



آراء فى القضايا الاقتصادية المعاصرة

التحفيز السلوكي كمدخل لدمج القطاع غير الرسمي
في الاقتصاد المصري

عدد رقم (٣) - مارس ٢٠٢٥

CONTEMPORARY ECONOMIC PERSPECTIVES

Behavioral Nudges: Driving the Formalization
of Egypt's Informal Sector

No. 3 - March 2025





Economics Department

CONTEMPORARY ECONOMIC PERSPECTIVES

Behavioral Nudges: Driving the Formalization of Egypt's Informal Sector



1. Background

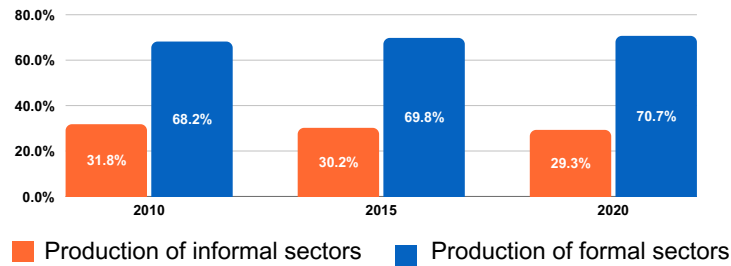
The Egyptian economy has struggled with the persistent growth of the informal sector over recent decades, a trend that continues today. In 2024, over 50% of non-agricultural employment was in the informal sector. Although the economy has grown from a 2% annual rate in 2011 to 3.8% in 2023, and despite various formalization initiatives by the government, the size of the informal sector has not declined. The rate of formal job creation remains insufficient to absorb the influx of new labor market entrants, leaving the informal sector as the primary refuge for excess labor.

The International Labour Organization (ILO) defines the informal sector as comprising all unregistered production units engaged in producing goods or services for sale or profit, utilizing unregistered or unlicensed production factors, or operating outside the regulatory and legal frameworks of the state. Similarly, Egyptian Law No. 152 of 2020 identifies informal businesses as those lacking operating license, commercial or industrial registration, or a tax card—placing them outside the scope of government regulation.

Egypt's informal sector presents challenges—unregulated products, tax losses, and poor working conditions—but also opportunities. Formalizing these businesses can boost GDP, expand the tax base, create jobs, and enhance exports. A behavioral economics approach is key to designing effective policies that encourage this transition.

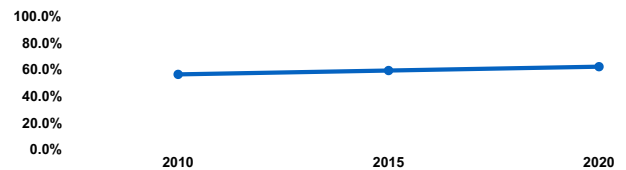
The size of the informal sector in Egypt's Economy (2010-2020)

Figure 1: Production of the formal and informal sectors as % of GNP



Source: Author's calculations based on ILO Data

Figure 2: Employment outside the formal sector (% of total employment)



Source: Author's calculations based on ILO Data

2. Behavioral Economics and Nudges to Drive Change

Behavioral economics explores how individuals make economic decisions by integrating insights from economics, psychology, and sociology. Unlike traditional economics, which assumes decisions are based on rational cost-benefit analyses, behavioral economics recognizes that choices are often shaped by bounded rationality—limitations in information, time, and context.



CONTEMPORARY ECONOMIC PERSPECTIVES

Behavioral Nudges: Driving the Formalization of Egypt's Informal Sector

Psychological, social, emotional, and cultural factors, along with cognitive biases, significantly influence behavior. To guide better decision-making, behavioral economics employs interventions known as "nudges" that subtly shape perceptions and preferences.

How Does Behavioral Economics and the Nudge Approach Work?

Nudges are policies designed to subtly and systematically influence individuals' behavior, encouraging them to adopt certain preferences without restricting their freedom of choice. In other words, nudges guide individuals toward making better decisions for themselves and society without imposing rigid regulations or substantial financial incentives. This approach relies on a thorough understanding of decision-making processes. Rather than directly altering individuals' choices, the goal is to modify the decision-making environment in a way that naturally leads to behavioral changes. While behavioral economics is a relatively recent field and its practical applications are still developing, it holds significant potential to support public policies and social development.

Public health example, the Ministry of Health could collaborate with shopping centers to place fruits and vegetables in prominent display areas, encouraging healthier eating habits and reducing the prevalence of non-communicable diseases such as diabetes, hypertension, and heart disease.

The Importance of Behavioral Economics and Nudges in Policymaking

- **Enhancing Policy Effectiveness:** Nudges can improve the effectiveness of public policies in areas such as health, education, and the environment.
- **Modifying Undesirable Behaviors:** Nudges can be used to encourage positive behaviors and reduce negative ones.

- **Supporting Sustainable Development Goals (SDGs):** Nudges can help achieve SDGs by steering individuals toward more sustainable choices.

In the realm of savings and financial planning, the Ministry of Finance, in partnership with banks, could streamline the process of enrolling in automatic retirement savings plans to promote higher savings rates. In environmental conservation, the government could implement labels that highlight the environmental impact of consumption choices, thereby encouraging more sustainable behaviors.

3. Behavioral Economics and Formalization

Integrating Egypt's vast informal sector into the formal economy remains a significant policy challenge. This issue explores how behavioral economics, specifically, nudges and behavioral interventions, can reshape perceptions and motivate informal business owners to formalize their enterprises.

A survey experiment was conducted with 240 informal business managers across three districts of greater Cairo: Obour, Sixth of October, and Shorouk. Using binary logistic regression for analysis, participants were divided into three groups: a control group and two treatment groups.

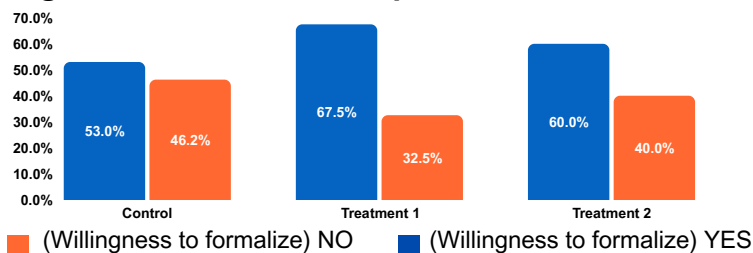
The first treatment group received a financial nudge, informing them that the Micro, Small, and Medium Enterprise Development Agency (MSMEDA) offers financing of EGP 10,000 to EGP 40,000 without requiring an official license, and up to EGP 100,000 for those with a temporary business license. They were then asked if this would influence their decision to register their business.

The second treatment group received a cognitive nudge, highlighting that MSMEDA could connect them—free of charge—with large institutions that purchase their products for further production processes. They were similarly asked if this would affect their decision to formalize.

The results were clear: participants exposed to cognitive nudges were more inclined to consider formalizing their businesses compared to the control group. These nudges made the benefits of registration more tangible and accessible, encouraging a reassessment of long-held biases against formalization.

Behavioral interventions were designed to make information more accessible and straightforward, emphasizing the benefits of business registration. By doing so, they helped informal business owners reassess their cognitive biases toward the formal economy, ultimately influencing their decision to integrate into the formal sector.

Figure 3: Result of the experiment



4. Policy recommendations

The proposition to the Egyptian government is to implement the following measures to encourage the formalization of Egypt's informal economy:

1. Designing Specialized Government Initiatives:

■ **Survival-oriented informal businesses:**

Reducing registration fees, offering temporary tax exemptions, providing free training programs to enhance business management skills post-formalization, and assist limited or no education entrepreneurs in navigating the registration process and business management.

■ **Growth-oriented informal businesses:**

Reducing the cost of accessing market information, offering low-interest loans to support business growth, and providing tax incentives to encourage tax compliance.

2. Promote Success Stories: Share case studies of successful government financing programs to inspire young, risk-averse entrepreneurs to formalize.

3. Awareness Campaign: Highlight MSMEDA's services and emphasize its geographic presence across Egypt through social media, including links to its website.

4. Mobile Application for Knowledge Sharing: It is proposed to launch a new MSMEDA app to provide business owners with updates on training courses, tax services, feasibility studies, and support programs, along with real-time inquiry support.

References:

- Benhassine, Naji & McKenzie, David & Pouliquen, Victor & Santini Massimiliano. (2018) "Does Inducing the Informal Firms to Formalize Make Sense? Experimental Evidence from Benin" *Journal of Public Economics*. Volume 157. Pages 1-14.
- CAPMAS Database 2023, <https://www.capmas.gov.eg/>
- El-Haddad, A., & Gadallah, M. M. (2021). "The Informalization of the Egyptian Economy (1998–2012): A Driver of Growing Wage Inequality." *Applied Economics*, 53 (1), 115-144.
- Ghisellini, F. & Chang, B. (2018) "Behavioral economics: Moving forward" Palgrave Mcmillan.

This issue of "Contemporary Economic Perspective" has been prepared based on Dr. Rania Salahaldin Moaz, Assistant Professor at the Faculty of Business Administration of the Ahran Canadian University, PhD thesis entitled "The Use of Behavioral Nudges in the Formalization of the Egyptian Informal Sector", which was developed, and published in 2023.

The contents of this publication are the sole responsibility of the researcher. The findings, interpretations, conclusions, and opinions expressed in this series do not necessarily express the views of the and can in no way be taken to reflect the views of the Department of Economics at the Faculty of Economics and Political Science, Cairo University but are the responsibility of the author(s).

About **CONTEMPORARY ECONOMIC PERSPECTIVE**: The series aims to present diverse viewpoints on contemporary economic issues and delve into multiple perspectives to enhance the understanding of various modern economic topics.

All rights reserved. No part of this publication may be reproduced in any form or by any means, electronic or mechanical, including information storage and retrieval systems, without written permission from the publisher. Copyright © Department of Economics, Faculty of Economics and Political Science, Cairo University 2025.

Photo Credit: AFP - Marwan Naamani