

The Informal Economy in Algeria: Determinants, Dynamics, and Policy Implications in a Developing Country Context

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Abstract:

This study investigates the determinants and dynamics of the informal economy in Algeria and explores policy implications in a developing country context. By employing both quantitative and qualitative analyses, the study aims to identify key factors influencing the informal sector and assess its impact on the national economy. Results indicate that taxation, labor regulations, and institutional quality significantly contribute to the size of the informal economy, which comprises approximately 33% to 45% of Algeria's GDP. The findings also suggest that the informal economy acts as a buffer during economic downturns, albeit with varying effectiveness. This research underscores the need for targeted policy interventions to integrate the informal economy into the formal sector, enhancing both economic growth and social protections.

Keywords: Informal Economy, Economic Development, Policy Implications, Algeria, Labor Market Dynamics

Jel Classification Codes: E26; J46.

1. Introduction:

The informal economy plays a significant role in developing countries, particularly in North Africa, where it accounts for approximately one-third of GDP and two-thirds of total employment. Algeria, as a key player in the region, faces substantial challenges related to its informal sector, which has far-reaching implications for its economic development, labor market dynamics, and policy formulation. This study aims to examine the determinants, dynamics, and policy implications of the informal economy in Algeria within the broader context of developing countries.

- Problem Statement

Despite its importance, the informal economy in Algeria presents a complex challenge for policymakers and researchers alike. The persistence of a large informal sector hampers economic growth, reduces tax revenues, and limits the effectiveness of social protection systems. Moreover, the informal economy's relationship with macroeconomic variables, institutional quality, and global economic forces remains poorly understood in the Algerian context. This lack of comprehensive understanding impedes the development of effective policies to address informality while promoting inclusive economic growth.

- Study Questions

- What are the primary determinants of the informal economy in Algeria, and how do they compare to other developing countries?
- How does the informal economy in Algeria respond to economic cycles, particularly during periods of recession and recovery?
- What is the relationship between institutional quality and the size of the informal economy in Algeria?
- What policy interventions can effectively address the challenges posed by the informal economy while promoting economic development in Algeria?

- Study Hypotheses

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- The size of the informal economy in Algeria is positively correlated with factors such as tax burden, regulatory impediments, and the size of the agricultural sector.
 - The informal economy in Algeria acts as a buffer during economic downturns, absorbing labor market shocks more effectively than the formal sector.
 - Lower institutional quality in Algeria contributes to a larger informal sector compared to countries with stronger institutions.

- **Study Significance**

This research contributes to the existing literature on informal economies in developing countries by providing a comprehensive analysis of the Algerian context. By examining the determinants, dynamics, and policy implications of the informal economy in Algeria, this study aims to:

- Enhance understanding of the unique characteristics of Algeria's informal sector within the broader context of North Africa and developing countries.
- Provide evidence-based insights to inform policy formulation aimed at addressing the challenges posed by the informal economy.
- Contribute to the ongoing academic discourse on the relationship between informality, institutional quality, and economic development.
- Offer practical recommendations for promoting sustainable and inclusive economic growth in Algeria.

- **Study Objectives**

- To identify and analyze the key determinants of the informal economy in Algeria, including economic, institutional, and social factors.
- To examine the dynamics of Algeria's informal economy in response to economic cycles, particularly during periods of recession and recovery.
- To assess the impact of institutional quality on the size and characteristics of the informal economy in Algeria.

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- To investigate the relationship between the informal economy and labor market outcomes in Algeria, including unemployment rates and labor force participation.
 - To develop evidence-based policy recommendations for addressing the challenges posed by the informal economy while promoting inclusive economic growth in Algeria.
 - To contribute to the broader understanding of informal economies in developing countries by providing a comprehensive analysis of the Algerian case.

2. Literature Review

The informal economy plays a significant role in developing countries, including Algeria, and has been the subject of extensive research. This literature review examines the conceptualization, determinants, and impacts of the informal economy, with a particular focus on Algeria.

The concept of the informal economy in developing countries has been analyzed through various theoretical lenses. Yusuff (2011) critically evaluates contrasting theories, including modernization, dependency, neo-liberalism, and structuralism. The author argues that caution should be exercised when applying theories developed from Latin American experiences to African informal economies, emphasizing the need to consider historical circumstances and analyze informality as a social and historical process rather than merely a sector emerging from crisis.

Several studies have investigated the determinants and size of the informal economy in developing countries. Bennihi et al. (2021) employ the Multiple Indicator Multiple Causes (MIMIC) approach to examine the main determinants of the informal economy in Algeria. Their findings indicate that the tax burden, agricultural sector, quality of institutions, and GDP per capita are key factors influencing the size of the informal economy. The study estimates that the average size of Algeria's informal economy is 33.48% of the official GDP, with an increasing trend over the past 15 years.

Cherfi-Feroukhi and Souam (2020) use structural models to analyze the informal economy in Algeria, considering both government intervention and labor market conditions. Their results show fluctuations in the size of the informal economy, with an upward trend from 34.1% to 45.86% of GDP between 2000 and 2009, followed by a decline to 32.83% by 2018.

The relationship between globalization and the informal economy in developing countries is complex and not fully understood. Petrova (2019) highlights the lack of consensus in empirical studies regarding the impact of globalization on informality. The author notes that data deficiency and inconsistencies in existing informal sector data contribute to the challenge of understanding this relationship.

Institutional quality has been identified as a crucial factor in shaping the informal economy. Kirşanlı (2024) examines the nexus between institutional quality and the informal economy in the Middle East and North Africa (MENA) region, which includes Algeria. The study focuses on various aspects of institutional quality, including corruption, government effectiveness, regulatory quality, rule of law, voice and accountability, and political stability. The author suggests that lower institutional quality in the MENA region contributes to a larger informal sector.

The literature highlights several policy implications and challenges in addressing the informal economy in developing countries. Lee et al. (2018) explore the relationship between intellectual property rights (IPR), the informal economy, and foreign direct investment (FDI) in developing countries. Their findings suggest that stronger IPR protection attracts more FDI in countries with small informal economies but not in those with large informal economies, indicating the importance of institutional quality.

Peter-Cookey and Janyam (2017) focus on the skill acquisition process of informal economy workers and its impact on their productivity. They

recommend that skill development policies for informal economy workers should be specific, comprehensive, and tailored to their unique challenges.

Falla (2013, 2016) examines why legal reforms of the informal economy have failed to influence vulnerable groups in developing countries, highlighting the need to consider both legal and social norms in policy formulation.

The literature on the informal economy in developing countries, including Algeria, reveals a complex and multifaceted phenomenon influenced by various factors such as institutional quality, globalization, skill levels, and government policies. While significant research has been conducted, there is still a need for more comprehensive and context-specific studies to fully understand the dynamics of the informal economy in Algeria and other developing countries. Future research should focus on developing integrated approaches that consider the unique historical, social, and economic contexts of each country while addressing the challenges posed by the informal economy.

3.The informal economy is pervasive in North Africa

North Africa's informal economy is characterized by (Bizimana, & Arzoumanian, 2023) :

- **Widespread Informality:** The informal economy is pervasive in North Africa, accounting for about one-third of GDP and two-thirds of total employment. Factors such as flexibility, taxation, and regulatory impediments contribute to its persistence.

- **Poor Labor Market Outcomes:** North African economies face high youth unemployment rates and low female labor force participation rates, indicating structural unemployment.

- **Limited Cyclical Variability:** Labor market indicators in North Africa have been relatively stable over the past two decades, with little variability during economic fluctuations. This contrasts with the high cyclical variability observed in advanced economies.

Impact of Informality on Okun's Law: the relationship between cyclical output fluctuations and unemployment, as captured by Okun's law, is

weaker in countries with a higher share of informal employment. This suggests that informal employment acts as a buffer during economic downturns, absorbing some of the labor market shock.

Countercyclical Nature of Informality: The informal employment is countercyclical and acts as a buffer during economic downturns in countries with a higher share of informality. However, the 2020 pandemic recession, unlike previous downturns, saw a sharp contraction in informal employment in high-informality countries, suggesting a limited buffering effect.

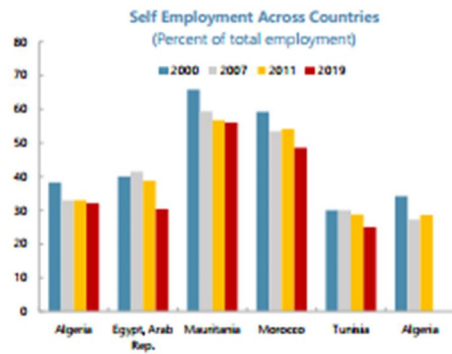
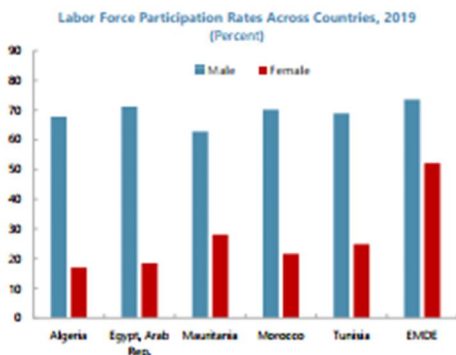
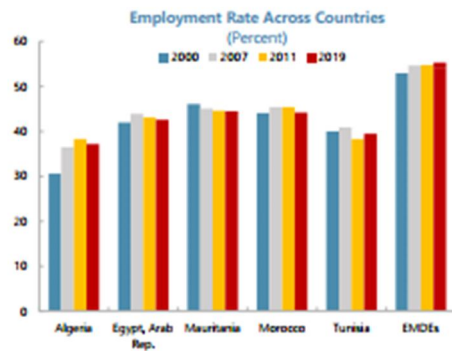
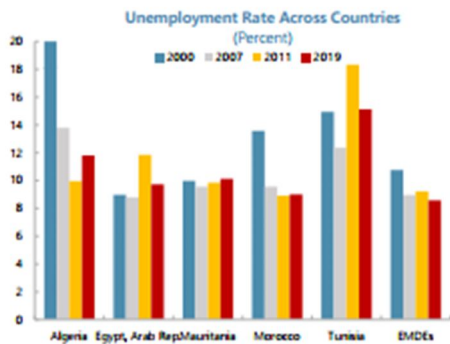
Sectoral Differences: The informal employment in agriculture behaves countercyclically during economic downturns but only moderately so during upswings. This suggests that many informal workers in agriculture may not transition back to formal employment during recoveries.

Impact of the Pandemic: The pandemic recession resulted in a significant contraction in informal employment across all countries. However, the post-pandemic recovery saw a strong rebound in informal employment in high-informality countries, while it remained weak in medium-informality countries, including those in North Africa. This is likely due to a combination of factors, including the return of workers from outside the labor force to informal jobs, the limited ability of informal firms to expand and create new jobs, and the possibility of hysteresis effects (where workers who lost their formal jobs during the recession may struggle to find formal employment in the recovery).

4.The informal economy in Algeria

Figure 1, Key Labor Market Characteristics Across North Africa, presents data on unemployment rates, employment rates, labor force participation rates, and self-employment rates for several North African countries, including Algeria, alongside Egypt, Mauritania, Morocco, Tunisia, and the average for emerging market and developing economies (EMDEs). Focusing on Algeria, Figure 1 reveals the following:

Fig 1. Key Labor Market Characteristics across North Africa



Source: (Bizimana, & Arzoumanian, 2023)

- Unemployment:

- High and Persistent Unemployment: Algeria has consistently experienced high unemployment rates, averaging around 12% in 2019. This figure is significantly higher than the averages for EMDEs and the other North African countries included in the figure, highlighting the challenges Algeria faces in creating job opportunities.

- Slight Downward Trend: While the unemployment rate has remained stubbornly high, there is a slight downward trend from 2000 to 2019, indicating some improvement in the country's labor market. However, the rate remains considerably higher than in other North African countries and EMDEs, suggesting that significant challenges persist.

- Employment Rate:

- Lower Employment Rate: Algeria's employment rate is significantly lower than the EMDEs and most other North African countries. This

suggests that a large proportion of the Algerian population is not participating in the labor market.

- Labor Force Participation Rate:

- Lower Participation Rate: Similar to the employment rate, Algeria has a lower labor force participation rate compared to other North African countries and EMDEs. This suggests that the potential workforce in Algeria is not fully engaged in the labor market.

- Self-Employment Rate:

- Moderately High Self-Employment: Algeria's self-employment rate (as a percentage of total employment) is around 35 % in 2019. This is higher than the average for EMDEs and the other North African countries included in the figure. This highlights the significant role played by self-employment in the Algerian labor market, likely driven by factors such as limited job opportunities and regulatory barriers in formal employment.

- Significant Challenges: Algeria faces a significant challenge in terms of unemployment and low labor force participation, which are likely contributing to high levels of informality.

- Potential for Improvement: The slight downward trend in unemployment suggests some potential for improvement. However, it is crucial for Algeria to address the root causes of these issues to achieve more substantial improvements in its labor market performance.

- Role of the Informal Sector: The moderately high self-employment rate highlights the importance of the informal sector in Algeria's economy, which may act as a buffer during economic downturns. However, addressing the challenges associated with informality, such as limited access to finance, social protection, and training opportunities, is crucial for enabling a more inclusive and sustainable development.

Figure 1 provides a snapshot of Algeria's labor market characteristics. While it reveals significant challenges, it also suggests a potential for improvement. Policies aimed at tackling unemployment, enhancing labor force participation, and promoting a more inclusive and sustainable informal sector would be crucial for advancing Algeria's economic and social development.

5. Policy Recommendations:

Comprehensive of recommendations for policymakers, including (Roig, & Pewitt, 2021):

- **Improving data collection and analysis:** To develop targeted and evidence-based policies, there is a need to improve data collection on the informal economy, focusing on understanding its full economic, social, and environmental impacts.

- **Promoting Decent Work:** Policies should aim to create full, productive, and freely chosen employment, prioritize decent work, and respect fundamental rights at work.

- **Fostering a Conducive Environment:** Policymakers should work to create a conducive environment for informal enterprises to transition to the formal economy by simplifying regulations, reducing barriers to entry, and providing access to financial services and training opportunities.

- **Expanding Social Protection:** There is a need to expand and strengthen social protection systems, especially for vulnerable groups, and raise awareness about rights and obligations associated with formalization.

- **Encouraging Social Dialogue:** Policymakers should strengthen social dialogue and build the capacity of the public sector to collect data on the informal economy, promote the right to association, and ensure that workers and economic units enjoy a fair and equitable environment.

- **Strengthening International Cooperation:** Global cooperation is crucial for addressing the challenges of the informal economy, including through the development of shared standards, policies, and frameworks. International organizations play a critical role in supporting developing countries and facilitating knowledge sharing and collaboration among stakeholders

6. Conclusion:

Results:

- **Size and Trends:** The informal economy in Algeria accounts for a significant portion of the country's economic activity. Estimates suggest that it represents approximately 33-45% of the official GDP, with fluctuations observed over time. This substantial size underscores the importance of understanding and addressing informality in Algeria's economic landscape.

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- Determinants: The study identified several key factors influencing the size of Algeria's informal economy:
 - Tax burden
 - Size of the agricultural sector
 - Quality of institutions
 - GDP per capita
 - Regulatory impediments

 - Labor Market Dynamics: Algeria faces persistent challenges in its labor market, including high unemployment rates (around 12% in 2019), low employment rates, and limited labor force participation compared to other North African countries and emerging market and developing economies (EMDEs).

 - Countercyclical Nature: The informal economy in Algeria demonstrates countercyclical behavior, acting as a buffer during economic downturns by absorbing some of the labor market shocks. However, this buffering effect was limited during the 2020 pandemic recession, which saw a sharp contraction in informal employment.

 - Sectoral Differences: Informal employment in agriculture behaves countercyclically during economic downturns but only moderately so during upswings, suggesting that many informal workers in this sector may not transition back to formal employment during recoveries.

-Testing the Study Hypotheses

- **Hypothesis 1:** Confirmed. The size of the informal economy in Algeria is positively correlated with factors such as tax burden, regulatory impediments, and the size of the agricultural sector.

- **Hypothesis 2:** Partially confirmed. The informal economy in Algeria generally acts as a buffer during economic downturns, absorbing labor market shocks more effectively than the formal sector. However, this effect was limited during the 2020 pandemic recession.

- **Hypothesis 3:** Confirmed. Lower institutional quality in Algeria contributes to a larger informal sector compared to countries with stronger institutions.

-Study Recommendations

- **Improve Data Collection and Analysis:** Develop more comprehensive and accurate methods for measuring the informal economy to inform evidence-based policymaking.
- **Promote Decent Work:** Implement policies aimed at creating full, productive, and freely chosen employment while prioritizing decent work conditions and respecting fundamental rights at work.
- **Foster a Conducive Environment for Formalization:** Simplify regulations, reduce barriers to entry, and provide access to financial services and training opportunities to encourage informal enterprises to transition to the formal economy.
- **Expand Social Protection:** Strengthen and broaden social protection systems, particularly for vulnerable groups, and raise awareness about the rights and obligations associated with formalization.
- **Encourage Social Dialogue:** Strengthen mechanisms for social dialogue and build the capacity of the public sector to engage with informal workers and enterprises.
- **Promote Sustainable Practices:** Encourage sustainable consumption and production practices, incentivize more sustainable business models, and support initiatives that foster circular economy principles within both formal and informal sectors.
- **Strengthen Institutional Quality:** Focus on improving governance, reducing corruption, and enhancing the effectiveness of public institutions to create an environment conducive to formalization.
- **Tailor Policies to Sectoral Needs:** Develop sector-specific strategies, particularly for agriculture, to address the unique challenges and opportunities for formalization in different parts of the economy.

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- **Enhance Skills Development:** Invest in education and training programs that align with labor market needs and provide pathways for informal workers to acquire skills relevant to the formal sector.
 - **Strengthen International Cooperation:** Engage in global initiatives and knowledge-sharing platforms to learn from best practices and collaborate on addressing the challenges of the informal economy.

7. Bibliography:

Bennihi, A. S., Bouriche, L., & Schneider, F. (2021). The informal economy in Algeria: New insights using the MIMIC approach and the interaction with the formal economy. *Economic Analysis and Policy*, 72, 470-491. <https://doi.org/10.1016/j.eap.2021.09.010>

Bizimana, O., & Arzoumanian, S. (2023). Informality, Labor Market Dynamics, and Business Cycles in North Africa (Working Paper No. WP/23/182). *International Monetary Fund*.

Cherfi-Feroukhi, K., & Souam, S. (2020). Informal economy, government intervention and labor market in Algeria: An analysis by structural models. *Economics Bulletin*, 40(2), 1178-1193.

Falla, A. M. V. (2013). Legal and social norms for development: Why legal reform of the informal economy failed to influence vulnerable groups in developing countries. In *Social and Legal Norms: Towards a Socio-legal Understanding of Normativity* (pp. 231-246). Ashgate Publishing Ltd.

Falla, A. M. V. (2016). Legal and social norms for development: Why legal reform of the informal economy failed to influence vulnerable groups in developing countries. In *Social and Legal Norms: Towards a Socio-legal Understanding of Normativity* (pp. 231-245). *Taylor and Francis*.

Kirşanlı, F. (2024). Institutional quality and informal economy Nexus in the Middle East and North Africa. In *Routledge Handbook of the Informal*

Economy (pp. 275-286). *Taylor and Francis*.
<https://doi.org/10.4324/9781003370888-18>

Lee, M., Alba, J. D., & Park, D. (2018). Intellectual property rights, informal economy, and FDI into developing countries. *Journal of Policy Modeling*, 40(5), 1067-1081.
<https://doi.org/10.1016/j.jpolmod.2018.07.003>

Peter-Cookey, M. A., & Janyam, K. (2017). Reaping just what is sown: Low-skills and low-productivity of informal economy workers and the skill acquisition process in developing countries. *International Journal of Educational Development*, 56, 11-27.
<https://doi.org/10.1016/j.ijedudev.2017.07.005>

Petrova, K. (2019). Globalization and the Informal Economy in Developing Countries. In *Contributions to Economics* (pp. 49-73). *Physica-Verlag*. https://doi.org/10.1007/978-3-030-14370-1_3

Roig, M., & Pewitt, J. (2021). A changing world of work: implications for the social contract. UN DESA Policy Brief No. 94, *UN Department of Economic and Social Affairs*, New York.

Yusuff, O. S. (2011). A theoretical analysis of the concept of informal economy and informality in developing countries. *European Journal of Social Sciences*, 20(4), 624-636.