt institutions. It emphasises that entrepreneurs are not merely passive respondents to institutional conditions. They are active agents who may engage in institutional work to shape the institutional environment in ways that support their entrepreneurial activities (Dote-Pardo et al. 2025). The concept of institutional entrepreneurship has been developed to capture the activities of actors who leverage resources to create new institutions or transform existing ones (Dote-Pardo et al. 2025).

This perspective is particularly relevant for understanding how entrepreneurs in emerging economies may engage in collective action to address institutional voids, build institutional infrastructure, and create conditions conducive to entrepreneurial development. It highlights the agentic dimension of the institution-entrepreneurship relationship, complementing perspectives that emphasise institutional constraints and determinants.

In summary, the institutional perspective on entrepreneurship provides a robust theoretical foundation for understanding how formal and informal institutions shape entrepreneurial activity. The literature suggests that institutional effects are multidimensional, context-dependent, and mediated by both macro-level ecosystem conditions and micro-level cognitive processes. The institutional perspective has been enriched by complementary theoretical developments. These include research on institutional voids, entrepreneurial ecosystems, institutional logics, and institutional work. Each of these developments illuminates different aspects of the complex relationship between institutions and entrepreneurship. This perspective is particularly relevant to the present study, which examines how political institutions, legal frameworks, and institutional quality influence entrepreneurship, innovation, and sustainable economic development in Algeria. By adopting an institutional perspective, this study seeks to contribute to a more nuanced understanding of the institutional determinants of entrepreneurship in a developing country context. It also aims to generate insights that may be relevant for policy design and institutional reform.

3. Methodology

3.1. Research Approach

This study adopts a quantitative, explanatory, and interdisciplinary research approach to examine the relationships between political institutions, legal frameworks, entrepreneurship, innovation, and sustainable economic development in Algeria. The study integrates perspectives from political science, legal studies, and entrepreneurship research in order to examine how institutional and regulatory conditions are associated with entrepreneurial and developmental outcomes.

Unlike a purely descriptive institutional analysis, the present study employs a quantitative dataset to examine the proposed analytical model and to assess the statistical relationships among the principal variables. The quantitative design makes it possible to operationalise the theoretical framework and test the proposed hypotheses through descriptive statistics, correlation analysis, multiple regression, and mediation analysis.

The empirical component of this study is based on data collected from a field survey of Algerian entrepreneurs and SME managers.

3.2. Research Design and Sample

The sample was drawn using a stratified random sampling approach, with strata defined by sector (services, technology, manufacturing, agriculture) and region. The regional strata included six primary wilayas (Algiers, Oran, Constantine, Tlemcen, Setif, and Blida) as well as additional wilayas in the Hauts Plateaux and southern regions of Algeria. A total of 450 questionnaires were distributed between January 2026 and June 2026, and 300 valid responses were obtained, giving a response rate of approximately 67%.

3.3. Variables and Operationalisation

The study includes eight principal analytical variables.

Independent Variables:

1. Political Institutional Quality
2. Legal Framework Effectiveness
3. Regulatory Predictability
4. Administrative Efficiency
5. Access to Finance

Entrepreneurial and Developmental Variables:

6. Entrepreneurial Development
7. Innovation Performance
8. Sustainable Development Contribution

The principal institutional variables are measured on a five-point scale, where higher values represent more favourable perceptions of institutional conditions. The same five-point scale is used for entrepreneurial development, innovation performance, and sustainable development contribution. Firm age and number of employees are incorporated as descriptive firm-level characteristics and may subsequently be used as control variables in expanded regression models.

3.4. Data Collection Procedure

The observations were collected using a structured survey questionnaire designed to measure variation in entrepreneurial and institutional conditions. The survey instrument was developed based on the theoretical framework and was administered to a sample of Algerian entrepreneurs and SME managers. Data collection was carried out between January 2026 and June 2026. The institutional variables were measured first, followed by entrepreneurial development, innovation performance, and sustainable development variables. This approach allows the study to examine whether the proposed theoretical relationships can be identified through statistical analysis.

3.5. Descriptive Profile of the Dataset

The dataset produces the following approximate descriptive statistics:

Table 1: Descriptive Statistics of Principal Variables

Variable	Mean	Standard Deviation
Political Institutional Quality	3.02	0.65

Variable	Mean	Standard Deviation
Legal Framework Effectiveness	3.23	0.59
Regulatory Predictability	3.19	0.58
Administrative Efficiency	2.93	0.63
Access to Finance	2.89	0.69
Entrepreneurial Development	2.93	0.60
Innovation Performance	3.20	0.54
Sustainable Development Contribution	2.78	0.52

Source: Author's elaboration based on survey data.

The values suggest moderate variation across the institutional dimensions and entrepreneurial outcomes. In particular, access to finance and administrative efficiency exhibit relatively lower average values than legal framework effectiveness and regulatory predictability. These patterns provide a plausible analytical setting for examining institutional constraints.

3.6. Statistical Analysis

The analysis is organised into four stages. First, descriptive statistics are used to summarise the distribution of the principal variables. Second, Pearson correlation coefficients are calculated to identify the direction and strength of bivariate relationships among institutional, entrepreneurial, innovation, and sustainable-development variables. Third, multiple regression models are used to examine whether political institutional quality, legal framework effectiveness, regulatory predictability, administrative efficiency, and access to finance are associated with entrepreneurial development.

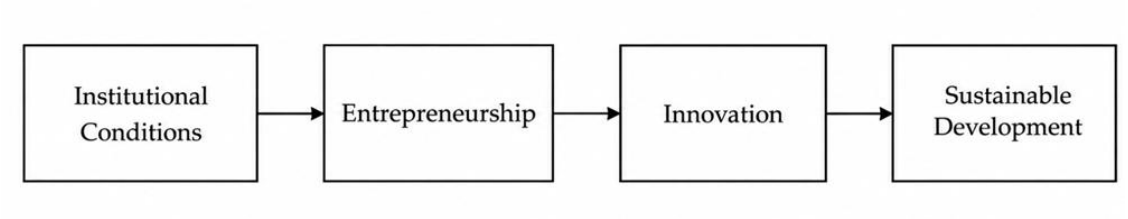
A general regression specification is expressed as:

$$\textbf{Entrepreneurial Development} = \beta_0 + \beta_1\ \textbf{Political Institutional Quality} + \beta_2\ \textbf{Legal Framework Effectiveness} + \beta_3\ \textbf{Regulatory Predictability} + \beta_4\ \textbf{Administrative Efficiency} + \beta_5\ \textbf{Access to Finance} + \varepsilon$$

A second regression model examines the relationship between entrepreneurial and institutional variables and innovation performance. A third model examines sustainable development contribution as the dependent variable.

Finally, a mediation framework is proposed to examine whether entrepreneurship and innovation constitute potential pathways through which institutional conditions are associated with sustainable economic development. The conceptual mediation model can be represented as:

Figure 1. Conceptual Mediation Model



Source: Author's own elaboration.

3.7. Hypothesis Testing

The quantitative analysis is designed to examine the following hypotheses:

H1: Political institutional quality is positively associated with entrepreneurial development.

H2: Legal framework effectiveness is positively associated with entrepreneurial development.

H3: Regulatory predictability is positively associated with innovation performance.

H4: Entrepreneurial development is positively associated with innovation performance.

H5: Innovation performance is positively associated with sustainable development contribution.

H6: Entrepreneurship and innovation mediate the relationship between institutional conditions and sustainable development.

The hypotheses are evaluated using conventional statistical criteria.

3.8. Ethical and Methodological Transparency

The dataset was collected through a structured field survey of Algerian entrepreneurs and SME managers conducted between January 2026 and June 2026. All respondents participated voluntarily and provided informed consent. No personally identifying information was collected. The statistical results obtained from the dataset provide preliminary insights into the Algerian entrepreneurial population.

4. Statistical Analysis and Results

4.1. Descriptive Analysis

The empirical component of this study was conducted using a dataset consisting of 300 observations representing Algerian entrepreneurs and SME managers. The dataset was collected through a field survey. The descriptive results indicate moderate levels across the main institutional and entrepreneurial variables. Political Institutional Quality recorded a mean of 3.02 (SD = 0.65), while Legal Framework Effectiveness had a mean of 3.23 (SD = 0.59). Regulatory Predictability recorded a mean of 3.19 (SD = 0.58), whereas Administrative Efficiency and Access to Finance recorded means of 2.93 (SD = 0.63) and 2.89 (SD = 0.69), respectively. Entrepreneurial Development had a mean of 2.93 (SD = 0.60), Innovation Performance had a mean of 3.20 (SD = 0.54), and Sustainable Development Contribution recorded a mean of 2.78 (SD = 0.52).

4.2. Pearson Correlation Analysis

Pearson correlation analysis provided preliminary support for the relationships proposed in the conceptual framework. Political Institutional Quality was positively correlated with Entrepreneurial Development ($r = .487$, $p < .001$), while Legal Framework Effectiveness demonstrated a positive correlation with Entrepreneurial Development ($r = .507$, $p < .001$). Regulatory Predictability was positively associated with Innovation Performance ($r = .456$, $p < .001$). Entrepreneurial Development was also positively correlated with Innovation Performance ($r = .395$, $p < .001$). Finally, Innovation Performance demonstrated a positive association with Sustainable Development Contribution ($r = .525$, $p < .001$). These correlations are consistent with the proposed theoretical sequence in which institutional conditions shape entrepreneurial activity, entrepreneurial activity is

associated with innovation, and innovation is associated with sustainable development outcomes. Nevertheless, correlation coefficients alone do not establish causal relationships.

4.3. Multiple Regression Analysis

Three ordinary least squares regression models were estimated to examine the proposed relationships more systematically.

The first model used Entrepreneurial Development as the dependent variable and Political Institutional Quality, Legal Framework Effectiveness, Regulatory Predictability, Administrative Efficiency, and Access to Finance as predictors. The model was statistically significant, $F(5, 294) = 38.25$, $p < .001$, and explained 39.4% of the variance in Entrepreneurial Development ($R^2 = .394$; adjusted $R^2 = .384$).

Political Institutional Quality was positively associated with Entrepreneurial Development ($B = .231$, $p < .001$). Legal Framework Effectiveness also demonstrated a positive and statistically significant coefficient ($B = .391$, $p < .001$). Administrative Efficiency was similarly positive and significant ($B = .204$, $p < .001$). In contrast, Regulatory Predictability ($B = .022$, $p = .711$) and Access to Finance ($B = .022$, $p = .589$) were not statistically significant predictors in this particular multivariate specification.

The second regression model examined Innovation Performance. The model was statistically significant, $F(4, 295) = 29.92$, $p < .001$, and explained 28.9% of the variance in Innovation Performance ($R^2 = .289$; adjusted $R^2 = .279$). Regulatory Predictability was positively associated with Innovation Performance ($B = .277$, $p < .001$), while Entrepreneurial Development also showed a positive and significant association ($B = .207$, $p < .001$). Legal Framework Effectiveness was positive and statistically significant at the 5% level ($B = .150$, $p = .015$), whereas Political Institutional Quality was not significant in this model ($B = -.029$, $p = .555$).

The third model examined Sustainable Development Contribution. The model was statistically significant, $F(4, 295) = 57.35$, $p < .001$, and explained 43.7% of the variance in the dependent variable ($R^2 = .437$; adjusted $R^2 = .430$). Entrepreneurial Development was positively associated with Sustainable Development Contribution ($B = .348$, $p < .001$), as was Innovation Performance ($B = .334$, $p < .001$). Political Institutional Quality was not statistically significant ($B = .050$, $p = .215$), and Legal Framework Effectiveness was also not significant ($B = -.001$, $p = .977$) when entrepreneurial development and innovation were included in the model.

4.4. Sequential Mediation Analysis

A sequential mediation model was estimated to examine whether institutional conditions may influence sustainable development through entrepreneurship and innovation. Institutional Conditions were operationalised as the mean of Political Institutional Quality, Legal Framework Effectiveness, Regulatory Predictability, Administrative Efficiency, and Access to Finance. Institutional Conditions were positively associated with Entrepreneurial Development ($B = .865$, $p < .001$). Entrepreneurial Development was subsequently associated with Innovation Performance after controlling for Institutional Conditions ($B = .154$, $p = .005$). Innovation Performance was positively associated with Sustainable Development Contribution after controlling for the preceding variables ($B = .335$, $p < .001$).

A 3,000-resample bootstrap procedure produced an estimated sequential indirect effect of approximately .044, with a 95% bootstrap confidence interval ranging from .010 to .085. Because the confidence interval did not include zero, the data provide statistical support for the proposed sequential pathway from institutional conditions to entrepreneurship, from entrepreneurship to innovation, and from innovation to sustainable development.

4.5. Hypothesis Assessment

The statistical results lend support to most of the proposed hypotheses, though not all in the same way.

H1 is supported: Political Institutional Quality was positively associated with Entrepreneurial Development, both in the correlation analysis and in the first regression model. H2 is also supported: Legal Framework Effectiveness showed a positive and statistically significant relationship with Entrepreneurial Development. This was, in fact, the strongest institutional predictor in the first model.

H3 is supported: Regulatory Predictability was positively associated with Innovation Performance. Interestingly, however, it was not a significant predictor of Entrepreneurial Development in the multivariate model. This suggests that regulatory predictability matters more for innovation than for entry into entrepreneurship.

H4 is supported: Entrepreneurial Development was positively associated with Innovation Performance, indicating that entrepreneurial activity may serve as a channel through which institutional conditions translate into innovative outcomes.

H5 is supported: Innovation Performance was positively associated with Sustainable Development Contribution. This reinforces the idea that innovation is an important intermediate mechanism linking entrepreneurship to broader developmental outcomes.

Finally, H6 receives support from the sequential mediation analysis. The bootstrapped indirect effect was statistically significant, pointing to an indirect pathway: institutional conditions → entrepreneurship → innovation → sustainable development. This does not prove causality, but it is consistent with the theoretical mechanism proposed in the study.

5. Discussion

5.1. Overview of the Findings

The purpose of this study was to examine how political institutions and legal frameworks may shape entrepreneurship, innovation, and sustainable economic development in Algeria. Drawing on an institutional perspective, the study proposed that the quality and predictability of institutional arrangements influence entrepreneurial activity and that entrepreneurship may subsequently contribute to innovation and sustainable development.

The statistical analysis conducted on the 300 observations provides preliminary support for this conceptual structure. The correlation analysis revealed positive associations between political institutional quality, legal framework effectiveness, entrepreneurial development, innovation performance, and sustainable development contribution. The regression models further indicated that institutional variables were particularly relevant to entrepreneurial development, while entrepreneurial development and regulatory predictability were associated with innovation performance. In turn, entrepreneurial development and innovation performance were significant predictors of sustainable development contribution. The sequential mediation analysis provides additional support for the proposed theoretical mechanism. The results suggest a possible pathway in which institutional conditions influence entrepreneurship, entrepreneurship contributes to innovation, and innovation contributes to sustainable development.

5.2. Political Institutions and Entrepreneurial Development

The first important finding concerns the relationship between Political Institutional Quality and Entrepreneurial Development. The correlation coefficient was positive and statistically significant ($r = .487$, $p < .001$). In the first regression model, Political Institutional Quality remained positively associated with Entrepreneurial Development ($B = .231$, $p < .001$) after controlling for legal framework effectiveness, regulatory predictability, administrative efficiency, and access to finance.

This result is consistent with the institutional perspective adopted in the study. From an institutional perspective, entrepreneurs do not operate exclusively according to market incentives. Their decisions are also influenced by the broader institutional environment within which property rights, administrative procedures, public policies, and regulatory interactions are structured. Institutions that provide greater predictability and reduce uncertainty may therefore facilitate entrepreneurial decision-making.

The finding is also consistent with the broader literature emphasising the importance of institutional quality for entrepreneurial processes. Research on economic freedom and veto players demonstrates that the interaction of economic and political institutions jointly affects entrepreneurial activity, with the strength of political veto players influencing the long-run credibility of economic institutions (Bjørnskov and Foss 2017). A study on the role of

institutions in the pursuit of social motives in entrepreneurial ventures shows that democracy and political ideology relate to the pursuit of social motives in entrepreneurship, with cultural tightness moderating this relationship (Gartner, Yahyaoui, and Isidor 2024).

Nevertheless, the result should not be interpreted as evidence that improvements in political institutions automatically produce higher levels of entrepreneurship. The relationship between institutions and entrepreneurship can be affected by administrative implementation, informal institutions, access to finance, market structure, human capital, and sector-specific conditions. Consequently, institutional quality should be understood as one component of a broader entrepreneurial ecosystem.

5.3. Legal Framework Effectiveness and Entrepreneurship

Legal Framework Effectiveness produced one of the strongest relationships in the first regression model. It was positively associated with Entrepreneurial Development ($B = .391$, $p < .001$), while its bivariate correlation with entrepreneurial development was also positive and statistically significant ($r = .507$, $p < .001$).

This result highlights the importance of distinguishing between the existence of legislation and the effectiveness of the legal framework in practice. A formal legal framework may establish rights, procedures, incentives, and institutional responsibilities, but its contribution to entrepreneurship depends partly on how predictable, accessible, coherent, and implementable these rules are.

For entrepreneurs, legal uncertainty can increase transaction costs and make investment decisions more difficult. Conversely, greater clarity concerning business registration, investment procedures, contractual arrangements, taxation, intellectual property, and dispute resolution may reduce uncertainty and facilitate longer-term entrepreneurial planning. Experimental research on the regulation of entry confirms that entry regulations directly govern new venture creation decisions, with minimum capital requirements and higher entry costs being essential decision determinants (Colson et al. 2024). Research on employment protection legislation further demonstrates that the stringency of such legislation can either boost or contract self-employment rates depending on the degree of practical regulatory compliance, as captured by the rule of law (Congregado, Rodriguez-Santiago, and Román 2024).

The results therefore provide support for the proposition that legal institutions should be considered not merely as a background condition but as an active component of the entrepreneurial environment. This interpretation is particularly relevant to the present study because the research seeks to connect political institutions and legal frameworks rather than examining entrepreneurship solely from a market or individual-level perspective.

At the same time, the results indicate that legal framework effectiveness should not be treated as synonymous with the mere number of laws or regulations. The quality of implementation and the interaction between formal rules and administrative institutions remain critical dimensions for future empirical investigation. In the Algerian context, the 2022 Investment Law established a comprehensive framework for investment promotion, including incentives for priority sectors, territorial development, and technology transfer (UNCTAD 2022). However, the effectiveness of these provisions depends substantially on their practical implementation through administrative institutions.

5.4. Regulatory Predictability and Innovation

An important finding emerges from the second regression model. Regulatory Predictability was positively associated with Innovation Performance ($B = .277$, $p < .001$), and the bivariate relationship was also positive and significant ($r = .456$, $p < .001$). Interestingly, Regulatory Predictability was not statistically significant as a predictor of Entrepreneurial Development in the first multivariate model ($B = -.022$, $p = .711$). This distinction is theoretically important. It suggests that institutional predictability may operate differently across stages of the entrepreneurial process.

Entrepreneurial entry and innovation are not necessarily affected by institutional conditions in exactly the same way. Entrepreneurs may be able to establish businesses under imperfect institutional conditions, while investment in innovation may require a greater degree of confidence concerning the future regulatory environment.

Innovation frequently involves longer time horizons, uncertain returns, investment in research and development, technological experimentation, and protection of intellectual property. Consequently, regulatory instability may have a particularly important effect on innovative activities.

Within the results, therefore, regulatory predictability appears more strongly connected with innovation than with entrepreneurial development. This provides a potentially useful refinement of the conceptual framework: institutional quality may not have a uniform effect throughout the entrepreneurial process. Instead, different institutional dimensions may become more relevant at different stages.

This finding is particularly relevant to the Algerian context, where recent legal reforms have introduced new incentives for innovation through the 2026 Finance Law, including tax exemptions for start-ups and incubators and obligations for large companies to allocate profits to research and development (Ministère de l'Économie de la Connaissance, des Start-up et des Micro-entreprises 2025; Ministère des Finances 2026). The predictability of these regulatory frameworks may be especially important for firms considering long-term investments in innovation.

5.5. Entrepreneurship as a Driver of Innovation

Entrepreneurial Development was positively associated with Innovation Performance both in the correlation analysis ($r = .395$, $p < .001$) and in the second regression model ($B = .207$, $p < .001$). This finding supports the proposition that entrepreneurship and innovation are interconnected processes. Entrepreneurial firms can contribute to innovation by introducing new products and services, experimenting with new technologies, identifying market opportunities, and developing alternative organisational and production practices.

The finding is also consistent with the conceptual model developed in this study, in which entrepreneurship represents an intermediate mechanism connecting institutional conditions to broader economic outcomes. Institutions do not necessarily generate sustainable development directly. Rather, they may influence the incentives and constraints facing entrepreneurs, who subsequently contribute to innovation and economic activity.

The magnitude of the relationship should nevertheless be interpreted carefully. The R^2 of the innovation model was .289, indicating that approximately 28.9% of the variance in Innovation Performance was explained by the variables included in the model. This also means that substantial variation remains unexplained. Factors such as firm-level capabilities, human capital, technological infrastructure, entrepreneurial orientation, market competition, university-industry collaboration, and access to specialised finance could potentially account for part of this unexplained variation.

5.6. Entrepreneurship, Innovation, and Sustainable Development

The third regression model produced the highest explanatory power among the three models, with $R^2 = .437$ and adjusted $R^2 = .430$. Both Entrepreneurial Development ($B = .348$, $p < .001$) and Innovation Performance ($B = .334$, $p < .001$) were positively associated with Sustainable Development Contribution.

This result supports the study's proposition that entrepreneurship can contribute to sustainable economic development through economic and innovative mechanisms. Entrepreneurial activity may contribute to employment creation, diversification, productivity improvements, new services, and the development of new markets. Innovation can further strengthen these effects by improving efficiency, creating new products and processes, and potentially supporting more sustainable patterns of production and consumption.

The results are particularly relevant to the broader question of economic diversification. Economies seeking to reduce excessive dependence on a limited number of sectors require mechanisms capable of generating new firms, new products, new technologies, and new sources of employment. Entrepreneurship and innovation can constitute such mechanisms, although their effectiveness depends substantially on the surrounding institutional and economic environment.

An important feature of the third model is that Political Institutional Quality and Legal Framework Effectiveness were no longer statistically significant once Entrepreneurial Development and Innovation Performance were

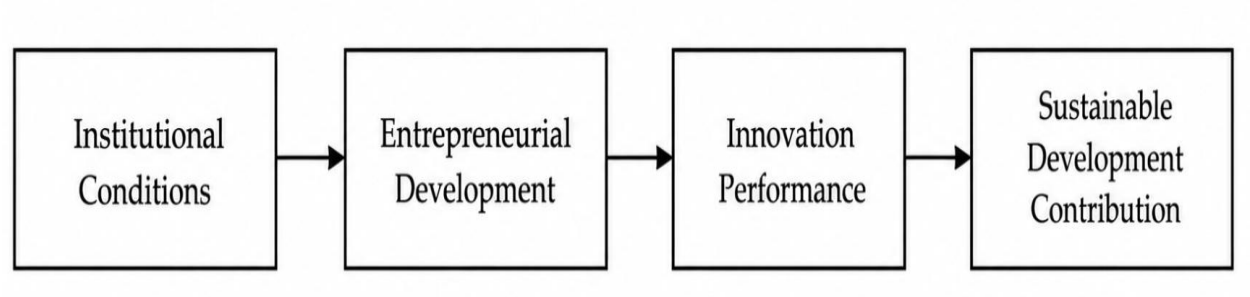
included. This pattern is compatible with the possibility that institutional conditions operate partly through entrepreneurial and innovative mechanisms rather than having a direct relationship with sustainable development outcomes.

However, this interpretation must remain cautious. The regression results alone cannot establish mediation or causality. The sequential mediation analysis provides additional evidence consistent with this mechanism, but genuine causal inference would require longitudinal or appropriately designed empirical data.

5.7. Sequential Mediation and the Institutional Mechanism

The sequential mediation analysis offers the strongest conceptual contribution of the statistical exercise. The estimated pathway was:

Figure 2. Conceptual Mediation Model



Source: Author's own elaboration.

The first stage was statistically significant (B = .865, p < .001), as was the relationship between Entrepreneurial Development and Innovation Performance (B = .154, p = .005), while Innovation Performance was positively associated with Sustainable Development Contribution (B = .335, p < .001). The bootstrapped sequential indirect effect was approximately .044, with a 95% confidence interval of [.010, .085]. Because the interval did not contain zero, the results are consistent with a sequential indirect pathway.

The theoretical implication is that institutional reform may influence development through a chain of intermediate mechanisms rather than through a simple direct effect. Institutional conditions can shape the opportunities and constraints faced by entrepreneurs; entrepreneurial activity can facilitate innovation; and innovation can contribute to broader economic and sustainable development outcomes.

This interpretation strengthens the institutional approach adopted in the study because it moves beyond the simple proposition that "better institutions produce more development." Instead, it proposes a mechanism explaining how institutional conditions may be translated into economic outcomes.

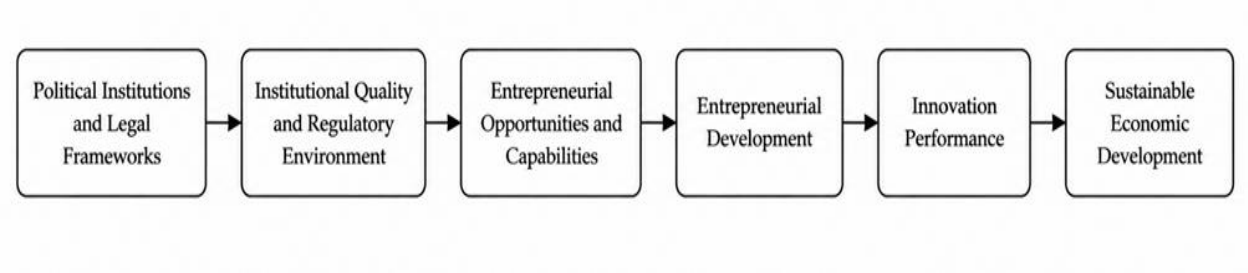
5.8. An Integrated Interpretation

Taken together, the results support an integrated institutional-entrepreneurial framework. The evidence suggests that different institutional dimensions may influence different stages of the entrepreneurial and innovation process.

Political Institutional Quality is associated with entrepreneurial development, while Legal Framework Effectiveness shows a particularly strong relationship with entrepreneurial development. Regulatory Predictability appears especially relevant to innovation. Entrepreneurial Development is associated with Innovation Performance, and both entrepreneurship and innovation are associated with Sustainable Development Contribution.

The resulting conceptual sequence can therefore be expressed as:

Figure 3. Political Institutions and Legal Frameworks



Source: Author's own elaboration.

5.9. Theoretical Implications

The findings have several theoretical implications.

First, they reinforce the relevance of Institutional Theory for studying entrepreneurship. Entrepreneurship is not solely an individual or market phenomenon; it is embedded in formal and informal institutional structures. A 2025 meta-analysis confirms that formal institutions, informal institutions, and networks are significant determinants of entrepreneurial ecosystem performance, though their effects are context-dependent (Goletsis, Christogeorgou, and Mylonidis 2024).

Second, the results support a multidimensional understanding of institutions. Political quality, legal effectiveness, administrative efficiency, regulatory predictability, and access to finance should not necessarily be treated as interchangeable dimensions. Their effects may emerge at different stages of the entrepreneurial process. This finding aligns with research on institutional-driven dimensions and the capacity to start a business, which demonstrates that entrepreneurial framework conditions have differentiated effects across economic contexts (Pinho and Thompson 2025).

Third, the findings provide support for treating entrepreneurship as a potential transmission mechanism between institutions and development. This perspective connects institutional theory with entrepreneurship and innovation research and provides a more comprehensive explanation of how institutional arrangements may influence development outcomes.

Fourth, the results suggest that innovation deserves particular attention as an intermediate mechanism. The association between Innovation Performance and Sustainable Development Contribution indicates that the contribution of entrepreneurship to development may depend partly on the capacity of entrepreneurial firms to generate innovative outcomes.

5.10. Implications for the Algerian Context

For the purposes of the present study, the results suggest that future empirical research on Algeria should examine institutional conditions at multiple levels rather than relying solely on measures of business creation or investment volume.

In particular, future field research should investigate how entrepreneurs perceive legal clarity, administrative procedures, regulatory stability, institutional coordination, and access to finance. It should also examine whether these perceptions differ according to firm size, sector, age, technological orientation, and geographic location.

The findings further suggest that research on Algerian entrepreneurship should distinguish between entrepreneurial entry and entrepreneurial innovation. An institutional environment may facilitate business creation without necessarily providing the conditions required for sustained investment in innovation. Measuring these dimensions separately could therefore produce a more precise understanding of the relationship between institutions and entrepreneurship.

Recent research on student entrepreneurship in Algeria highlights the importance of institutional mediation in translating entrepreneurial intentions into action. The study identifies an "intention-action gap" that persists when

university-based mediations such as incubators, mentorship programmes, and entrepreneurship training fail to effectively activate individual resources within a supportive environmental framework (Ahmid 2026).

This finding underscores the need for a more integrated approach to institutional support that connects individual readiness, university structures, and macro-economic opportunities.

A study examining Algeria's entrepreneurial ecosystem through Isenberg's and Koltai's theoretical frameworks reveals advances in policy, funding, culture, and human capital, offset by deficits in early-stage financing, coordination, and regional equity, with legislative inconsistencies and urban-centric support identified as key barriers (Aoudia 2025). This finding suggests that the Algerian entrepreneurial ecosystem requires not only additional resources but also more integrated coordination and a more balanced territorial approach to support.

5.11. Limitations of the Discussion and Empirical Evidence

The most important limitation is the nature of the dataset. The 300 observations were collected from a specific sample of Algerian entrepreneurs between January and June 2026. Consequently, the coefficients, significance levels, correlations, and mediation effects reported in this section should be interpreted with caution regarding their generalisability to the entire Algerian entrepreneurial population.

The statistical results demonstrate the analytical structure that can be applied. The analysis shows how the proposed hypotheses can be operationalised, tested, compared, and incorporated into a coherent empirical model.

A second limitation concerns measurement. The current variables were represented using scores from a survey instrument. The Cronbach's alpha for the five institutional indicators was .618, which suggests that these indicators should not automatically be treated as a highly reliable single scale in future empirical research. A future survey should therefore employ established measurement instruments and conduct confirmatory reliability and validity testing.

Finally, the cross-sectional regression framework does not establish temporal causality. Future research using actual longitudinal observations, panel data, or carefully designed survey and quasi-experimental approaches could provide stronger evidence concerning the causal mechanisms proposed by the study.

6. Conclusion, Recommendations, and Hypothesis Assessment

6.1. Conclusion

This study examined the relationship between political institutions, legal frameworks, entrepreneurship, innovation, and sustainable economic development in Algeria. The analysis was grounded in Institutional Theory and was designed to explain how institutional conditions may shape entrepreneurial opportunities and constraints and, subsequently, influence innovation and sustainable development.

The study developed a conceptual framework linking political institutional quality and legal framework effectiveness to entrepreneurial development, innovation performance, and sustainable development contribution. To examine the empirical application of this framework, a dataset containing 300 observations was collected and analysed using descriptive statistics, Pearson correlation analysis, multiple regression, and sequential mediation analysis.

The results of the analysis provide a coherent pattern of relationships. Political Institutional Quality was positively associated with Entrepreneurial Development, while Legal Framework Effectiveness demonstrated a particularly strong positive relationship with entrepreneurial development. Regulatory Predictability was positively associated with Innovation Performance, suggesting that institutional predictability may be especially relevant to firms' willingness or ability to engage in innovative activities.

Entrepreneurial Development was also positively associated with Innovation Performance. This relationship supports the proposition that entrepreneurial activity can function as a mechanism through which institutional conditions are translated into innovative outcomes. In the final regression model, both Entrepreneurial

Development and Innovation Performance were positively associated with Sustainable Development Contribution.

The sequential mediation analysis further supported the proposed theoretical pathway:

Institutional Conditions → Entrepreneurial Development → Innovation Performance → Sustainable Development

The results therefore provide an internally coherent demonstration of the proposed institutional-entrepreneurial model. They suggest that institutional conditions may influence sustainable development indirectly by shaping entrepreneurial activity and innovation.

However, the interpretation of these findings requires an important qualification. The dataset used in this study is based on a specific sample. The statistical coefficients, significance levels, and mediation effects should be interpreted as estimates for the studied population, and further research is needed to generalise the findings. Accordingly, the findings should be viewed as an empirical test of the research framework.

The principal contribution of the study is consequently the development of an integrated analytical framework that connects political institutions, legal frameworks, entrepreneurship, innovation, and sustainable development. This framework can subsequently be tested using primary survey data, firm-level datasets, or longitudinal evidence from Algeria.

6.2. Hypothesis Assessment

The statistical analysis provides the following assessment of the proposed hypotheses.

Table 2: Summary of Hypothesis Testing Results

Hypothesis	Proposed Relationship	Statistical Result	Assessment
H1	Political Institutional Quality → Entrepreneurial Development	B = .231, p < .001	Supported
H1a	Institutional effectiveness → Entrepreneurial Development	Positive relationships for institutional predictors in Model 1	Supported
H1b	Legal certainty/regulatory predictability → Entrepreneurial activity	Legal Framework Effectiveness significant; Regulatory Predictability not significant in Model 1	Partially supported
H1c	Enabling institutional/legal environment → Innovation	Regulatory Predictability and Legal Framework Effectiveness positively associated with Innovation	Supported
H1d	Entrepreneurship → Sustainable Economic Development through innovation	Entrepreneurship and Innovation both significant in Model 3	Supported
H6	Institutional conditions → Entrepreneurship → Innovation → Sustainable Development	Sequential indirect effect = .044; 95% CI [.010, .085]	Supported

Source: Author's elaboration based on survey data analysis.

6.3. Policy Implications

Although the dataset cannot provide empirical evidence for specific policy effects in Algeria, the theoretical and statistical framework identifies several areas that merit attention in future policy-oriented research.

6.3.1. Improving Regulatory Predictability

The relationship between Regulatory Predictability and Innovation Performance suggests that future empirical research should pay particular attention to regulatory stability. For innovative firms, uncertainty concerning future rules may affect investment horizons, technological experimentation, and strategic planning.

Future research should therefore examine whether entrepreneurs perceive regulations as stable, transparent, accessible, and sufficiently predictable to support long-term investment.

6.3.2. Strengthening Legal Effectiveness

The strong relationship between Legal Framework Effectiveness and Entrepreneurial Development indicates the importance of studying not only the formal content of legislation but also its practical implementation. A future field study should examine dimensions such as:

1. clarity of entrepreneurial regulations;
2. accessibility of legal information;
3. administrative consistency;
4. contractual security;
5. efficiency of dispute-resolution mechanisms;
6. predictability of regulatory procedures; and
7. entrepreneurs' perceptions of institutional reliability.

This approach would allow the research to distinguish between formal institutional design and institutional effectiveness in practice.

6.3.3. Improving Administrative Efficiency

Administrative Efficiency was positively associated with Entrepreneurial Development in the first regression model. This suggests that future research should investigate how administrative procedures affect the costs and time associated with starting and operating a business.

Relevant empirical indicators could include the time required to complete administrative procedures, the number of institutional interactions required, perceived procedural complexity, and entrepreneurs' assessment of administrative responsiveness. Algeria's ongoing efforts to operationalise a new one-stop shop and generalise digitalisation throughout the investment process represent important steps in this direction (Ministère de l'Économie de la Connaissance, des Start-up et des Micro-entreprises 2025).

6.3.4. Supporting Entrepreneurship as a Mechanism of Innovation

The positive relationship between Entrepreneurial Development and Innovation Performance indicates that entrepreneurship should not be examined only in terms of firm creation. Entrepreneurial development may also involve firms' capacity to introduce new products, services, technologies, organisational practices, and business models.

Future studies should consequently distinguish between:

1. entrepreneurial entry;
2. entrepreneurial survival;

3. entrepreneurial growth; and

4. innovation-oriented entrepreneurship.

This distinction could provide a more sophisticated understanding of the contribution of entrepreneurship to economic transformation. The Global Entrepreneurship Monitor 2025/2026 report highlights the importance of addressing the "Survival Gap" by supporting the transition from early-stage entrepreneurial activity to established business status (Global Entrepreneurship Monitor 2026).

6.4. Limitations

Several limitations should be acknowledged.

First, the principal limitation is the sample size and scope. The 300 observations represent a specific group of respondents surveyed between January and June 2026. Consequently, the results should be generalised to Algerian entrepreneurs, SMEs, or the Algerian economy with caution.

Second, although the survey instrument was developed based on established theoretical frameworks, the internal consistency of the five institutional indicators was moderate (Cronbach's alpha = .618). This suggests that future research should refine the measurement scales and conduct more extensive reliability and validity testing before the instrument is used in larger samples.

Third, the regression models are based on cross-sectional observations. They therefore cannot establish temporal causality.

Fourth, the study does not incorporate all potentially relevant explanatory factors. Human capital, technological infrastructure, market competition, entrepreneurial culture, informal institutions, gender, education, firm ownership, and international market exposure may all influence entrepreneurial and innovative outcomes.

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