



The Impact of Innovation on Informal SMEs in Cameroon

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Innovation in the Informal Sector

1

Existence of Innovation

There is a debate around whether innovation truly exists in the informal sector. Some argue informal firms focus on imitation rather than innovation, while others find evidence of genuine innovation driven by the need to stay competitive.

2

Measurement Challenges

Defining and measuring innovation in the informal sector is a persistent challenge. Researchers call for context-specific approaches to capture the nuances of innovation in developing economies where informal activities dominate.

Innovation and Firm Formalization

Positive Impact

Studies suggest that while informal enterprises often rely on adaptive and imitative strategies, genuine innovation can occur and contribute to their formalization. Technological innovation in particular has been found to increase the chances of firm formalization.

Negative Impact

However, product innovation has been shown to reduce the chances of firm formalization. Informal firms may avoid registering new products to maintain their informal status and avoid taxes, at least until they can afford the costs of formalization.

Policy Implications

The findings highlight the need for targeted policies that recognize the unique challenges and opportunities within the informal sector. Encouraging and supporting innovation, especially technological innovation, could be key to facilitating the transition to formalization.

Informal Innovation in Cameroon

Prevalence of Informal SMEs

In Cameroon, SMEs account for over 95% of businesses, with 86% operating informally (NIS, 2016 , 2021). This highlights the importance of understanding innovation in the informal sector for economic development.

Low Innovation Rates

According to the Second General Census of Enterprises (GCE 2), less than 6% of SMEs in Cameroon invest in R&D or technological innovation activities and Only 6.5% report creating products or services that meet national or international certification standards.

Barriers to Innovation

High costs of technologies like the internet, limited access to capital, and lack of innovative financing mechanisms are key barriers to innovation faced by informal

Research Question and Study Objectives



Research Question

The study aims to understand the impact of innovation on informal small and medium



Study Objectives

1. Identify the prevalence and types of innovation activities among informal

Rigorous Informal Innovation Study



Model

This study employs a **logit model** to estimate the relationship between **innovation and firm formalization**. The logit model is a discrete choice economic model where the binary dependent variable indicates whether a company operates formally or informally.



Empirical Approach

The key independent variable, x_i , is a categorical variable that distinguishes **firms engaged in technological, process, product, or R&D innovation** from those that do not innovate.



Estimation methods

The parameters of interest are estimated using the **maximum likelihood method**. Under standard assumptions for nonlinear models, the maximum likelihood estimator (MLE) is consistent, asymptotically normal, and efficient.

Data



Comprehensive Data

The study leveraged comprehensive data from the World Bank Enterprise Survey (2016) to examine formal and informal sector enterprises in Cameroon. **70.27% of these SME where informals.**



Size sample

The Survey provides a representative sample of 361 enterprises operating in Cameroon. Very Small Enterprises (VSEs) (defined as those with fewer than five employees) represent nearly



Detailed Insights

Small companies (SE) represent less than 25%, and medium-sized companies (ME) represent the least (19.11%). Only 8.11% of the ME can be considered informal compared to 21.61% of Small

Result: Innovation Types and Firm Formalization



Technological Innovation

Technological innovation, such as the use of ICT, increases the chances of firm formalization by 3.1%.



Product Innovation

Product innovation, on the other hand, reduces the chances of firm formalization by 4%.



R&D and Process Innovation

R&D and process innovations do not significantly affect the probability of firm formalization.



Innovation and Job Creation

1

R&D Innovation

R&D innovation has a significant positive impact, increasing job creation by 46.29%.

2

Product Innovation

Product innovation also has a positive effect, increasing job creation by 20.29%.

3

Technological and Process Innovation

Technological and process innovations do not have a

Innovation and Informal Firm Growth

Innovation Type	Impact on Informal Firms
Technological Innovation	Increases informal job creation by 42.95%
R&D Innovation	No significant impact
Product Innovation	Positive impact, but not significant
Process Innovation	Positive impact, but not significant

Innovation and Firm Growth

1

Job Creation

The study finds that the effect of innovation on job creation is greater for informal enterprises than formal ones. However, the jobs created are proportional to firm size and the nature of the firm's innovations.

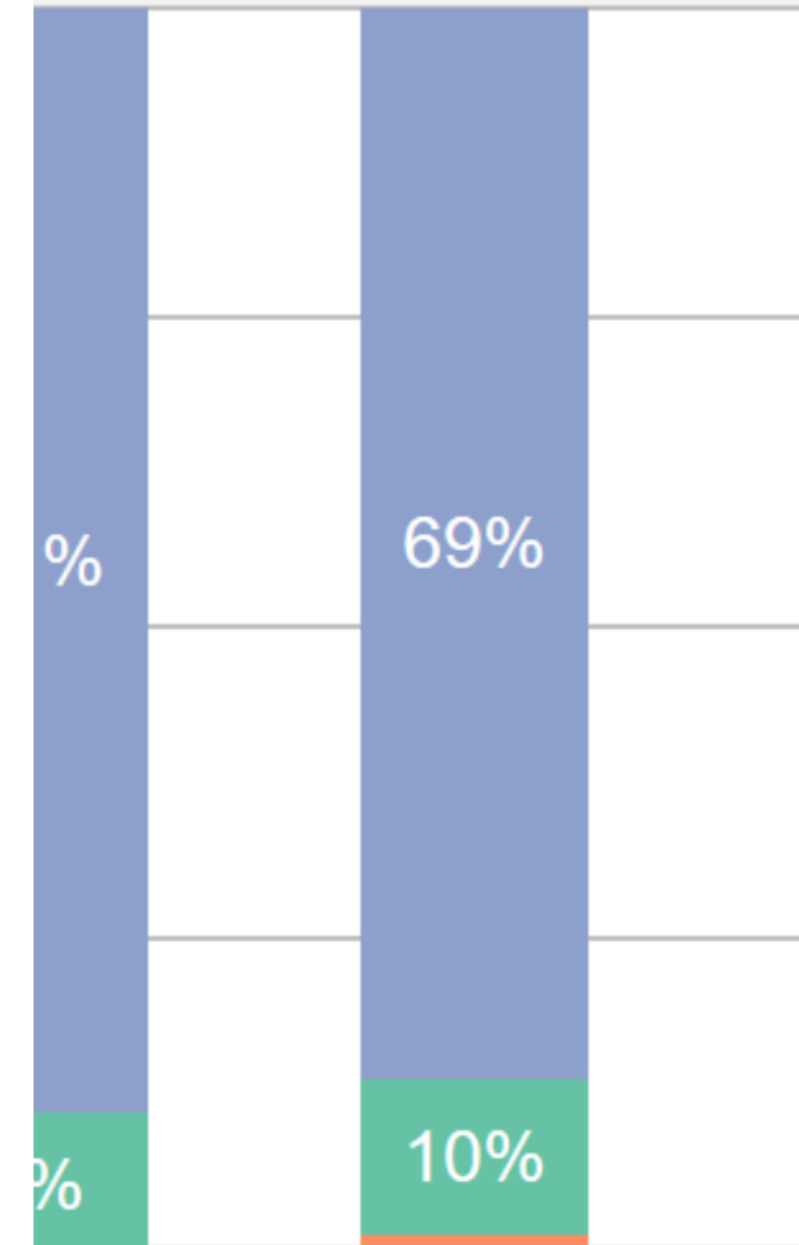
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Contrasting Effects

Technological innovation can have both positive and negative impacts on informal job creation. It increases informal job creation by 43% as firms utilize low-cost, easily accessible labor. But it can also reduce the need

to turnover has
er in the formal business

Small Medium Large



Firm Characteristics and Innovation



Firm Size

Larger firms, particularly medium-sized enterprises, are more likely to create jobs due to their higher levels of innovation and capital investment.

Manager Gender

Firms with female managers are less likely to create jobs compared to those with male managers, potentially due to differences in innovative capacity.

Access to Capital

Higher levels of capital investment are positively correlated with innovation and job growth, highlighting the importance of access to financing for informal SMEs.

Challenges in Measuring Informal Innovation

Context-Specific Approaches

Researchers emphasize the need for context-specific measures of innovation that capture the nuances of the informal sector in developing economies, where traditional R&D-based definitions may not apply.

Firm Definitions

The definition of SMEs, which varies by country, can significantly impact research findings. Interpreting studies across different contexts requires understanding these definitional differences.

Entrepreneurial Characteristics

Individual entrepreneur characteristics, such as attitudes towards innovation, can play a crucial role in the innovation process.

Future Research Directions

Future studies should continue to explore the nuanced relationship between innovation and formalization, developing

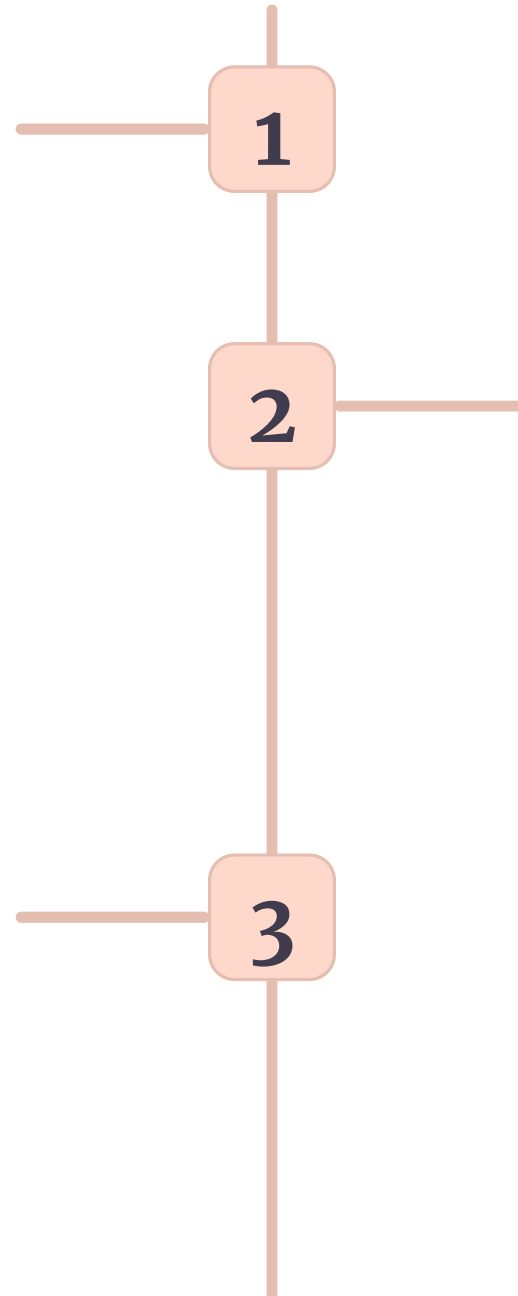
Policy Implications

Promote Technological Innovation

Governments should encourage the adoption of technological innovations by informal SMEs to increase transparency and facilitate the formalization process.

Improve Access to Financing

Addressing the capital gap faced by informal SMEs, through innovative financing mechanisms and increased access to formal financing, could



1

2

3

Enhance Intellectual Property Protection

Policies should aim to improve access to intellectual property registration and promotion, particularly for informal enterprises producing affordable products.

Informal Innovation and Economic Development



Inclusive Innovation

Informal enterprises can engage in "inclusive" or "frugal" innovation, developing affordable products and services that



Contribution to Development

By fostering innovation in the informal sector, policymakers can unlock the potential of informal enterprises to



Overcoming Challenges

Addressing the unique challenges faced by informal enterprises, such as access to capital and technology, is crucial to enabling innovation

Conclusion

Key Findings

This study highlights the complex relationship between innovation, formalization, and growth in the informal SME sector in Cameroon. While technological innovation can facilitate formalization, product innovation can hinder it. Innovation also has varying impacts on job creation, with R&D and product innovation being

Policy Recommendations

The findings suggest the need for targeted policies that promote the adoption of technological innovations, enhance intellectual property protection, and improve access to financing for informal SMEs in Cameroon and similar developing contexts.

Future Research

Further research is needed to explore the nuanced relationship between innovation and formalization, as well as the potential of innovative financing mechanisms to support informal sector growth and development.



Thank You

Questions?

We welcome any questions or comments you may have

Future Research Directions

1

Cross-Country Comparisons

Conducting comparative studies across multiple African countries could provide deeper insights into the role of innovation in informal sector formalization and growth.

2

Measuring Firm Performance

Exploring the impact of innovation on a wider range of firm performance indicators, beyond just job creation, could yield a more comprehensive understanding of its effects.

3

Innovative Financing Mechanisms

Investigating the potential of innovative financing models, such as venture capital, to support innovation and growth in the informal sector could offer valuable policy recommendations.