Informality, Productivity, and Financial Inaccessibility:

A Study of Selected APO Members

Asian Productivity Organization

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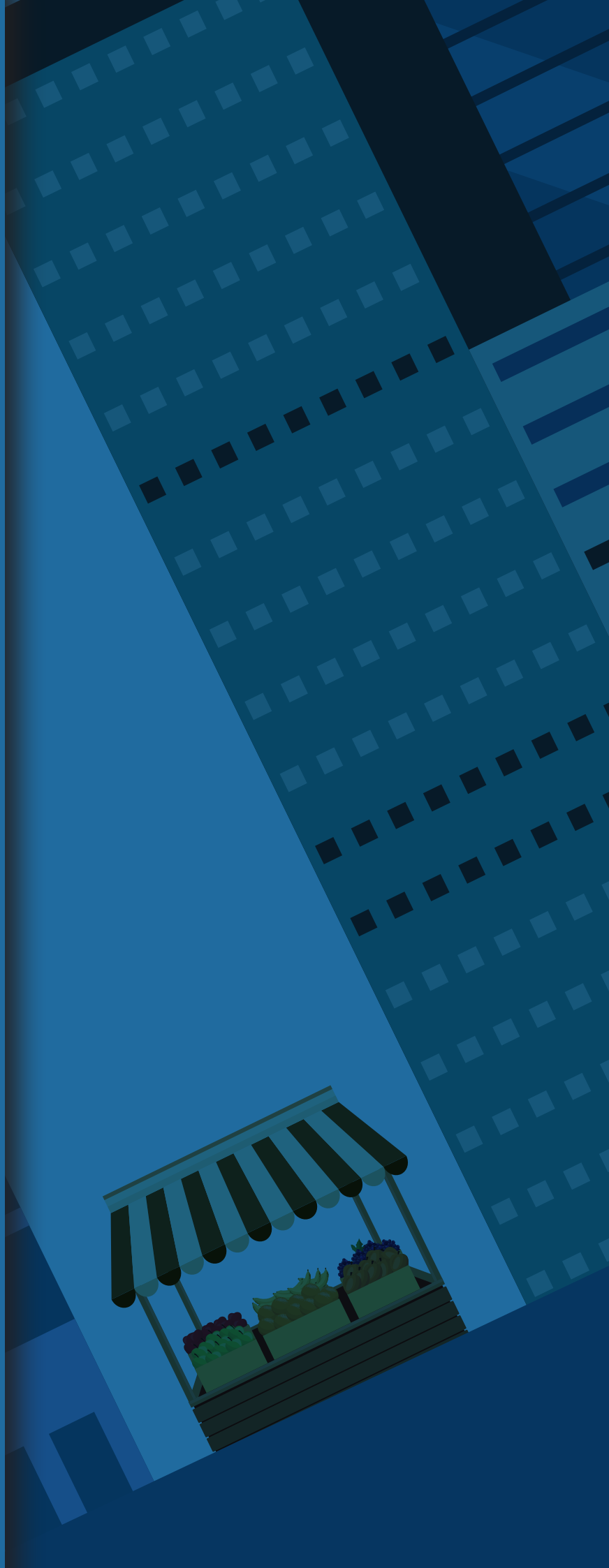

INFORMALITY, PRODUCTIVITY, AND FINANCIAL INACCESSIBILITY: A STUDY OF SELECTED APO MEMBERS

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INFORMALITY, PRODUCTIVITY, AND FINANCIAL INACCESSIBILITY:
A STUDY OF SELECTED APO MEMBERS

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FOREWORD

The informal sector plays a crucial yet often underappreciated role in the economic landscape of many Asia-Pacific countries. Characterized by small, unregistered businesses, unregulated employment, and limited access to formal financial services, this sector is a double-edged sword. On the one hand, it provides livelihoods for millions of people, particularly in regions where formal employment opportunities are scarce. On the other hand, it poses significant challenges to productivity growth, financial inclusion, and overall economic development. This duality is particularly pronounced in the Asia-Pacific region, where informality accounts for a significant share of economic activity.

The Asia-Pacific region grapples with high levels of informality, encompassing a vast segment of the population who rely on informal employment and enterprises for their livelihoods. The globalized economy, coupled with recent shocks such as the COVID-19 pandemic, has exacerbated these challenges and reinforced the persistence of informality as a structural feature of developing economies. The pandemic widened financial inaccessibility in the informal sector as formal financial institutions often shy away from it due to perceived risks and costs. Addressing these financial barriers is essential for unlocking the potential of informal enterprises, enabling them to overcome size-related market failures and become more competitive.

This research report, *Informality, Productivity, and Financial Inaccessibility: A Study of Selected APO Members*, delves into these complex dynamics and provides a nuanced understanding of how the informal sector operates and its implications for productivity and financial inclusion. It not only deepens our understanding of the informal sector but also lays the groundwork for policies that can transform its vulnerabilities into strengths. This research is both timely and critical as policymakers, economists, and development practitioners grapple with the dual goals of fostering economic growth and ensuring that growth is inclusive and sustainable.

The APO extends gratitude and appreciation to all the experts who contributed to this report, led by Chief Expert Dr. Seema Joshi, Professor of Economics, Department of Commerce, Kirori Mal College, University of Delhi, India, and national experts from Bangladesh, Cambodia, Fiji, India, Lao PDR, Malaysia, Mongolia, Pakistan, Sri Lanka, and Turkiye. We hope that this publication will stimulate meaningful dialogue and inspire concerted efforts to address the challenges and opportunities within the informal sector, paving the way for a brighter, more inclusive future for all.

Dr. Indra Pradana Singawinata
Secretary-General
Asian Productivity Organization
Tokyo

INFORMALITY, PRODUCTIVITY, AND FINANCIAL INACCESSIBILITY NEXUS: AN INTRODUCTORY NOTE

Professor (Dr.) Seema Joshi

Setting the Scene

One of the biggest issues standing in the way of economic progress in many developing countries in the world, including those in the Asia-Pacific region, is the prevalence of informality. The Asia-Pacific region ranks second with 68.2% of the population employed in the informal sector, following sub-Saharan Africa, which is recorded at 85.8% [1]. Not only is the incidence of informality[1] high in these regions but there is also a gender bias in informality [2–3]. Studies[2] [4–7] empirically show that while the informal sector and informal economy significantly contribute to production, employment, and income generation, it also has the potential to thwart growth. In the aftermath of globalization, and more recently with the onset of COVID-19 pandemic [5–6, 8], informality does not seem to be a passing phenomenon, as the development economic discourse suggests [9]. Apparently, it is likely to stay here [8].

It is a widely accepted fact across countries that informal enterprises and workers are less productive than their formal counterparts (enterprises and workers), which further widens the productivity gap. This low productivity can lead to a cascade of issues that often lead to weaker economic outcomes, such as lower per capita income, low levels of human development, and greater poverty. Therefore, there is a need to make productivity growth more inclusive by providing a level playing field for incumbents of both informal and formal sectors[3]. The ILO terms productivity as a "key to addressing today's multiple crises"[4] and "a linchpin of a just transition" [10].

Since the informal sector is characterized by enormous heterogeneity and the root causes of informality (and low productivity) are multifaceted, the recommendation to formalize the informal sector to raise productivity seems overly simplistic[5]. This is especially true when most of their units and workers are petty producers, such as self-employed and casual workers [11]. Given that the formal sector dominates in controlling transactions and shaping contracts [7], and the creation of an ecosystem with solid institutions, laws, regulations, infrastructure, and education is a time-consuming process [4], it is

1 According to an estimate, informal firms constitute of about 74% of MSMEs globally and in developing countries, accounting for around 77% of all MSMEs (IFC, 2013). The incidence of informal employment stood at 58% (2 billion) in 2022 (see: https://ilostat.ilo.org/assessing-the-current-state-of-the-global-labour-market-implications-for-achieving-the-global-goals/).

2 Some studies [5–7] focus on Asian/Asia-Pacific countries, and many of them are members of Asian Productivity Organization (APO).

3 Another option is to formalize them. The ILO suggests that the transition from informal to formal economy be facilitated by the countries by introducing diverse strategies which align with their national circumstances (see: https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_412833.pdf).

4 In purchasing power, well-being, and environmental sustainability (see : https://voices.ilo.org/podcast/tackling-the-productivity-challenge).

5 In fact, it is believed that "formalisation will naturally follow when informal enterprises become more productive by capital investment, and the workers by education and skill formation" [11].

suggested that the informal sector should be made more competitive by extending certain advantages, such as credit.

Financial inaccessibility and the credit gap are often termed "classic constraint"[6] that disproportionately affect informal firms, particularly women. The COVID-19 pandemic, its ensuing economic crisis, and greater credit management risk in troubled times have further widened the financing gap for informal sector enterprises, as formal institutions, like banks, shy away from this segment. These segments are costly and, at the same time, challenging to serve. But improving financial and credit access or closing the credit gap can help them tackle several barriers that are size-induced. These barriers are termed as "size-induced market failures" and affect the competitiveness of enterprises. Market failures occur in four key areas: lack of access to credit, technology, markets (domestic and international), and failure in securing skilled workers [12].

One of the biggest hurdles in accessing credit from formal sources is the lack of collateral [13–14], which constrains operations and growth. The problem is more pronounced for women-owned enterprises [15]. Greater obstacles faced in accessing credit hurt their productivity [16], leading to slower growth. The issue of financial inaccessibility faced by these informal enterprises and workers has drawn the attention of policymakers and regulators, making it a problem that needs to be addressed.

The present study offers important contribution to the literature on informal sector productivity. Among other things, it sheds light on the underdocumented impact of lack of financial/credit access on informal sector productivity in selected Asia-Pacific countries, specifically the Asian Productivity Organization (APO) member economies. Understanding the relationship between informality, productivity, and financial/credit accessibility in the 10 APO member economies participating in this project is a crucial aspect of this study.

Objectives

Given the heterogeneity of the informal sector, country-specific studies were commissioned by the APO from its selected member economies who were keen to contribute to the project. National experts from each member economy aimed to achieve the following key objectives:

i) Examine the relationship between the informal sector/economy and productivity.

ii) Examine the association, if any, between informal sector productivity and financial/credit accessibility.

iii) Identify the sources of funds for informal sector firms and workers and the challenges faced in accessing finance/credit.

iv) Briefly examine policy interventions and suggest a way forward.

Nature of the Study and Research Methodology

This study on the "informality, productivity, and financial inaccessibility" is a multicountry analysis of the Asia-Pacific region. It covers 10 member economies of the Asian Productivity Organization (APO), namely: Bangladesh, Cambodia, Fiji, India, Lao PDR, Malaysia, Mongolia, Pakistan, Sri Lanka, and Turkiye.

Given the heterogeneity in the informal sector, lack of uniformity in defining this sector, and data constraints, each country report adds value by providing a fresh approach to the existing problem of informal sector productivity and financial inaccessibility. National experts from each of these 10

6 See Das (2008).

economies have assessed the aforementioned objectives by utilizing diverse datasets from sources, such as World Bank Enterprises Survey, APO Productivity Data Book, and other national data sources pertaining to each country and sometimes combining them with primary surveys and case studies. They have employed appropriate statistical techniques to shed new light to the subject.

Chapter Structure and Arrangement

This publication comprises 11 chapters. Following the introductory note, the subsequent country reports (Chapters 1–10) have been arranged alphabetically. The last chapter (Chapter 11) summarizes the findings from all the member reports compiled by the national experts and offers policy recommendations.

CHAPTER 1

BANGLADESH

Abstract

Bangladesh has witnessed notable economic growth in recent decades. The informal economy, which is mainly made up of micro and small enterprises, encompasses a significant portion of the labor force, particularly less skilled individuals in both urban and rural areas. Total GDP shows 43% represent the informal sector, which dominates economic activity in terms of its contribution to GDP and employment. The workforce in the informal sector is clearly less productive than in the formal sector, highlighting the urgent need to transition the workforce to the formal sector for higher productivity. The informal sectors face challenges, such as low productivity, limited access to capital, inadequate skills, training, infrastructure, and technology. Collaborative efforts involving the government, private sector, and development organizations are essential to create an enabling environment for informal businesses to thrive. Understanding the dynamics of the informal economy is crucial for shaping policies that promote inclusive growth, enhance productivity, and contribute to Bangladesh's sustainable economic development. Bangladesh can harness the full potential of this dynamic economic segment to drive overall productivity growth and contribute to its long-term economic prosperity. This paper explores the intricate relationship between the informal economy and productivity growth in Bangladesh. The first case study, CARE Bangladesh's initiative, highlights innovative solutions, like the A-Card program, which integrates smallholder farmers into the formal banking system by providing low-interest, collateral-free loans with flexible repayment terms. The second case study, BRAC Bangladesh's initiative, examines scaling up crop insurance as a means to tackle the global food crisis with a focus on financial accessibility for smallholder farmers. These initiatives leverage technology and collaboration among farmers, local market actors, and financial institutions to enhance financial accessibility and agricultural productivity.

Introduction

The informal sector, not regulated by the government, is often hidden, unregistered, and not fully legal, making it nontaxable. Many of the terms used to describe the "informal" sector essentially highlight what it is not. It should be noted that there is no generally agreed definition of the informal economy due to its complexity. However, several recent research and exploration of the sector has led to a more nuanced approach, defining its broad and specific subjects. The informal sector that mainly consist of small and microenterprises lacks a uniform definition due to its varied forms and situations across the country. Informal workers are less likely to receive pensions, social security, and termination notices compared to formal workers [1].

The informal sector constitutes a significant part of employment in Bangladesh's economy. The sector is often associated with lower productivity and potentially trapping the economy in low development levels. This study will analyze informal employment and its link to productivity performance at an aggregate level.

The role of the informal sector in economic development has been a subject of debate. By the 1980s, the focus of discussions had expanded to include the changes that were taking place in developing countries like Bangladesh. The increased presence of the informal sector sparked a growing interest in

statistics among international organizations. The 15th International Conference of Labor Statisticians in 1993 defined the informal sector as all unregistered or unincorporated enterprises below a specific size, including: (i) microenterprises owned by informal employers who hire one or more employees on a continuous basis; and (ii) own-account operations owned by individuals who may employ contributing family workers and employees on an occasional basis [2]. Bangladesh's sixth Five Year Plan (SFYP) 2011–2015 recognizes the vulnerability of workers in the informal economy and states "This call for changing the structure of employment by withdrawing labor from low productivity agriculture and informal jobs (also known as disguised unemployment) to higher productivity jobs in the manufacturing and formal services" (SFYP document, March 2011, pg. 46).

The informal sector is recognized as a reservoir of indigenous entrepreneurs, technology, and skills. Its role is vital in generating employment, optimizing the utilization of scarce resources, and expanding nonagricultural employment. It also provides income opportunities to the urban poor, supplies basic goods and services at affordable prices, and stimulates innovation and adaptation of technology, highlighting its significance as a driver of economic growth. Addressing the challenges associated with the informal sector and finding ways to integrate it into the formal economy are crucial considerations for policymakers, researchers, and social activists. Therefore, it is necessary to include the informal sector in discussions on productivity growth.

According to the 2022 Land Force Survey of the Bangladesh Bureau of Statistics (BBS), informal employment represents 84.9% of the working population nationally; 88.2% in rural areas and 74.8% in urban areas [3]. Women (91.3%) are more likely to be engaged in informal employment than men (86.6%); women are generally unpaid family workers and in the private household sector. Workers in formal employment are paid better than those in informal arrangements with significant wage differentials between the two sectors. Informal workers have fewer benefits than those in formal employment, except for free meals and free lodging. Self-employed and unpaid workers make up a little over 20 million of informal workers but less than 2 million enjoy benefits [4].

In South Asia, the informal economy accounts for an estimated 80% to 90% of the labor force. The large scale of precarious employment presents a challenge to a stable and sustainable development as the workforce in this sector is typically engaged in activities that are unregulated, unrecognized, and "low productivity" in nature [5].

Methodology

The research methodology is primarily qualitative, involving a literature review and secondary study reports from both public and private sources. Apart from these, case study analyses have been conducted to enhance the study's depth. Overall, all gathered data and findings have been triangulated to make the report more substantive.

Literature Review

This literature review provides an overview of key findings and insights from existing research on the informal economy and productivity growth in Bangladesh. The concept of the informal sector has evolved over time. In the 1950s and 1960s, there was a common view that the traditional sector, including petty traders, small producers, and casual job workers, would eventually be absorbed into the formal economy during economic growth.

The informal sector is not a new concept; it encompasses activities not covered by laws and relevant regulations, serving more as a descriptive definition, rather than a formal or statistical one. The informal economy in Bangladesh has been the subject of numerous studies and research initiatives, aiming to understand its dynamics and role in the country's productivity growth.

Recent studies have consistently highlighted the substantial size and significance of the informal economy in Bangladesh. It employs a large portion of the labor force, particularly in rural areas, significantly contributing to employment levels and income generation (Amin, 2009).

The major characteristics of the informal sector in Bangladesh are similar to those in other developing countries and include: (i) unregistered, small-scale operation; (ii) low productivity; (iii) low income generation; (iv) limited access to institutional credit; (v) employment based mainly on kinship, personal/social relations, and casual employment rather than contract basis; and (vi) a general lack of recognition or regulation by the government (Selim Raihan, 2010).

The informal economy serves as a vital safety net for the poor and vulnerable. Research indicates that it plays a critical role in poverty reduction by providing livelihoods to marginalized populations, especially in the absence of formal job opportunities (Khan, 2015).

Several studies have pointed out the productivity challenges faced by informal enterprises in Bangladesh, including limited access to financial resources, lack of skills and training, and inadequate infrastructure (Rahman and Hasan, 2017).

Moreover, the informal economy is susceptible to external shocks, such as natural disasters, which can disrupt economic activities and hinder productivity growth (Chowdhury, 2018).

Research has documented various government initiatives and policies supporting the informal economy, including microcredit programs, skill development initiatives, and efforts to promote entrepreneurship among informal sector workers (ILO, 2020).

Studies have assessed the impact of these policies on productivity and livelihoods in the informal sector (Bhattacharjee et al., 2019).

Researchers have examined the transition of informal enterprises into the formal sector, showing that formalization can lead to increased productivity by granting businesses access to credit, technology, and government support (Rashid et al., 2016).

Research also explores the gender dynamics of the informal sector, highlighting the role of women in various informal activities and the need for gender-sensitive policies to enhance productivity and well-being (Kabeer, 2004).

The resilience of the informal economy during economic downturns and crises, such as the global financial crisis and the COVID-19 pandemic, has been a subject of study. Research suggests that the informal sector can act as a buffer, absorbing shocks and helping individuals cope during challenging times (Mahmud et al., 2020).

Concept of Informal Economy and Its Contribution

By the early 1970s, the Kenya Employment Mission of the ILO recognized that the traditional sector had not only persisted but had even expanded to include profitable and efficient enterprises as well as marginal activities. To reflect this phenomenon, the Kenya Mission decided to use the term "informal sector" instead of "traditional sector" to encompass the range of small-scale and unregistered economic activities. Since then, the term "informal sector" has become popular in economic literature.

The definition of the informal sector has evolved over time. It includes activities in urban and rural economies, such as micro and small-scale enterprises in crafts, trade, restaurants, open-food stalls, transport, and repair and maintenance. These activities are often carried out from temporary structures, pavements, and other open spaces. The issue can also be approached from the perspective of employment status: some employees in the formal sector may exhibit characteristics associated with the informal sector. Workers in the informal economy may not have formal employment contracts, job security, or access to social security benefits. Additionally, businesses in the informal sector may not

pay taxes or comply with labor and environmental regulations. While the informal economy provides livelihoods for a significant portion of the global population, it also presents challenges, such as job insecurity, limited access to social services, and difficulties in enforcing labor standards.

According to the ILO, the informal economy comprises workers in the informal sector as well as informally employed workers in formally established enterprises. An individual can be employed informally in a formally registered business or regulated economic sectors. Formally employed workers in the formal sector have written employment contracts and their employment is subject to labor legislation, social security provisions, and collective bargaining agreements.

The contribution of the informal economy to GDP and employment varies across countries and regions. The informal economy generally consists of economic activities that are not regulated by the government, and participants often operate outside the legal and regulatory frameworks. This sector often plays a crucial role in providing employment opportunities, especially for those who may not have access to formal job markets. While it provides the advantage of employment flexibility in certain economies, a large informal sector is associated with low productivity, reduced tax revenues, poor governance, excessive regulations, poverty, and income inequality.

However, the informal sector provides critical economic opportunities for the poor and has been expanding rapidly since the 1960s. Integrating the informal economy into the formal sector poses an important policy challenge for Bangladesh. Unlike the formal economy, the activities of the informal economy are often not included in a country's GNP or GDP.

The informal sector constitutes the dominant economic activity in Bangladesh in terms of their contribution to GDP and employment. Studies have shown that about 80% of Bangladesh's labor force work in the informal economy, and the informal sector contributes about 64% to GDP with the highest contribution in agriculture, fisheries, trade, and industry, where capitalization is relatively high. Some argue that integrating the informal economy into the formal sector can lead to increased productivity, better working conditions, and improved economic outcomes.

Definition of Informal Sector and Its Key Statistics in Bangladesh

According to BBS Labor Force Survey 2022, informal employment refers to jobs that generally lack basic social or legal protection or employment benefits. Employees in informal jobs are not subject to national labor legislation, income taxation, social protection, or entitlement to certain employment benefits.

In Bangladesh, informal employment predominates in the labor market. At the national level, it representes 84.9% of the employed population; with 96.6% for females and 78.4% for males. In urban areas, informal employment accounts for 13.16 million (74.8%) while in rural regions, it is 46.64 million (88.2%). Thus formal employment is 15.1% with females comprising 3.4% and males 21.6%. Women make up 20.45 million (98%) of the informal workforce in rural regions, compared to 3.57 million (89.6%) in urban areas. Overall, 59.79 million (84.9%) of the total 70.47 million employed people in the nation work informally [3].

According to Dr. Md. Nazrul Islam, Director of Bureau of Manpower Employment and Training (BMET), "Informal sector is a very significant area of the economy and employment in Bangladesh, particularly for the less skilled people, living both in urban and rural areas. The absence of rights and social protection of the workers is the major drawback involved in it. There are several ways of approaching or defining the informal sector which is mainly made up of micro and small enterprises. The major occupations are street vendors, wage laborers working in small enterprises on a regular, casual or contract basis; unpaid workers, including family workers and apprentices, home-workers, paid domestic workers, day labor in agriculture, day labor in nonagriculture, self-employed in agriculture, self-employed in nonagriculture, unpaid family worker, casual/irregular paid worker, domestic worker in private house, and a smaller number of owners of tiny enterprises. Informal workers

are less likely to receive pension, social protection, and a notice of termination compared to formal workers. Common places of informal work are in farms, markets, bazaar stalls, and trade fairs. Self-employed workers are most likely to be single regardless of legal status. These activities are usually conducted without proper recognition from the authorities. Labor market in Bangladesh constitutes three types of market: formal, rural informal, and urban informal. The formal market is operated under the legal framework that follows the presence of contractual employment relationships, labor laws and regulations, and unions. Protective labor regulations and unions do not cover the informal sectors, which dominate the labor market in Bangladesh. Workers under informal employment arrangements or those working in informal enterprises are more vulnerable to economic and social shocks" (Brief on Informal Sector - Introduction, p.1).

"Based on a labor force survey conducted in 2010, informal employment in Bangladesh is estimated at about 89% of the total number of jobs in the labor market. It is more prevalent in the rural areas than in urban areas. Women are also more likely to be under informal employment arrangements. The informal sector accounted for more than 40% of the total gross value added of Bangladesh in 2010, with the highest contributions in agriculture, fishery, trade, and industries where capitalization is relatively lower" [6].

However, if the status of labor force in recent times is observed, then it is quite significant in respect of changes made for both unemployed and employed population. The following labor force survey findings of the last quarter of 2023 provides the most recent status on the same.

Recent labor force survey findings from the fourth quarter of 2023 provide updated statistics. The total labor force was 73.46 million, with 48.01 million male and 25.45 million female. In Bangladesh, the labor force comprises both the active labor force and unemployed population over 15 years old. In the last quarter of 2022, the labor force was slightly lower at 73.35 million. During the same quarter of October–December 2023, the total number of employed labor was 71.11 million (3.2% rate of unemployment) with 46.44 million males (3.27% rate of unemployment) and 24.67 million female (3.06% rate of unemployment). Sector-wise, the employed population was 31.78 million in agricultural, 12.49 million in industry, and 26.84 million in services (Source: Quarterly Labor Force Survey 2023, BBS, Government of Bangladesh).

According to the BBS report for October–December 2023, Bangladesh's active able-bodied population over 15 years old was 120.82 million with 59.82 million male and 61 million female, the latter being slightly higher than the former [7].

TABLE 1.1

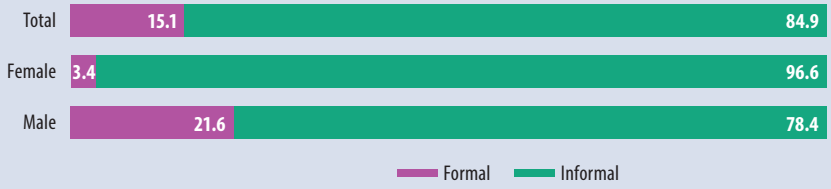
EMPLOYMENT DISTRIBUTION BY SECTOR, GENDER, AND AREA FOR POPULATION AGED 15 AND OLDER

Sector of Employment	(in '000)								
	Rural			Urban			Bangladesh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Formal	5,817	422	6,239	4,020	414	4,434	9,837	836	106
Informal	26,183	20,454	46,637	9,592	3,566	13,158	35,775	24,020	59,795
Total	32,000	20,876	52,876	13,612	3,980	17,592	45,612	24,856	70,468

Source: Labor Force Survey 2022, Bangladesh Bureau of Statistics, Bangladesh (pg. 106–107) [3].

FIGURE 1.1

EMPLOYMENT DISTRIBUTION BY SECTOR, GENDER, AND AREA FOR POPULATION AGED 15 AND OLDER (IN %)

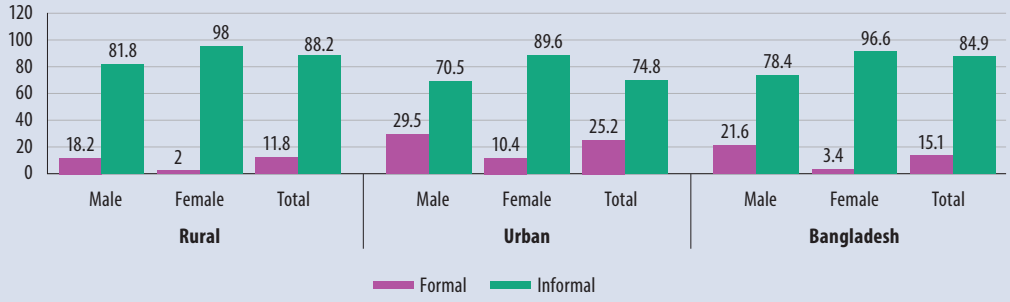


Source: Labor Force Survey 2022, Bangladesh Bureau of Statistics, Bangladesh (pg. 106–107) [3].

Figure 1.1 shows the percentage distribution of informal employment by gender, showing a higher percentage of females (96.6%) working informally compared to males (78.4%).

FIGURE 1.2

EMPLOYMENT DISTRIBUTION BY SECTOR, GENDER, AND AREA (IN %)



Source: Labor Force Survey 2022, Bangladesh Bureau of Statistics, Bangladesh (pg. 106–107) [3].

TABLE 1.2

INFORMAL EMPLOYMENT DISTRIBUTION BY SECTOR, GENDER, AND AREA FOR POPULATION AGED 15 AND OLDER

Age Group	(in '000)								
	Rural			Urban			Bangladesh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Informal Employment									
15–29	7,496	10,954	18,450	3,070	1,351	4,421	10,566	12,305	22,871
30–64	16,954	9,275	26,229	6,171	2,160	8,331	23,125	11,435	34,560
65+	1,733	225	1,958	351	55	406	2,084	280	2,364
Total	26,183	20,454	46,637	9,592	3,566	13,158	35,775	24,020	59,795

Source: Labor Force Survey 2022, Bangladesh Bureau of Statistics, Bangladesh (pg. 107) [3].

Table 1.3 displays the percentage of formal and informal employment among the total employed in the three main economic sectors, namely agriculture, industry, and services, as the following [3]:

- The agricultural sector employs 45.4% of the workforce, with formal employment at 1.4% and informal employment at 44%
- In the industry sector, formal employment is 1.6% and informal employment at 15.4%
- In the service sector, formal employment is 12.1% and informal employment at 25.5%

TABLE 1.3

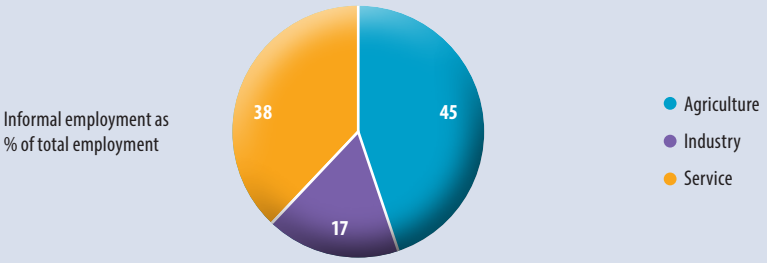
EMPLOYED POPULATION BY SECTOR, GENDER, AND AREA FOR POPULATION AGED 15 AND OLDER

Sector of Employment	(in '000)								
	Rural			Urban			Bangladesh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Agriculture	895	29,467	30,362	115	1,512	1,627	1,010	30,979	31,989
Industry	626	6,500	7,126	509	4,344	4,853	1,135	10,844	11,979
Service	4,718	10,670	15,388	3,810	7,302	11,112	8,528	17,972	26,500
Total	6,239	46,637	52,876	4,434	13,158	17,592	10,673	59,795	70,468
Informal employment as percentage of total employment									
Agriculture	1.3	41.8	43.1	0.2	2.1	2.3	1.4	44	45.4
Industry	0.9	9.2	10.1	0.7	6.2	6.9	1.6	15.4	17
Service	6.7	15.1	21.8	5.4	10.4	15.8	12.1	25.5	37.6
Total	8.9	66.2	75	6.3	18.7	25	15.1	84.9	100
Row %									
Agriculture	2.9	97.1	100	7.1	92.9	100	3.2	96.8	100
Industry	8.8	91.2	100	10.5	89.5	100	9.5	90.5	100
Service	30.7	69.3	100	34.3	65.7	100	32.2	67.8	100
Total	11.8	88.2	100	25.2	74.8	100	15.1	84.9	100

Source: Labor Force Survey 2022, Bangladesh Bureau of Statistics, Bangladesh; (pg. 110) [3].

FIGURE 1.3

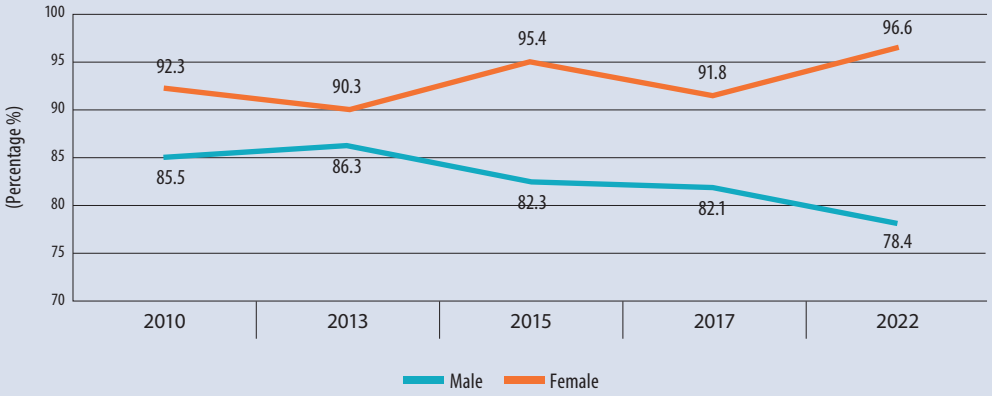
PERCENTAGE OF INFORMAL EMPLOYMENT IN AGRICULTURE, INDUSTRY, AND SERVICE SECTORS



Source: Labour Force Survey 2022, Bangladesh Bureau of Statistics, Bangladesh (pg. 111) [3].

FIGURE 1.4

BANGLADESH'S PROPORTION OF INFORMAL EMPLOYMENT BY GENDER



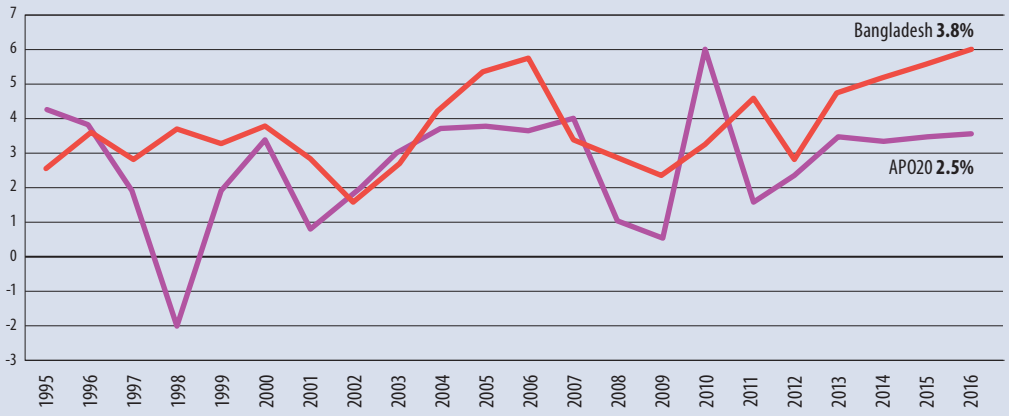
Source: Labour Force Survey 2022, Bangladesh Bureau of Statistics, Bangladesh (pg. 111) [3].

Productivity in the Informal Sector in Bangladesh

Productivity expert Paul Krugman says, "Productivity isn't everything, but in the long run, it is almost everything." In Bangladesh, productivity issues were not priority areas in the early 1980s, and productivity was neither theoretically nor practically understood in its real context. Bangladesh became a member of the Asian Productivity Organization (APO) in 1984, a decade after gaining independence.

FIGURE 1.5

BANGLADESH'S PRODUCTIVITY GROWTH COMPARED WITH APO20



Source: Bangladesh National Productivity Master Plan FY2021–FY2030 [9].

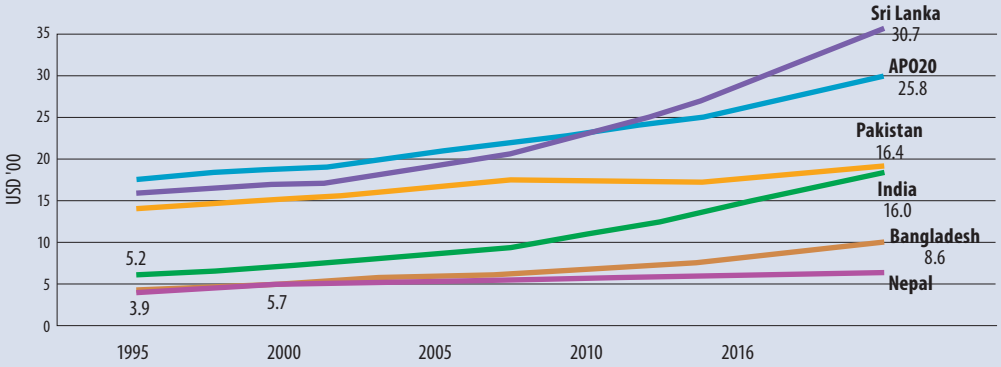
Typically, the demography of a developing country means a large number of young people enter the workforce every year. Poor educational opportunities result in many unskilled job-seekers. Whether productivity is low or high in a sector can be determined by the efficiency of workers, the technology

used, the timeframe of output delivery, and the quality of the output. According to ADB, the informal sector accounted for more than 40% of the total gross value added of Bangladesh in 2010. However, labor productivity in the formal sector is six times higher than in the informal sector [8].

By targeting the 60th year of Bangladesh's independence, the National Productivity Organization (NPO) of Bangladesh made a comprehensive plan called the "Bangladesh National Productivity Master Plan FY2021–FY2030" to implement a high-productivity growth strategy in a holistic manner. From 1995–2016, Bangladesh's productivity grew by 3.8% per annum, higher than the 2.5% for APO20. This was due to Bangladesh starting from a very low productivity level. The 3.8% annual growth raised Bangladesh's productivity level by 2.2 times [9].

FIGURE 1.6

BANGLADESH'S PRODUCTIVITY LEVEL COMPARED WITH OTHER SOUTH ASIAN ECONOMIES



Source: Bangladesh National Productivity Master Plan FY2021–FY2030 [9].

However, in 2016, Bangladesh's productivity was only 33% of that of APO20, placing it in the third-lowest position, just above Cambodia and Nepal. Furthermore, the 3.8% growth was lower than that achieved by India and Sri Lanka, thus widening the productivity gap over time [9].

FIGURE 1.7

AVERAGE PRODUCTIVITY GROWTH 3.8 BETWEEN 1995–2016 (IN %)

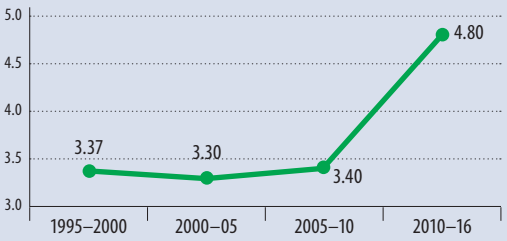


FIGURE 1.8

AVERAGE PRODUCTIVITY GROWTH 4.28 FROM 2017–21 (IN %)

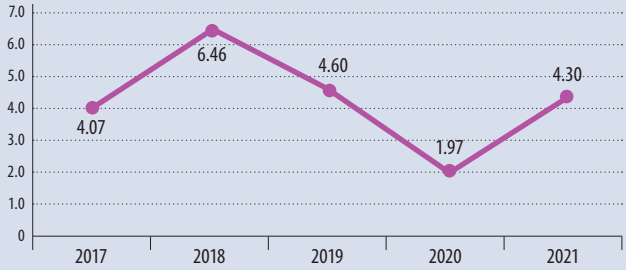


FIGURE 1.9

PRODUCTIVITY GROWTH BETWEEN 1995–2021 (IN %)

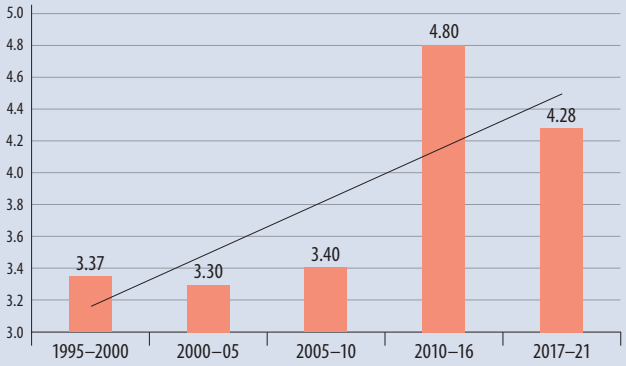
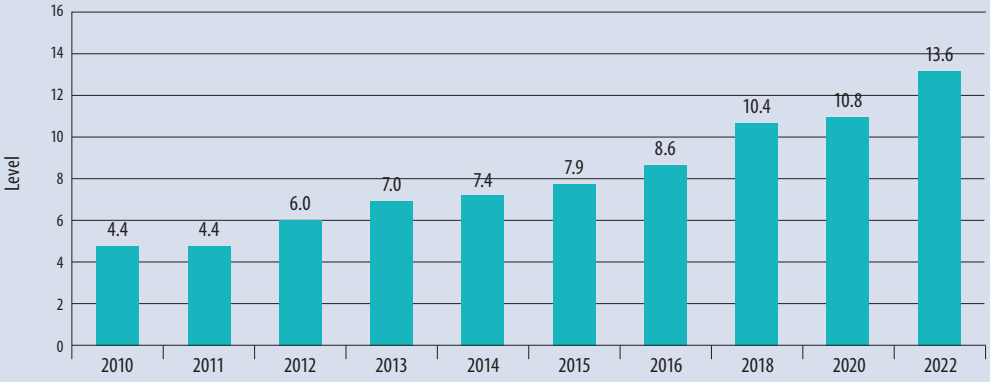


FIGURE 1.10

LABOR PRODUCTIVITY LEVEL BY PER WORKER



Source: APO Productivity Databook 2008–2022 [2].

TABLE 1.4

PERCENTAGE OF FORMAL AND INFORMAL EMPLOYEES

Year	2006	2010	2013	2016	2017	2022
Informal (%)	87.60	87.50	87.40	86.20	85.10	84.90
Formal (%)	12.40	12.50	12.60	13.80	14.90	15.10
Total employer person (million)	47.35	54.46	58.07	59.53	61.53	70.46
Productivity (BDT*)	96,644.57	106,394.66	120,533.20	333,853.12	414,003.30	414,574.75

Source: Labour Force Survey 2006 [10], 2010 [6], 2013 [11], 2016–17 [12], 2022 [3]; Bangladesh Bureau of Statistics, Bangladesh.
**BDT - Bangladeshi currency "Taka".*

TABLE 1.5

BREAKDOWN OF FORMAL AND INFORMAL EMPLOYEES

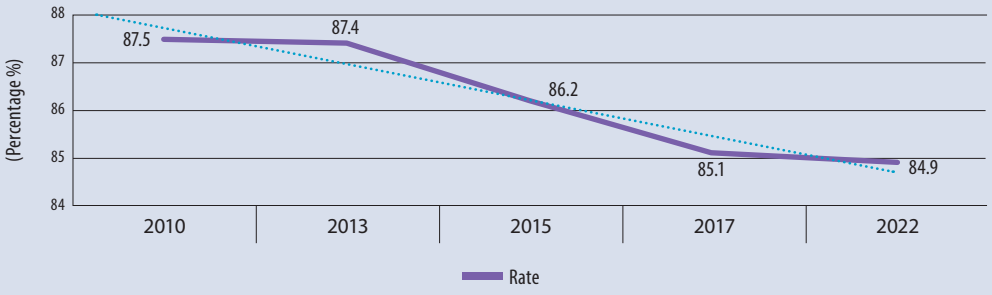
Year	2010	2013	2016	2020	2022
GDP	5,794,253	6,999,363	19,874,276	25,473,623	29,210,937
Informal employee (million)	47.35	50.77	51.33	51.73	59.79
Labor productivity (informal) (BDT*)	122,370.71	137,853.29	387,193.91	492,396.16	488,558.91
Formal employee (million)	6.79	7.30	8.20	9.09	10.67
Labor productivity (formal) (BDT*)	853,728.16	958,948.21	2,423,396.66	2,801,146.14	2,737,669.82

Source: Labour Force Survey 2006 [10], 2010 [6], 2013 [11], 2016–17 [12], 2022 [3]; Bangladesh Bureau of Statistics, Bangladesh.
**BDT - Bangladeshi currency "taka".*

Table 1.5 shows that every year, the number of employees in both informal and formal sectors is increasing, as are GDP and productivity. The informal sector accounted for a significant part of the total gross value added during these years and labor productivity in the formal sector is higher than in the informal sector.

FIGURE 1.11

TRENDS OF INFORMAL EMPLOYMENT RATE BY YEAR



Source: Labour Force Survey 2010 [6], 2013 [11], 2016–17 [12], 2022 [3]; Bangladesh Bureau of Statistics.

The number of employees in the formal sector is increasing, possibly due to initiatives carried out for the formalization of workers' salaries, working processes, and buyer requirements. On the other hand, new informal employment is created due to a lack of awareness or to fulfill quick market demands. The productivity gap between formal and informal sectors was around six times earlier and is now decreasing day by day.

Relationship between the Formal and Informal Economy in Bangladesh

The relationship between the formal and informal economy in Bangladesh is a complex and multifaceted issue. Both sectors play significant roles in the country's economic landscape, and understanding the dynamics between them is crucial for addressing productivity disparities. Here are some key factors contributing to the relation between the two sectors:

i) Regulatory environment

The formal sector is subject to government regulations, taxation, and labor laws. While these regulations provide structure and stability, they can also increase costs and bureaucratic hurdles. The informal sector often operates outside formal regulations, allowing for flexibility but also leading to lower productivity due to a lack of standardized processes and quality control.

ii) Access to financial resources

Businesses in the formal sector generally have better access to finance, technology, and skilled labor. This can enhance productivity through better equipment, training, and innovation. In contrast, limited access to financial resources and technology can hinder productivity in the informal sector, where a lack of formal training often results in lower skills among workers.

iii) Access to infrastructure and technology (ICTs)

Formal businesses typically have better access to modern infrastructure and technology, contributing to higher efficiency and productivity. Limited access to infrastructure and technology can be a barrier to productivity in the informal sector. Adopting modern tools and practices could significantly improve efficiency in informal businesses.

iv) Access to market linkages

Well-established market linkages enable formal businesses to reach a broader customer base and engage in international trade, contributing to higher productivity. Limited market access and a focus on local or informal markets can constrain productivity in the informal sector. Improving market linkages could lead to increased productivity.

v) Education and training

The formal sector benefits from a more educated and skilled workforce, contributing to higher productivity through improved decision-making and problem-solving. Lack of formal education and training can limit the skill set of workers in the informal sector, affecting productivity. Initiatives to enhance education and training could address this gap.

vi) Social protection

Workers in the formal sector often have access to social protection measures, which can contribute to a more stable and productive workforce. Lack of social protection can lead to instability and reduced productivity in the informal sector. Implementing measures to provide social safety nets may help bridge the gap.

Barriers of the Informal Sector Resulting Low Productivity in Bangladesh

The root causes of informality include factors related to the economic context, legal, regulatory, and policy frameworks, and some micro-level determinants, such as low education levels, discrimination, and poverty. Additionally, there is a lack of access to economic resources, property, financial and other business services, and markets. The high incidence of the informal economy is a major challenge for workers' rights and decent working conditions. It negatively impacts enterprises, public revenues, government actions, institutional soundness, and fair competition [5].

Many individuals and small businesses in Bangladesh face barriers to entry into formal markets due to regulatory constraints, bureaucratic hurdles, and high compliance costs. This pushes them toward informal channels where regulations are less stringent. Lack of formal job opportunities drives people to seek informal employment. Oftentimes, individuals engage in small-scale, unregistered economic activities due to the absence of formal-sector jobs. Insufficient infrastructure, including transportation and communication networks, can impede the growth of formal businesses.

Limited access to credit and capital can constrain their growth and productivity. Weak enforcement of regulations and ineffective regulatory frameworks create an environment where informal economic activities flourish. High tax burdens and complex tax structures discourage businesses from operating within the formal economy. Informal businesses may be deeply ingrained in certain communities, where traditional practices may favor informal economic structures.

Similarly, informal wage workers also face the responsibility of taking care of themselves as they receive minimal or no employer-sponsored benefits. Moreover, both groups receive no legal protection from the government. As a result of these and other contributing factors, a higher percentage of people working in the informal economy are poor compared to those in the formal economy [13].

Currently, there is no legal framework to facilitate the gradual formalization of informal businesses. An assessment of current business laws and regulations clearly indicates that it is difficult to bring poor informal entrepreneurs within the scope of the existing legal framework. Instead, a feasible way to accord legal protection to these entrepreneurs is to establish a new regulatory regime [13].

For poor entrepreneurs in the informal sector, the procedure for obtaining trade license is both complex and costly. Applications for a trade license must be accompanied by copies of rent receipts or rental agreements and holding tax payment receipt. The legal framework that applies to businesses in Bangladesh is burdensome due to various factors, such as the lack of public information about relevant laws and regulations, the fragmented nature of legal and regulatory requirements among different ministries and offices, and delays and demands for informal payments that plague virtually every registration or certification requirement [13].

The most common reasons for low productivity levels in this sector include multitasking, workplace stress, lack of a sense of belonging, lack of recognition, toxic workplace behavior, poor management, long working hours, low pay, difficult working conditions, low job security, high turnover rates, and low job satisfaction. According to those concerned, the main reasons behind Bangladeshi workers' low productivity include lack of training, low wages, lack of nutritious food, unhealthy living conditions, and lack of a proper working environment for long-time work.

Informal Sector Productivity and Financial Inaccessibility Issues in Bangladesh

Credit inaccessibility in Bangladesh's informal sector significantly impedes productivity growth and sustainable economic development. Access to credit is essential for the growth and sustainability of businesses in this sector. Many informal enterprises in Bangladesh face considerable difficulties in obtaining formal loans due to a lack of collateral, credit history, and necessary documentation. Without collateral, informal sector workers find it challenging to secure credit as banks typically rely on credit histories and financial statements to assess borrowers' repayment capabilities. The absence of this information makes lenders hesitant to extend credit to informal sector workers.

Further, the cost of processing small loans for informal sector workers is relatively high for formal financial institutions. These workers often require smaller loan amounts compared to formal businesses, but the administrative costs of processing the loan remain similar. Consequently, banks are reluctant to provide loans to the informal sector due to the lower profitability associated with these transactions. Even if informal businesses manage to access credit, they often face high interest rates, making it difficult to sustain and expand their operations.

Many informal businesses resort to informal financial mechanisms, such as moneylenders, which can lead to exploitative practices and financial instability. A lack of financial literacy among individuals in the informal sector also hinders their ability to navigate formal financial systems and make informed financial decisions. Without access to credit, informal sector businesses struggle to invest in technology, machinery, or infrastructure upgrades that could improve productivity. This lack of investment hampers their ability to modernize operations and compete more effectively.

Credit inaccessibility also affects the ability of informal sector workers to access training and skills development programs. Without adequate training, workers may lack the skills necessary to adopt more efficient practices or utilize new technologies, thereby limiting productivity gains. This financial vulnerability limits their ability to weather economic downturns or invest in resilience measures, further impeding productivity growth.

Improved financial inclusion means that individuals and businesses in the informal sector have greater access to financial services, such as credit, savings, and insurance. This allows them to invest in productivity-enhancing activities, such as purchasing equipment, upgrading technology, or expanding their businesses. Increased access to finance can stimulate entrepreneurship within the informal sector, enabling entrepreneurs to start or expand their businesses, leading to higher productivity levels in Bangladesh.

Financial inclusion can help informal sector workers and businesses mitigate risks associated with income volatility and unforeseen expenses. For instance, access to insurance products can protect against crop failure, illness, or other emergencies, allowing individuals to focus on productive activities without worrying about financial setbacks. Training programs can equip individuals in the informal sector with the knowledge and skills necessary to manage their finances effectively, leading to better financial decisions and improved productivity.

Moreover, financial inclusion can facilitate the adoption of digital financial services and tools among informal sector participants, streamlining financial transactions and improving efficiency in their business operations. Greater financial inclusion can also help integrate informal sector activities into the formal economy. As businesses in the informal sector gain access to formal financial services, they may find it easier to formalize their operations, comply with regulations, and access formal markets, leading to increased productivity.

Overall, the positive association between informal sector productivity and financial inclusion indicators in Bangladesh underscores the importance of expanding access to financial services and promoting financial inclusion as key drivers of economic growth and development in the country. By addressing credit inaccessibility, Bangladesh can foster a more productive and resilient informal sector, contributing to broader economic prosperity.

Linkage between Informality, Productivity, and Financial Access in Bangladesh

The informal sector is a significant area of the economy and employment in Bangladesh, mainly composed of micro and small enterprises. Informal skills development largely falls outside the scope of government schemes and programs. Bangladesh's large informal sector encompasses various industries, such as agriculture, small-scale manufacturing, and services.

The private sector employs many informally trained young people. Workers in informal employment or enterprises are more vulnerable to economic and social shocks. Informal employment often lack legal protections, social security benefits, and regulatory oversight. Skills development in the informal sector is crucial as it concerns almost the entire economy of subeconomic development. It is necessary to develop technical and vocational skills for young people and stakeholders in this sector to help them further develop their activities.

In Bangladesh, there exists a complex interplay between informality, productivity, and financial access, which significantly influences the country's economic landscape. The informal sector provides a source of income for a significant portion of the population, especially those with limited formal education or skills. However, productivity levels within the informal sector tend to be lower compared to the formal sector due to factors, such as limited access to capital, technology, and skills training. Informal businesses often operate on a small scale with minimal capital investment and outdated technology, leading to inefficiencies in production processes. Access to formal financial services remains limited for many individuals and businesses in Bangladesh, particularly those operating in the informal sector. They mainly have financial access to microfinance institutions (MFIs). Lack of collateral, documentation, and financial literacy are common barriers to accessing credit and other financial products.

As a result, informal businesses rely heavily on informal sources of financing, such as moneylenders, which often charge exorbitant interest rates, further constraining profitability and growth. Limited access to finance hampers investment in productivity-enhancing technologies and skills development, thereby perpetuating low productivity levels within the informal sector. Conversely, low productivity diminishes the ability of informal businesses to generate sufficient income to qualify for formal financial services, reinforcing their reliance on informal sources of financing.

Case Studies on Informal Sector

NGOs in Bangladesh engage in informal economic activities for productivity improvement in key areas, such as microfinance and entrepreneurship development, skills development and training, agricultural development, women's empowerment, health and sanitation initiatives, education and literacy, and advocacy and policy interventions. Two success stories are discussed to highlight the resilience and adaptability of individuals and communities within Bangladesh's informal economy, emphasizing their contributions to the nation's economic growth and development.

CARE Bangladesh: An Award-winning Solution for Farmers' Access to Formal Financial Sector [14]

About 80% of the rural people in Bangladesh rely on MFIs for traditional loans. There are more than 693 licensed MFIs, which have disbursed USD8.4 billion to their 34 million active borrowers. A study conducted by the Agriculture Extension Support Activity (AESA) on access to microfinance found that despite its socioeconomic importance, smallholder farmers in Bangladesh tend to have little or no access to formal credit. To address this, the AESA Project started a new initiative called "A-Card: Smallholders Access to Finance through Banks". The initiative helped around 5,000 farmers receive loans with very nominal interest rates and a farmer-friendly repayment system from formal banking channels, enabling them to purchase the right inputs at the right time.

The USAID AESA project began in 2012 in the southwest region of Bangladesh, which was a Feed the Future (FtF) Zone of Influence. After approaching different financial institutions for support, the project initiated a new intervention "A-Card" with Bank Asia (a national formal financial institution). This initiative supports agricultural lending to farmers through a formal banking channel, allowing them to access the necessary credit to purchase agricultural inputs with minimal costs and flexible payment terms.

Cooperative for Assistance and Relief Everywhere (CARE), an international humanitarian organization fighting global poverty and world hunger, organizes and trains farmer groups and collects data on the loan needs of the farmers. They identify local market actors (LMAs) and orient them with A-Card; these LMAs provide support to A-Card farmers. The organization also identifies agents in collaboration with the bank and educates them on the A-Card. CARE facilitates a tripartite agreement among agents, LMAs, and the commercial bank as well as handles farmer training while agents and the bank work on opening bank accounts and developing loan proposals. Farmers and LMAs open bank account and receive their A-Card based on agents' advice and use it to purchase agro inputs and services. Using a

mobile app, they scan the A-Card to conduct an account-to-account cash transfer, and farmers repay the loan after the harvest season.

Key Features

- A-Card offers loans to farmers at a less than 10% annual interest with a flexible payback period over six-months, unlike standard MFI loans, which generally have an annual percentage rate of 25%–31% and require weekly repayments over a 46-week time period
- Creates opportunities for smallholder farmers to participate in the formal banking system at less than 10% annual interest rate
- Provides collateral-free loans for smallholder farmers, especially women, with a flexible repayment system based on the cropping season/production cycle
- Use of Near Field Communications (NFC)-enabled mobile phones for purchasing agricultural inputs
- Uses fingerprint verification technology to identify intended farmers, which integrates access to the banking system for farmers and LMAs
- Ensures the card is unusable for purchasing anything other than agricultural inputs or services

Key Results

- 4,000 smallholder farmers identified
- USD30,000 in loans distributed
- USD20,000 in farmers' savings
- 100 LMAs involved
- Four agent banks and one national bank actively engaged
- 25% increase in productivity
- 20% increase in market actors' sales

Challenges

- Natural disasters, like floods, cyclones, and droughts, may affect farmers' productions and hence repayment
- Cooperative interest from agent banks in the A-Card operation is relatively low
- Lack of incentives results in low ownership among the field-level bank staff

The A-Card model is expected to ensure high recovery rates due to its low interest rate and repayment required only on used credit after six months. Registered farmers continue savings with MFIs, which improves market linkages and strengthens collaboration involving farmer communities, local MFIs, and larger commercial banks. As farmers continue using and building their credit records by using the digital card and ICT platform, engage with agent banks, and maintain bank accounts, their self-confidence and readiness for future commercial endeavors are envisioned to increase.

BRAC Bangladesh: Scaling Up Crop Insurance to Tackle the Global Food Crisis [15]

Over 100 million people in Bangladesh live with inequality and poverty, and BRAC aims to create sustainable opportunities to realize potential. Building Resources Across Communities' (BRAC) community-led, holistic approach is reflected in its unique integrated development model, which combines social development, social enterprises, and humanitarian response for lasting, systemic change.

The world is already facing a global food crisis and it is expected to worsen, with climate impacts anticipated to reduce the world's food production by 30% by 2050. BRAC's biggest strength in facing this crisis lies in the people most exposed to it: smallholder farmers, who produce one-third of the world's food. This case study provides insights from Bangladesh that provide valuable guidance on how crop insurance can support these farmers in tackling the challenges ahead.

Traditionally, Bangladesh has three crop seasons across six seasons: summer, monsoon, autumn, late autumn, winter, and spring. However, all of these seasons are now experiencing climate shocks. Crop insurance has emerged as a key climate adaptation tool for smallholder farmers worldwide. At its core, it works like any other insurance: one pays a premium to insure his crop against a climate shock that might impact his yield, and receives a payout if that climate shock occurs.

BRAC Bangladesh, formerly known as Bangladesh Rehabilitation Assistance Committee, provides finance to approximately 10 million people, many of whom use the loans for small-scale farming and have reported unprecedented losses. In response to increased unseasonal rainfall, intensifying cold waves, and excessive heat, BRAC started offering crop insurance to farmers in Bangladesh in 2021, partnering with Syngenta Foundation for Sustainable Agriculture, Green Delta Insurance Company, and Bangladesh's only government general insurance provider, Sadharan Bima Corporation.

Launching in 2021 was tough. The world was still grappling with the impacts of COVID-19 and Bangladesh was still in lockdown. However, BRAC began its work because many smallholder farmers were severely affected by the pandemic, and the organization wanted to support them in building resilience as soon as possible. As BRAC expanded access to more farmers, gaps began to appear. One major issue was farmers losing crops for reasons unrelated to the immediate weather. Bangladesh's two major rivers, Jamuna and Brahmaputra, begin in Nepal and flow through India before entering Bangladesh. Farmers living in the char (river island) regions in northwestern Bangladesh lose more crops to floods resulting from rainfall in the adjacent Indian states of Meghalaya or Assam than to local rainfall.

In response to this gap, known as basis risk in the world of insurance, BRAC added area yield index insurance, through two new partners: Pula and Reliance Insurance Limited.

The results have been impressive. Nearly 80,000 farmers and 10,000 acres of crops have been insured within just two and a half years, with 9,000 farmers receiving payouts totaling BDT3.7 million over three cropping seasons. With 85% of farmers in Bangladesh being smallholder farmers, strengthening resilience impacts more than just income. The positive response from farmers has led to crop insurance being included in the microfinance program package.

Formal banking channels with favorable interest rates and farmer-friendly payment systems can help informal workers to purchase the right inputs at the right time, thereby boosting productivity. Credit inaccessibility contributes to the perpetuation of the informal economy as businesses struggle to formalize due to a lack of financial resources.

TABLE 1.6

INSURING 80,000 FARMERS IN 30 MONTHS (2.5 YEARS)

No.	Year	Crop	Number of Farmers
1	2021- Winter	Bean	107
2	2021- Winter	Potato	859
3	2022 - Boro	Paddy	8,339
4	2022 - Winter	Potato	11,566
5	2023 - Boro	Bean	17,190
6	2023 - Aman	Paddy	41,898

TABLE 1.7

TAKING CROP INSURANCE TO SMALLHOLDER FARMERS IN BANGLADESH BY BRAC BANGLADESH

No.	Items	Activities
1	Insurance education	BRAC spreads insurance knowledge to raise awareness
2	Activation	Farmers pay premium before the season starts and get the insurance documents
3	Cultivation supports	During the cropping season, farmers get one-to-one technical support, and receive voice SMS with weather forecast
4	Market linkage	Insured farmers get support to sell the produce at the market price
5	Claim payment	If the weather/yield hits any of the insurance trigger clauses, farmers get notification and receive their insured amount in their savings account

Interventions for Transitioning from Informal to Formal

The Bangladesh government emphasizes industrial development through the formulation of industry-friendly policies across all sectors. Various policies and initiatives have been implemented to facilitate the transition of industries from the informal to the formal sector. Key policies and initiatives include:

i) **National Industrial Policy (NIP):** The NIP promotes industrialization and economic growth with specific measures to support the formalization of small and medium enterprises (SMEs). It includes provisions for simplifying registration processes, providing financial support, and offering technical assistance to informal businesses transitioning to the formal sector.

ii) **Small and Medium Enterprise (SME) Policy:** This policy focuses on the development of SMEs by providing access to finance, capacity building, and market access. It encourages the formalization of informal enterprises through various support mechanisms and incentives.

iii) **Microfinance and financial inclusion programs:** Various MFIs and programs, such as those run by the Bangladesh Microfinance Regulatory Authority (MRA) and the Bangladesh Bank, aim to provide financial services to informal sector businesses, helping them transition to the formal economy.

iv) **Digital Bangladesh Vision 2021:** This vision includes initiatives to promote digital literacy and e-governance, making it easier for informal businesses to register and comply with regulations. The digitalization of government services helps reduce bureaucratic hurdles for formalization.

v) **Labor laws and social protection:** Reforms in labor laws, such as the Bangladesh Labour Act, and the introduction of social protection measures aim to bring informal workers under formal employment contracts, ensuring better working conditions and social security.

vi) **Tax policies and incentives:** The government offers tax incentives and simplified tax regimes for SMEs to encourage their formalization. Examples include the introduction of value added tax (VAT) exemptions and lower corporate tax rates for newly formalized businesses.

vii) **One-stop service (OSS) centers:** OSS centers provide a single point of contact for various regulatory and administrative services, simplifying the process of business registration and compliance for informal businesses.

viii) **Skills development and vocational training:** Programs aimed at improving the skills of workers in the informal sector help them meet the requirements of formal sector jobs. These programs are often supported by the government and international organizations.

ix) **Public-private partnerships (PPPs):** PPPs are encouraged to support infrastructure development and provide resources for informal businesses to scale up and formalize.

x) **Trade policies and export promotion:** Policies that support access to international markets for SMEs can incentivize informal businesses to formalize in order to comply with international trade standards.

These policies and initiatives collectively aim to create an enabling environment for the transitioning from informal to formal sectors, fostering economic growth, improving labor standards, and enhancing overall productivity in Bangladesh. Besides the other agencies, the Ministry of Industries has been working tirelessly in formulating policies and implementing strategies to expand the country's industrial sector, to position Bangladesh as an industry-based high-middle-income country by 2031 and a developed nation by 2041.

Recommendations for Effective Strategies to Transition to the Informal Sector

i) Productivity must be at the top of the country's economic agenda to build an institutional framework for competitiveness and productivity improvements by all stakeholders.

ii) Formulate a plan for the informal sector to enable every organization become efficient, profitable, and productive by undertaking continuous and systematic productivity improvement activities.

iii) Conduct research into the current and future demand for skills in various existing and new occupations.

iv) Develop skill qualification standards and qualifications based on the National Technical and Vocational Qualification Framework (NTVQF) for each existing occupation or any new occupation.

v) Establish linkages between training institutions and industry to facilitate the transition from informal to formal activities.

vi) Review current policies to minimize the gaps and challenges of accessing the financial resources available for the informal economy of Bangladesh.

vii) Eliminate and simplify complex business start-up processes, and increase and intensify foreign direct investment (FDI) inflows.

viii) Ensure access to adequate credit (through minimizing the credit gaps) for informal businesses/economy to invest in technology and infrastructure that could improve overall national productivity.

Limitations of the Research

i) Updated information on productivity in the informal sector and employment, employees, and wages in different sectors are not published annually.

ii) Formal and informal employee information can be found in various publications in the BBS but the GDP contribution by informal and formal sectors or employees is not yet measured.

iii) Limited availability and accuracy of data on the informal economy constrained the depth of analysis. Informal sector activities often go unrecorded, making it challenging to obtain comprehensive data. Respondents were also unwilling to share information to questionnaires.

Conclusion

In Bangladesh, the informal sector significantly impacts the economy, encompassing diverse activities with challenges related to productivity and financial accessibility. Addressing these challenges is crucial for fostering inclusive economic growth in the country.

The formal sector employment has shown minimal growth in recent years as most new jobs have been generated in the informal sector. This changing trend necessitates an innovative approach to education, training, and skill development for the informal sector. Policy measures aimed at improving regulations, enhancing access to resources, promoting technology adoption, and investing in education and training can contribute to narrowing this gap and fostering overall economic development.

A strong link exists between informal sector productivity and financial inclusion indicators in Bangladesh, driven by factors, such as access to finance, entrepreneurial growth, risk mitigation, capacity building, technology adoption, economic integration, and investment in human capital.

Understanding the dynamics of the informal economy is vital for shaping policies that promote inclusive growth and enhance productivity in Bangladesh. Microentrepreneurial movements and capacity building are crucial for long-term economic and social development, requiring an integrated approach. To address productivity gaps between formal and informal economies, collaborative efforts involving the government, private sector, and development organizations are essential to create an enabling environment for informal businesses to thrive in Bangladesh.

CHAPTER 2

CAMBODIA

Abstract

This paper examines features of the informal economy in Cambodia, focusing on its definition, contexts, contribution to the overall economy, challenges related to access to financing, and introduction of policy interventions. It employs secondary data sources from the government to provide context, utilizing enterprise data and related policy frameworks. In addition, a regression analysis is conducted to estimate the impacts of financing on productivity, using the Ordinary Least Square (OLS) method. The results indicate that financing improves productivity for both labor productivity and total factor productivity (TFP). A percentage increase in credits was associated with increments of 0.48% and 0.38% for labor productivity and TFP, respectively. Secondary data reveals a significant financing gap for micro, small, and medium enterprises (MSME), amounting to about 21% of GDP in Cambodia.

Understanding these impacts and gaps underscores the importance of financing for SMEs as a critical investment in sustaining long-term economic growth. Government initiatives to improve access to finance through implementations of entrepreneurship promotion funds, skills development funds, credit guarantee schemes, Agricultural and Rural Development Bank (ARDB), and SME Bank, among others, are crucial steps toward improving access to finance and promoting investment opportunities. The government's comprehensive strategy toward formalization through the National Strategy for Informal Economic Development 2023–2028 has paved the way for the country to easily monitor and identify the prioritized sectors despite its limited budget. Looking ahead, the public-private forum will serve as a platform to communicate, address challenges, and facilitate scaling up of capital investments through public-private partnerships and joint ventures between domestic and foreign firms. This approach aims to attract investment and technological advancements that enhance labor productivity and TFP.

Introduction to the Informal Economy and Productivity Growth

Demographic, Labor Force, and Statistics on the Informal Economy

According to the General Population Census, Cambodia's population is recorded at 15,552,211 [1]. This figure excludes approximately 1.2 million migrant workers abroad, as estimated by the Ministry of Labour and Vocational Training (MoLVT). Of the total population, 48% are male and 52% are female. The 2019 Labour Force Survey identifies a working-age population, defined as those aged 15 years and above, comprising 11.5 million people (approximately 73.2% of the total population), with 7.9 million employed [2]. Employment by sector shows 33.1% in agriculture, 27.1% in industry, and 39.8% in the service sector. The distribution of employment types includes:

- Employees (47.8%)
- Employers (3.4%)
- Own-account workers (36.9%)
- Contributing family workers (11.9%)

Cambodia's economy has been growing rapidly over the past three decades. It is one of the fastest growing in the region as well as in the world. The economy has transitioned from agricultural dependency to reliance on manufacturing and services, as illustrated in Table 2.1.

TABLE 2.1

SECTORAL SHARE AS PERCENTAGE OF GDP

Share to GDP	2015	2016	2017	2018	2019	2020	2021	2022
Crops	16%	15%	14%	13%	12%	13%	13%	13%
Other agriculture	11%	10%	10%	9%	9%	10%	10%	9%
Textile	11%	11%	11%	11%	11%	10%	11%	11%
Construction	10%	11%	12%	14%	15%	15%	15%	15%
Other industry	7%	8%	8%	8%	8%	10%	11%	11%
Hotel and restaurants	5%	5%	5%	4%	4%	3%	2%	2%
Trade	9%	9%	9%	9%	9%	9%	8%	8%
Transportation & communication	8%	8%	8%	8%	8%	8%	9%	9%
Real estate	6%	7%	7%	7%	7%	7%	6%	5%
Other services	11%	11%	11%	10%	10%	11%	10%	10%
Taxes less subsidies	6%	6%	6%	6%	6%	6%	6%	6%
GDP	100%	100%	100%	100%	100%	100%	100%	100%

Source: National Institute of Statistics, 2023.

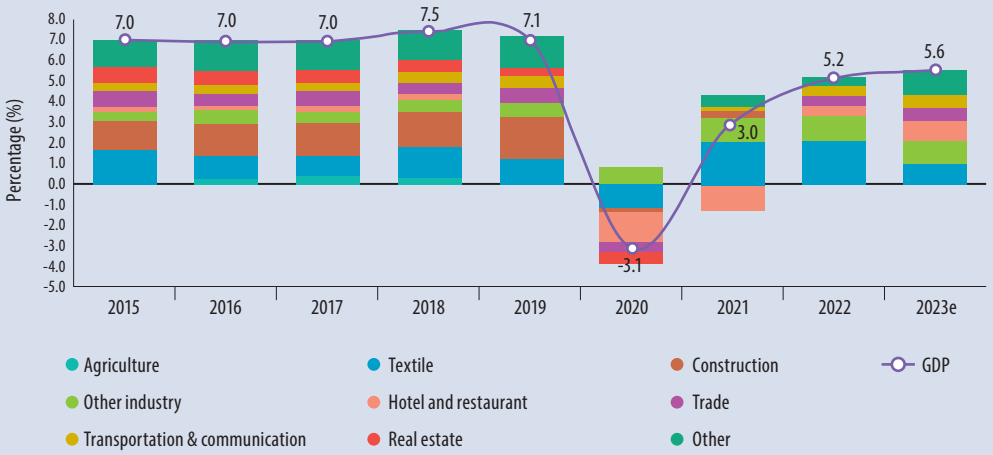
In recent years, the economy has gradually diversified, driven by robust growth in other manufacturing sectors (Figure 2.1). Manufacturing, particularly the garment industry and other sectors, has made significant contributions to the economy. Apart from the garment industry, industries, such as electrical components, bicycles, and optical cables have played pivotal roles in diversifying manufacturing. Recently, emerging sectors, like solar panels (diode), furniture, and tires, have shown strong growth momentum since 2020.

However, the informal economy still represents a substantial portion of the overall economy. Transitioning from informality to formality is crucial to sustain the country's positive growth trajectory, aiming to achieve higher middle-income status by 2030.

According to the ILO [3], the concept of informality is quite new in Cambodia and encompasses various criteria: (i) those without a firm; (ii) lack of a fixed postal address; (iii) employment of self-employed and part-time or full-time workers; (iv) labor-intensive operations with rapid turnover; (v) reliance on human or animal energy sources; (vi) absence of data in census surveys; (vii) lack of legal recognition; (viii) operation in unstructured premises; (ix) absence of regulations, licenses, or insurance; and (x) non-payment of taxes. Recently, Cambodia's National Strategy for Informal Economic Development 2023–2028 [4] has refined this definition to include all types of businesses, self-employment, and employments that are not illegal but have not completed the administrative procedures required for identification.

FIGURE 2.1

CONTRIBUTION TO GDP GROWTH



Source: Ministry of Economy and Finance, 2023.

The informal economy contributed significantly to Cambodia's economy. According to Economic Institute of Cambodia (EIC) [5], it accounted for 62% of Cambodia's GDP in 2003. There are different degrees of informality among enterprises, ranging from those who are not registered and escaping detection by public administration (total informality) to those who are registered, acknowledged by the public administration, but not fully compliant (partial informality). Using data provided by the Ministry of Commerce (MoC), most firms are micro and small (staff less than or equal to 10 people) and cover nearly 97.6% while the medium-sized firms account for about 1.9%. Additionally, the majority of micro and small businesses, which did not have business registration (informality), made up around 87.6% of the total business.

Most firms engaged in the wholesale and retail sector, covering about two-thirds of the total business, according to the 2020 economic census [6]. Table 2.2 shows that about 92.5% of employment in this sector was informal. As of August 2023, loans provided by commercial banks to the wholesale and retail sector accounted for about one-third of the total credit provided to business entities in Cambodia. The other two leading sectors, accommodation and food service, and manufacturing represented about 12.8% and 7.3% with shares of informality about 87.8% and 94.4%, respectively. All three sectors have low rates of formal penetration (formal to informal ratio).

In line with the nature of business operations in Cambodia, labor employment also exhibited a significant proportion of informality. A large proportion of Cambodia's labor force is engaged in informal sectors. According to Cambodia Labour Force Survey shown in Table 2.3, roughly 77.4% of Cambodia's employed population was in the informal sectors with the majority of employment was informal, roughly 88.3% (89% male and 87.6% female). Huge informal employment was concentrated across leading sectors, such as wholesale and retail, accommodation and food service, construction, and agriculture. For the manufacturing sector, formal employment shared a considerable proportion, roughly 30% of the total employment in this sector.

TABLE 2.2

BUSINESSES OPERATING IN THE FORMAL AND INFORMAL ECONOMY BY SECTOR[1]

ISIC IV Classification	Number of Enterprises			Share (%)		Ratio Formal/ Informal
	Total	Formal	Informal	Formal	Informal	
Wholesale and retail trade, repair of motor vehicles and motorcycles	499,731	37,383	462,348	7.5%	92.5%	8.1%
Accommodation and food service activities	96,315	11,718	84,597	12.2%	87.8%	13.9%
Manufacturing	54,871	8,541	46,330	15.6%	84.4%	18.4%
Healthcare and social work	12,333	8,226	4,107	66.7%	33.3%	200.3%
Education	12,241	10,374	1,867	84.7%	15.3%	555.7%
Financial and insurance activities	10,726	4,431	6,295	41.3%	58.7%	70.4%
Other	67,453	12,974	54,479	19.2%	80.8%	23.8%
Total	753,670	93,647	660,023	12.4%	87.6%	14.2%

Source: National Institute of Statistics (Economic Census, 2022).

TABLE 2.3

LABOR OPERATING IN THE INFORMAL AND FORMAL ECONOMY BY SECTOR

ISIC IV Classification	Employment			Share (%)	
	Total	Formal	Informal	Formal	Informal
Agriculture, forestry, and fishing	2,612,551	37,275	2,575,276	1.4%	98.6%
Wholesale and retail trade, repair of motor vehicles, etc.	1,319,027	76,135	1,242,892	5.8%	94.2%
Manufacturing	1,314,966	394,140	920,826	30%	70%
Construction	785,210	21,718	763,492	2.8%	97.2%
Transportation and storage	364,863	19,934	344,929	5.5%	94.5%
Accommodation and food service activities	269,527	12,890	256,638	4.8%	95.2%
Public administration and defense	284,894	128,343	156,551	45%	55%
Administrative and support service activities	176,821	25,738	151,084	14.6%	85.4%
Education	182,972	81,644	101,328	44.6%	55.4%
Professional, scientific, and technical activities	60,579	15,297	45,281	25.3%	74.7%
Financial and insurance activities	114,231	43,858	70,373	38.4%	61.6%
Other	397,465	66,074	331,390	16.6%	83.4%
Total	7,883,106	923,046	6,960,060	11.7%	88.3%

Source: NIS (Cambodia Labour Force Survey, 2019).

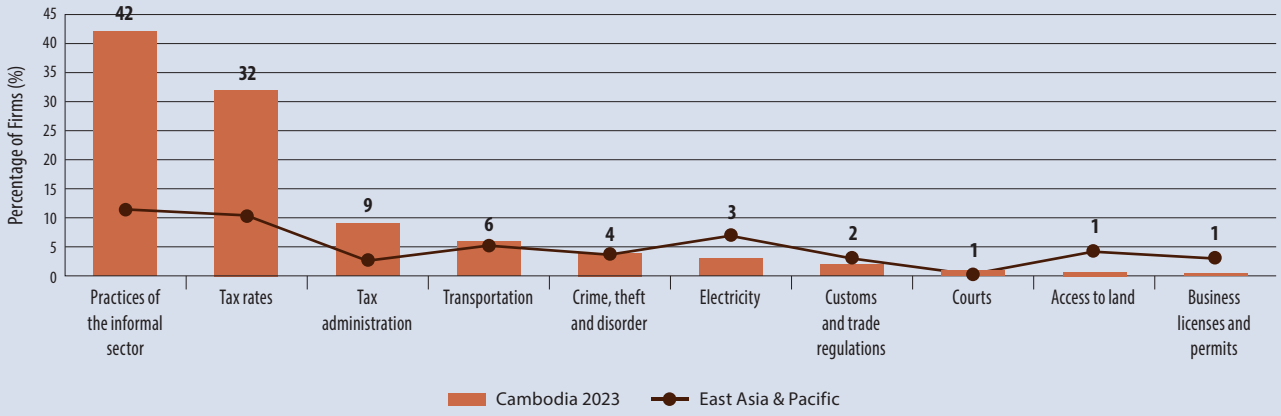
Productivity in Cambodia remained low with limited labor quality due to a large proportion of the labor force being engaged in the informal sector. Comprehensive study on the productivity gap between the formal and informal economy in Cambodia is scarce. So far, Amin, Ohnsorge, and Okou [7] conducted a firm-level analysis of the labor productivity gap between formal and informal firms in developing countries, including Cambodia. They found out that the labor productivity of informal firms was about one-fourth that of formal firms. Tanaka [8] studied the impact of a firm's formalization on productivity in Cambodia. He revealed that formalization yielded a significant positive impact on sales, value-added, and regularly employed workers, but the impact on labor productivity was marginal.

[1] Formal and informal refer to the status of business registration of the firm.

He argued that although formalization alone may have little impact on boosting productivity, it allowed formalized firms to grow by hiring of additional formal workers. At the same time, according to the World Bank's latest enterprise survey in 2023 [9], firms reported the informal sector as the biggest obstacle in Cambodia, even higher than the tax administrative issues, especially for small and medium-sized firms.

FIGURE 2.2

PRIVATE SECTOR'S BIGGEST OBSTACLES IN CAMBODIA



Source: World Bank's enterprise survey (2023).

For Cambodia, the informal economy has been a cross-cutting issue involving interministrial collaboration. In the previous mandate, a series of government-supported policies were put in place to address this issue, including formalization, financing, and relieve package during COVID-19. In this new government mandate, the informal economy has been regarded as one of the key priorities to address, leading to a release of the National Strategy for the Development of Informal Economy 2023–2028, which focuses on the following: (i) online business registration; (ii) tax incentives; (iii) social protection benefits; (iv) skilled development; and (v) self-declaration system of labor inspection through the automatic system.

Main Causes of Informal Economy

The main causes of the informal economy in Cambodia are multifaceted and similar to those in other developing countries. They include the high cost of doing business in the formal sector, low economic development, and labor surplus due to inadequate absorption in manufacturing and service sectors, inadequate access to health, education, and other basic public goods, and limited access to finance.

- **High cost of running a business in the formal sector:** The majority of firms in Cambodia operate at micro and small-scale levels. Complicated administrative procedures for obtaining licenses, along with high costs and time-consuming business registration processes, discourage small and medium enterprises from transitioning to formal. Limited government adoption of digitalization makes business registration time-consuming and costly. Starting a business in Cambodia takes 99 days and costs about 53.4% of income per capita, compared to East Asia and Asia-Pacific, where it takes about 25.6 days and costs 17.4% of income per capita on average [10]. Despite making some progress in online registration, the process remains relatively uncompetitive among its peers. The World Bank ranked Cambodia 144th in ease of doing business in 2020 with a relatively low score (187 out of 190) in terms of starting a business, making it more difficult for firms to operate

- **Labor surplus and low economic development:** The country's working-age population is significantly higher relative to the total population, according to Cambodia Labour Force Survey. Although Cambodia has achieved remarkable economic growth, the growth drivers are mainly in less productive sectors with limited human resource development. The garment sector, a key pillar for growth, has absorbed a large proportion of labor, mainly low-skilled workers. COVID-19 revealed that shocks can easily cause inadequate absorption in both manufacturing and service sectors, with low-skilled workers being the most affected. Given the low skills and limited buffer against shock, the labor surplus drives a large portion of the workforce into the informal economy

- **Inadequate access to public goods, including healthcare, education, and other services:** As a developing country, Cambodia faces constraints in the supply of public goods. Inadequate healthcare, social protection, education, and other basic services disincentivize people and firms from moving into the formal sector

- **Limited access to finance:** Most firms in Cambodia are micro and small scale, making it difficult to access financial institutions for credit. Additionally, borrowing from banks to scale up capital investment requires collateral, which informal firms are less likely to have, pushing them toward informal channels. This difficulty in accessing finance makes it challenging for firms to transition from informal to formal. Additionally, access to finance is often a constraint for informal firms to improve productivity, making them less productive and unable to compete. These constraints contribute to the productivity gap between formal and informal firms

Informal Sector Productivity and Credit Access

Financial Accessibility, Informal Economy, and Productivity Growth: A Literature Review

The empirical literature extensively discusses the primary challenges of the informal sector. Deléchat and Leandro [11] have broadly covered the macroeconomic consequences of the informal sector, highlighting low productivity, minimal tax contributions, suboptimal growth potential, lower workers wages compared to those in the formal sectors, and inadequate social protection. Moreover, the informal economy exacerbates inequalities among workers. Chant and Pedwell [12] pointed out that female workers in the informal economy tended to face greater barriers in the organization due to their multiple roles and responsibilities both at the workplace and at home. Additionally, the informal sector was often less competitive and nonproductive while at the same time, labor productivity was typically low compared to those in the formal sector. Access to health insurance remains a significant challenge.

Access to finance is another critical issue, as discussed by Fanta [13] and Turkson, Amissah, and Gyeke-Dako [14]. For informal enterprises, access to finance is crucial not only for survival but also for sustainability. It improved firms' competitiveness and helps narrow the productivity gaps between the formal and informal sectors.

The relationship between financial accessibility, productivity, and economic growth is extensively studied across developed and developing economies. Magazzino and Santeramo [15] argued that access to finance, productivity, and economic growth reinforce one another and need to be estimated using a system of equations (panel vector autoregressive estimation). They revealed that high productivity in agricultural output was stimulated by credit access, and access to credit boosted both productivity and output more significantly (and for a longer impact) in OECD countries relative to developing and least developed economies.

Giang et al. [16] studied the impact of access to finance on the productivity of SMEs in the manufacturing sector in Vietnam, where productivity was estimated as total factor productivity (TFP) derived from production function using the Levinsohn and Petrin approach. They found that firms with access to bank loans could increase TFP by about 8.6% using the difference-in-difference (DID) approach as well as propensity score matching coupled with the difference-in-difference (PSM-DID) approach.

Asongu [17] studied the impact of financial access on four different types of TFP dynamics: TFP, real TFP, welfare TFP, and real welfare TFP, taken from the Penn World Table database. The use of welfare TFP intended to incorporate the dimension of whether it benefited the mass population, serving the

sustainable development goal (SDGs). Although he found no statistical significance of financial access on TFP, real TFP, and real welfare TFP, he did reveal a positive impact of access to finance on welfare TFP.

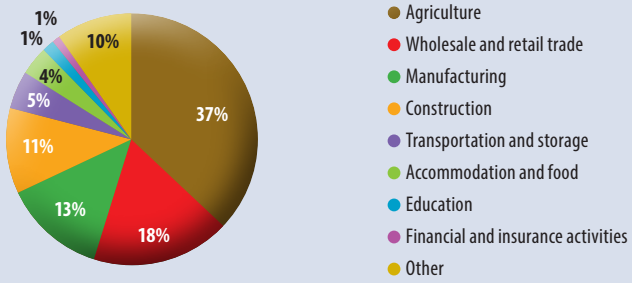
The impact of financial accessibility on productivity was heterogeneous. Ahamed, Luintel, and Mallick [18] studied firm-level productivity in India and they showed that firms with better access to finance had higher productivity, not only through increased research and development (R&D) capital but also through industry-level knowledge spillovers. In Nigeria, access to bank credits played a crucial role in driving innovation among SMEs, particularly in R&D spending and adoption of foreign technologies, highlighting the importance of external financing sources.

Access to Credit, Informal Economy, and Productivity: An Empirical Exercise

The informal economy constitutes a significant portion of Cambodia's economic landscape. According to Cambodia's labor force survey, almost 90% of employment is informal, concentrated mainly in the rural areas. Agriculture leads with approximately 37%, followed by wholesale and retail (18%), manufacturing (13%), and construction sectors (11%), as shown in Figure 2.3. These four sectors collectively account for almost 80% of total informal employment. Low-skilled labor was the most common nature of labor employment.

FIGURE 2.3

INFORMAL EMPLOYMENT BY SECTORS



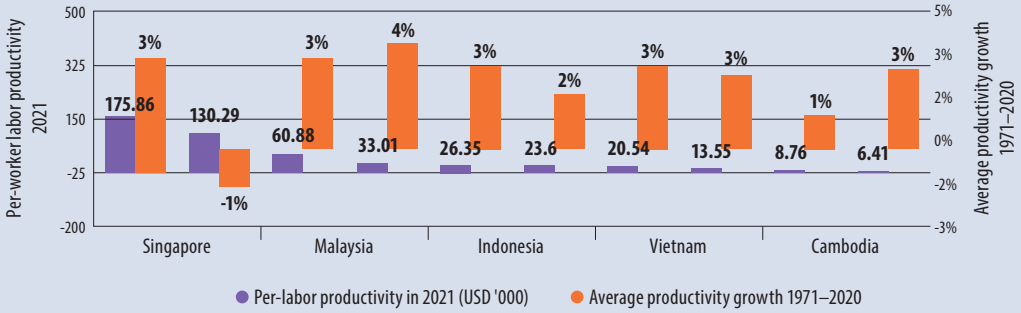
Source: NIS (Cambodia Labor Force Survey, 2019).

Labor productivity per worker in Cambodia remains comparatively low among neighboring countries[2]. In 2021, it stood at approximately USD8,750, slightly above Myanmar. Additionally, based on the Asian Productivity Organization (APO) data, the per-worker labor productivity growth (based on worked hours) has been modest, particularly when compared to other countries in the region from 1971 to 2020 (Figure 2.4). On average, ASEAN member states achieved a labor productivity growth of about 2.33% during the same period. Thailand led with 3.75%, followed by Malaysia and Singapore at 3.22% each. In contrast, Cambodia recorded the lowest growth at 1.21%, surpassing only Brunei. Research by Kim and Woon [19] identifies Cambodia as having one of the lowest labor productivity growth rates within ASEAN.

2 This measure is defined as GDP at constant basic prices per worker, evaluated in USD using 2011 purchasing power parities (PPP), reference year 2014.

FIGURE 2.4

PER-WORKER LABOR PRODUCTIVITY AND AVERAGE PRODUCTIVITY GROWTH OF ASEAN MEMBERS

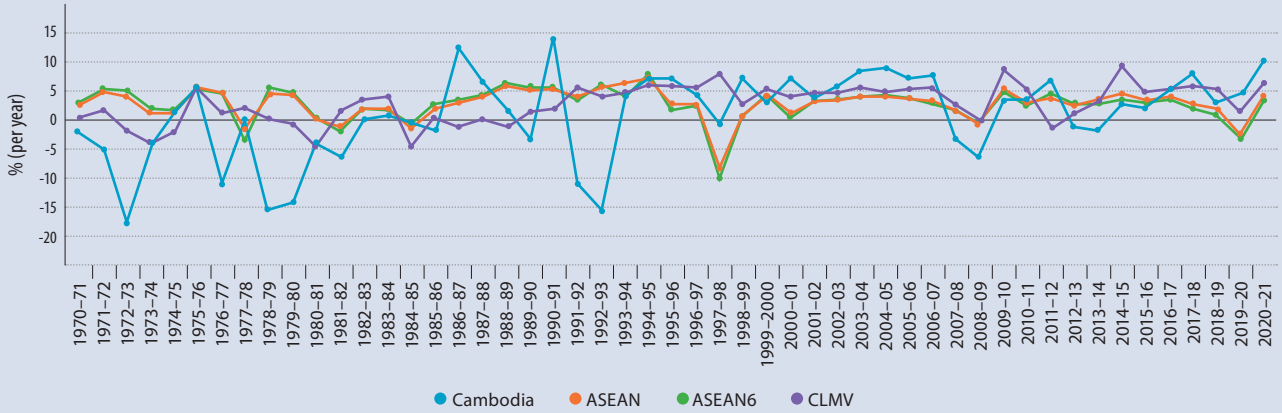


Source: APO Database 2022, updated on 31 October 2022 for productivity growth, and Asian Economy and Productivity Map, accessed on 25 October 2023, for per-worker labor productivity.

Looking at the historical trend, it is worth pointing out that Cambodia's productivity growth has shown volatility, particularly before 1993 compared to ASEAN6 and CLMV (Cambodia, Laos, Myanmar, and Vietnam) countries as a whole. However, post-1993, productivity trends have stabilized. Recent data from 2016 to 2021 indicate a gradual labor productivity growth [20], averaging at 2.8%, slightly better than CLMV countries and comparative to ASEAN and ASEAN6 as a whole (Figure 2.5).

FIGURE 2.5

REGIONAL COMPARISON OF PER-WORKER LABOR PRODUCTIVITY GROWTH



Source: APO, Asian Economy and Productivity Map, accessed on 25 October 2023.

By sectors, the labor productivity analysis reveals notable disparities. Manufacturing and agriculture have seen significant improvements compared to the serviced-related sectors. Overall, labor productivity (Table 2.4) in manufacturing increased by about 10.7% every five years from 1995 to 2021 while agriculture saw a growth of 6.1%. Conversely, serviced-related sectors, such as wholesale and retail, and transportation and communication experienced declines of -4.11% and -5.35% during the same period, respectively.

TABLE 2.4

LABOR PRODUCTIVITY GROWTH (% EVERY FIVE YEARS)

Every Five Years	1995–2000	2000–05	2005–10	2010–15	2015–21
Agriculture	0.19	0.59	7.1	1.3	6.06
Manufacturing	-3.45	0.87	3.93	1.79	10.73
Wholesale and retail	1.21	1.34	-3.73	3.12	-4.11
Transportation and communication	-0.22	3.76	1.7	1.02	-5.35

Source: APO, Asian Economy and Productivity Map, accessed on 25 October 2023.

TFP trends in Cambodia exhibit a downward trend, albeit outperforming regional averages in recent years[3]. From 1986 to 2020, Cambodia TFP's growth saw a declining trend using the APO Database (Table 2.5). However, the country managed positive growth of approximately 0.4% on average from 2016 to 2020, placing it below only Vietnam within ASEAN.

TABLE 2.5

TFP GROWTH (2010 =1)

Average Five Years	1986–90	1991–95	1996–2000	2001–05	2006–10	2011–15	2016–20
Singapore	1.6%	0.8%	0.7%	1.4%	2.1%	0.3%	0.3%
Brunei	-6.6%	-4.6%	0.0%	-1.1%	-3.3%	-4.2%	-1.2%
Malaysia	1.6%	0.3%	-1.5%	2.0%	0.9%	0.5%	-0.9%
Thailand	2.3%	-1.1%	-2.6%	2.3%	0.2%	0.3%	-0.2%
Indonesia	0.5%	-0.3%	-4.5%	-0.1%	0.1%	-1.3%	-2.3%
Philippines	2.7%	-0.4%	0.2%	1.8%	1.3%	1.4%	-1.9%
Vietnam	-1.0%	1.8%	-0.4%	-0.1%	-1.5%	1.1%	1.4%
Lao PDR	-0.6%	-0.8%	1.4%	1.2%	0.9%	-3.1%	-1.4%
Cambodia	6.1%	2.7%	2.0%	3.7%	-0.9%	-1.6%	0.4%
Myanmar	-2.1%	0.3%	1.5%	-0.1%	-1.0%	-0.6%	-4.9%

Source: APO Productivity Database 2022, updated on 31 October 2022.

Access to finance emerges as a critical challenge hindering firm productivity in Cambodia, especially for SMEs. According to the Ministry of Industry, Science, Technology & Innovation (MISTI) in 2018, SMEs represent nearly 99% of total enterprises in Cambodia and engaged nearly 70% of the labor force, a finding consistent with the 2022 economic census. Recent government initiatives, such as entrepreneurship promotion funds, credit guarantee schemes, and support from ARDB and SME Bank, aim to improve financial accessibility. Enhancing access to finance could provide firms with more investment opportunities and facilitate technological adoption. Further, getting SMEs to transition to formality has been an ongoing government effort. Recent studies showed that formalization has facilitated firms to access finance and boost productivity and output as a whole.

While access to finance plays a crucial role in boosting productivity within the informal economy, research specific to Cambodia remains limited due to data limitation as well as its accessibility. One leading research on this aspect was carried out by Kijkasiwat et al. [21] on Southeast Asia, including Cambodia. The seminal study found the positive impact of finance on nonlisted firms' performance.

[3] This study referred to the APO's definition in which TFP was defined as the output quantity index divided by the total input quantity index.

Their time-series analysis underscored the significant role of bank credits in enhancing both per-worker labor productivity and TFP.

Model Specification 1:

$dlog(LP_t) = c + dlog(credit_t) + dlog(Z_t) + \varepsilon_t$; *where* $\varepsilon \sim N(0,\delta_{\varepsilon}^2)$

Model Specification 2:

$dlog(TFP_t) = c + dlog(credit_t) + dlog(Z_t) + e_t$; *where* $\varepsilon \sim N(0,\delta_{\varepsilon}^2)$

Where:

- LP_t is labor productivity in period t
- TFP_t is the Total factor productivity (TFP)
- $credit_t$ is the credit provided by commercial banks to firms
- Z_t is a vector of control variables, including FDI and dummy variables
- ε_t and e_t are idiosyncratic errors

Labor productivity and TFP data was obtained from the APO database while credit data was provided by commercial banks and FDI figures were derived from the National Bank of Cambodia (NBC), the country's central bank. Credit data was readily available on the NBC website. However, FDI data required a special request for access. The only difference between model specifications 1 and 2 was the use of different dependent variables as a proxy of productivity while all independent variables remained consistent. Both specifications were estimated by the OLS method using Eviews software (Version 12). The dlog is the log differences in natural log form. Each specification was estimated by three different models to observe the sensitivity of the financing variable coefficient to the omitted variable bias.

Results showed that increased financing (proxy by credit provided by the commercial bank) positively impacted both labor productivity and TFP. Specifically, a percentage increase in credits corresponded to productivity increments of 0.48% and 0.38% for labor productivity and TFP, respectively (model 3), as shown in Table 2.6. These findings aligned somewhat with Hing, Thangavelu, and Kong [22], who similarly explored the impact of financial accessibility on firm productivity using survey data. However, due to the limited sample size (2008–20), the robustness check was constrained in estimating this relationship.

One notable constraint in the analysis was the unavailability of data classified between formal and informal firms, which hindered the assessment of productivity gaps between these sectors. Nonetheless, insights from Tanaka (2023) revealed that formal registration alone generated minimal impact on labor productivity but improved sale rates and value-added for firms. Tanaka highlighted that although formal registration may have little role in boosting productivity, formalization helped firms to grow through the employment of formal workers. Another benefit of formalization was how firms respond to shocks. Tanaka's findings suggested that positive trade shocks directly improved productivity among formal firms in the garment industry with potential benefits extending to informal firms through their contractual relationship with formal counterparts [23].

TABLE 2.6

OLS ESTIMATED RESULT (SAMPLE 2008–20)[4]

Dependent Variable	dlog (Labor productivity)			dlog (TFP)		
	Model1	Model2	Model 3	Model1	Model2	Model 3
dlog (FDI)	-	-	0.019	-	-	0.030
	-	-	(0.086)	-	-	(0.080)
dlog (credit)	0.428**	0.476**	0.478**	0.321	0.381**	0.384**
	(0.177)	(0.165)	(0.176)	(0.183)	(0.154)	(0.163)
COVID-19 (dummy)	-	-0.046	-0.043	-	-0.054	-0.048
	-	(0.034)	(0.040)	-	(0.032)	(0.037)
Dummy_2014	-	-0.059	-0.054	-	-0.072*	-0.064
	-	(0.035)	(0.045)	-	(0.033)	(0.042)
Constant	-0.073*	-0.075*	-0.078*	-0.083*	-0.085**	-0.091**
	(0.040)	(0.037)	(0.042)	(0.041)	(0.034)	(0.039)
Adjusted R-squared	0.306	0.437	0.362	0.159	0.443	0.376
Log likelihood	23.870	26.474	26.517	23.465	27.278	27.398
F-statistic	5.839	3.852	2.558	3.084	3.920	2.660
Prob(F-statistic)	0.036	0.056	0.131	0.110	0.054	0.123

Source: National Bank of Cambodia (2023).
Note: (i) Author's estimate.
(ii) Standard errors were in parenthesis; significant level * p<0.1, ** p<0.05, and *** p <0.01.

Sources of Funds and Challenges in Finance/Credit Accessibility

Understanding the available financing for SMEs in Cambodia has been limited by scope, coverage, and classification challenges. To date, it encompasses only banking aspects, including lending by commercial banks and microfinance institutions (MFIs). As of August 2023, total credits provided by banks and MFIs amounted to approximately KHR241,915 billion, roughly 185% of GDP at current prices with banks covering more than 83% of the total lending, as shown in Table 2.7. This figure excludes lending provided from SME Bank as well as other forms of lending by other nonfinancial institutions. Even so, the financing gap for MSMEs remains significant at about 21% of GDP [24]. Additionally, there is no specific classification of lending between formal and informal firms, though formal sectors have better access to finance than informal ones.

In Cambodia, most MSMEs rely on multiple sources of funds for their business operations, both formal and informal. According to the World Bank survey data [25], over 90% of enterprises use owner's equity as start-up capital. They borrow from financial institutions, mainly banks and MFIs, as the common source of funds. According to NBC, formal financial institutions covered commercial banks, specialized banks, MFIs, rural credit institutions, leasing companies, and payment service providers. Okuda and Aiba [26] highlighted that commercial banks as crucial lenders, primarily offered loans in US dollars (USD). Another formal channel is the SME Bank, a state-owned entity which was established in 2020. However, accessibility to the bank for MSMEs remain limited due to information barriers regarding available schemes. For informal channels, it includes various sources, encompassing borrowing from family and relatives (through kinship networks), moneylenders, cooperative funds (commune funds, mainly in the agriculture sector), and borrowing from friends and trusted networks.

4 Both per-worker labor productivity and TFP was taken from Asian Productivity Database, updated October 31, 2022.

TABLE 2.7

CREDITS PROVIDED BY COMMERCIAL BANKS AND MFIS (AS OF AUGUST 2023)

KHR 'billion	2017	2018	2019	2020	2021	2022	Aug-23
Commercial banks (CB)	68,271	84,736	107,598	131,431	164,529	194,243	201,206
1. Financial institutions	1,877	3,014	5,109	5,920	7,222	8,300	8,277
2. Nonfinancial service institutions	54,345	64,979	79,319	94,137	117,068	139,797	144,730
Agriculture	7,065	7,524	7,907	9,858	12,858	15,600	15,813
Construction	6,381	7,787	10,197	12,783	15,347	18,240	18,462
Wholesales	8,368	9,655	11,819	12,735	15,452	18,600	18,292
Retails	1,213	13,673	16,548	20,230	26,020	30,864	32,202
Hotel and restaurant	3,055	3,998	4,705	5,161	7,312	8,421	8,216
Transportation and warehousing	1,268	1,668	2,060	3,469	4,413	4,987	5,098
Selling of real estate	4,005	6,210	9,006	10,925	14,157	18,161	19,941
Other	12,070	14,463	17,077	18,976	21,509	24,925	26,705
3. Personal needs	11,061	15,707	21,878	30,258	37,986	43,558	45,396
4. Other credits	989	1,037	1,292	1,116	2,253	2,587	2,804
MFIs	17,236	21,813	29,357	27,527	31,723	38,932	40,710
Credit provided by CB and MFIs	85,508	106,549	136,955	158,958	196,252	233,175	241,915

Source: National Bank of Cambodia, 2023.

Access to finance presents multifaceted challenges in Cambodia with collateral being a very common issue. According to the enterprise surveys by World Bank in 2023, 100% of small and medium firms reported a need of collateral to secure loans while specific data for large firms[5] was unavailable. As per a UNDP MSME survey in 2021, only 2.6% of loans were unsecured while another 73.4% were secured with land or properties and another 10.3% by other collateral, like vehicles [27]. The Young Entrepreneurs Association of Cambodia (YEAC), in consultations with over 200 firms in 2017, identified difficulties in accessing finance due to lack of and low-value collateral, limited information on available funding schemes and the source of funds on both debt and equity financing, and high interest rates [28]. Common issues highlighted include lack of eligible collateral, lack of loan product diversity, complicated loan requirements, limited financing options, lengthy loan processing time, and high interest rates, consistent with in-depth MSME interviews. Lengthy loan processing time was specifically noted as a significant challenge, where the lack of credible financial reports delayed financial assessment and verification of MSME loan applications. The delay impacts the evaluation of borrowers' business viability, which is consistent with the World Bank's study in 2010.

Liquidity constraints are another common issue for firms in Cambodia that affect both formal and informal sectors. Corporate performance is undermined, particularly in innovation and investment, with a more severe impact on the informal sector. Kolesar et al [29] reported more than 98,500 households, or 2.7% of the population, faced difficulties accessing financing based on Cambodia's socioeconomic survey 2019–20. Consequently, due to challenges in accessing fundings through formal source, micro and small businesses often resort to informal channels. These include borrowing from friends or moneylenders, albeit at higher interest rates compared to formal channels. Ung and Hay [30] argued that SMEs in Cambodia face difficulties, including loan size restrictions, high interest rates, and short repayment periods.

5 By their classification, large firms are defined as companies with 100 employees or over while small and medium firms that employ between 5–19 and 20–99 individuals, respectively.

Case Study: Access to Finance for Starting a Business

In Cambodia, MSMEs typically rely on three primary financing methods. The first method is entrepreneurs using personal funds, which are sourced from family savings, property sales, or other income streams to finance their business. Secondly, they may access microfinance or bank loans, which could offer a larger capital investment. The final method is a combination of both.

Entrepreneur Chhean Sreymom provides a clear illustration of these dynamics. She runs a small business making hand-made fishball in Battambang province, Cambodia. Sreymom employs five staff members for over five years.

Despite being in business for these years, she has yet to register her business with any official institutions. The main reason her business remains informal is due to the fact that she does not see the benefit of registration. In addition, she does not want to pay any tax which is perceived as a loss of profits, and unfamiliarity with the registration process. Consequently, her employees do not benefit from any social security schemes.

In terms of credit access, Sreymom relies mainly on her personal network for borrowing. In addition, she has secured loans from MFIs to support her business operations. Sreymom is aware that formalizing her business would benefit her in the long run, however, she expressed the government needs to simplify the registration process to encourage microbusinesses like hers to formalize. Despite these challenges and with the available financing options, Sreymom has successfully expanded her business to the capital city of Phnom Penh.

The Cambodian government has rolled out various initiatives to improve access to finance, including entrepreneurship promotion funds, credit guarantee schemes, and the establishment of ARDB and SME Bank. These efforts are gradually improving financial accessibility, which offer SMEs more investment opportunities and better access to technology that could significantly benefit entrepreneurs like Sreymom.

Policy Intervention

Like other countries, the government has recognized the crucial role of the informal economy in sustaining household livelihoods. However, the impacts of the COVID-19 pandemic on micro and small businesses have prompted the government to place additional emphasis on the informal sectors. Without formal business registration, the government's ability to promptly intervene to mitigate the effects of shocks, such as the COVID-19 pandemic, was constrained. During this period, emergency intervention packages and loan restructuring measures were put in place; however, assessing the viability and health of businesses posed significant challenges. Formal businesses had an advantage in accessing these intervention packages, making them well-targeted and more efficient. This emphasizes the importance of transitioning from informality to formality as a buffer against unforeseen economic shocks.

Government efforts have not only focused on promoting formalization but also on addressing the credit gap. The role of financing in enhancing productivity has been acknowledged by the government. This has led to the establishment of the SME Bank in 2020 to manage financing issues for firms and improve credit accessibility at reasonable interest rates. The government has introduced a series of policies to tackle the credit gap, including:

- **Encouraging savings in formal financial institutions:** Mobilizing domestic funds through deposits was prioritized as part of the government's strategies to address the credit gaps. Cambodia has a very low savings rate compared to other countries in the region, offering a huge opportunity to mobilize domestic sources of funds. This policy is emphasized in the National Financial Inclusion Strategy 2019–2025 (NFIS)

- **Post-COVID-19 recovery plan:** Introduced in December 2021, the "Strategic Framework and Programs for Economic Recovery in the Context of Living with COVID-19 in A New Normal 2021–2023" aims to address the credit gap, especially for sectors most affected by COVID-19. This includes providing loans at low interest rates to farmers, agricultural communities, and MSMEs through ARDB, SME Bank, co-financing schemes with private financial institutions, and credit guarantee schemes
- **Public-private partnership (PPP):** Recognizing the critical role of the private sector and development partners in mobilizing financing, the government has stimulated private sector investment in sustainable finance and green financing, particularly in infrastructure and energy projects to address the credit gap issue. The Public-private Partnership Law introduced in 2021 aims to attract private-sector investment through government-offered financial assistance, guarantees, and investment incentives

In addition to addressing the credit gap issue, the government has focused on supporting R&D, human capital development, and market access through various initiatives. They include:

- **Cambodia Digital Economy and Social Policy Framework:** This framework aims to enable digital businesses and encourage enterprises and SMEs to broadly adopt digital technologies, create ecosystems for new businesses, and participate in the digital economy regionally and globally
- **Cambodian Digital Government Policy:** The policy seeks to establish the relevant infrastructure and regulations to promote the development of digital financial services tailored for MSMEs
- **Skill Development Fund (SDF):** The initiative aims to strengthen and enhance skill development by providing demand-driven training to meet the needs of the private sector, thereby enhancing labor productivity

The government has been putting more effort into formalizing the informal economy to enhance productivity and growth. The most recent milestone includes the launch of the National Strategy for Informal Economic Development 2023–2028. The policy was one of the key priorities under the new mandate. This strategy focused on five main priorities: (i) easing access to the formal system; (ii) reducing registration burdens; (iii) providing social protection for those who have entered the formal system; (iv) providing skills and incentive supports; and (v) expanding outreach and awareness to encourage participation.

Conclusion

In conclusion, supporting SMEs through financing is a critical investment to sustain long-term economic growth, especially as Cambodia prepares to transition from the low-income country category. While some preferential treatments remain in place during the grace period, going forward, Cambodia will soon lose access to these preferential treatments, making it vulnerable to fierce external competition. Improving firm productivity is essential for Cambodia to avoid falling into the middle-income trap and sustain economic growth naturally.

Although the challenges in enhancing firm productivity are multifaceted in Cambodian, the access to finance plays a pivotal role. This is especially for SMEs, where a large proportion of them operate in the informal sector. Insufficient financial accessibility has hindered domestic firms from investing in R&D and innovation, making them less competitive compared to foreign counterparts. This has made Cambodia rely intensively on imports to support domestic consumption and production.

Improving firms' productivity through financing is complex, given the current credit market structure. The effects are heterogeneous, and it wouldn't make much sense without looking deeper at the sectoral levels. However, exploring sectoral level is constrained by data recording and classification issues. Further, the scope of credit coverage excludes lending from nonbank institutions, which paints an

incomplete picture for analysis. Despite these challenges, the dominance of banking in the financial sector suggests that these issues may significantly distort the overall analysis.

Banking mechanisms and government initiatives aimed at channeling financing to productive sectors will be crucial in ensuring the efficient use of funds, especially given the country's high levels of private debt. Although Cambodia's credit provided by commercial banks is relatively high in the region, it is heavily concentrated in property-related sectors. This potentially crowds out investment in more productive sectors to some extent. The IMF reported Cambodia's private debt to GDP ratio was about 160% as of August 2023, which is high compared to its peers in the region. It highlights the need to shift focus toward supporting start-up firms to improve productivity and innovation.

The government's existing initiatives to improve access to finance through entrepreneurship promotion funds, skills development fund, credit guarantee schemes, ARDB and SME Bank, among others, are commendable and moving on the right track to foster investment opportunities and improve firm productivity through technological innovation. The recent introduction of the government's comprehensive strategy toward formalization through the National Strategy for Informal Economic Development 2023–2028 has paved the way for the country to easily monitor and identify the prioritized sectors given its limited budget.

Moving forward, public-private forums will serve as a vital platform to communicate, address challenges, and facilitate firms scale up capital to invest through public-private partnerships and joint ventures between domestic and foreign companies. These collaborations will help attract investment and technology inflows, thereby enhancing labor productivity and TFP in Cambodia.

CHAPTER 3

FIJI

Abstract

Capital for the purpose of starting a new business and managing existing ones is critical, especially among informal enterprises. This study in Fiji is aimed to analyze credit accessibility within informal settings and identify factors inhibiting growth of business enterprises, under the premise that access to credit has a positive link to productivity growth in the informal sector.

A mixed data collection method was used to capture the Fijian credit experience and perceptions of selected local business executives. Two main findings emerged. First, research participants expressed strong views about information asymmetry within local financial institutions to discourage small businesses from borrowing funds. Further, micro, small, and medium enterprises (MSMEs) perceived a disconnect between those applying for business credit and financial intermediaries providing support services. To some extent, credit rationing against MSMEs in both formal and informal sectors may exist given the low take-up rates of credit. Second, the study established a link between productivity and credit access based on three constructed models. Interestingly, one of the models, with a reduced sample size, showed that total factor productivity (TFP) could improve when capital is directed toward consumption of goods and services rather than on capital assets.

In the final analysis, the study indicates a significant potential impact on productivity and output growth if financial institutions allocate capital to both formal and informal enterprises. This will require a multifaceted approach that combines policy interventions, socioeconomic initiatives, and institutional and regulatory reforms.

Understanding Informality

Introduction

Informality, like the COVID-19, is a global phenomenon that spreads and impacts economies worldwide. In a recent study, the World Bank recognized the prevalence of informal sector enterprises in developing countries. However, as economies expand, informal sector activities shrink and shift toward formal enterprises [1]. Previous studies on Fiji's informal sector [2] have highlighted a significant increase of unregistered small businesses and the transition of MSMEs from formal to informal businesses, particularly in the post-COVID-19 period [3]. These studies also reported widespread poverty, lack of access to finance, low productivity, and limited fiscal resources [4].

This paper presents findings of a January 2024 study on informality in Fiji. A primary objective of the paper was to examine the impact of financial accessibility on informal sector activities and their role in fostering productivity growth. Specifically, the paper sets out to understand informality with emphasis on GDP contributions, sector characteristics, financial sector initiatives, and developmental challenges. The premise is that if informal businesses have access to credit[1], training, technology,

[1] Many exponents of informality subscribed to the view that a strong correlation between informality and productivity growth do exist and mediated by accessibility to credit.

market, and other business support services[2], then the impact on informal sector income, employment, and productivity growth would be significant.

This Fiji report is structured as the following: (i) segment one presents a broad understanding of informality, causes of informality, and the local context in Fiji; (ii) segment two explores Fiji's experience with sources of funds, including a quantitative analysis of how credit accessibility influences productivity and output growth, and (iii) the third segment discusses policy intervention; and (iv) the fourth and last segment covers policy implications and conclusions.

Research Objectives

The main objectives of the study are:

i) To understand informality and informal business activities in Fiji; and to analyze the impact of financial accessibility on informal sector business activities and their contributions to productivity growth.

ii) To derive policy implications enhancing productivity within the informal economy.

Research Methodology

This study employed a mixed data collection method. Sources of data included government annual reports, regional development partners reports, and consultancy reports to provide insights into informality and context. In-depth interviews known as *"talanoa"*[3][5] were complemented with secondary information to further understand the Fijian informality. One of the advantages of the *"talanoa"* method was that it enabled the researcher and research participants to establish rapport as "friends"[4], creating a conducive environment to collect detailed accounts of the informal sector experience.

Initially, about 10 senior executives from government, financial institutions, NGOs, higher education institutions, and private commercial companies were randomly selected at a Top Executive (TOPEX) conference[5]. Selected public and private sectors were then analyzed to demonstrate how these stakeholders mitigate credit gaps and information asymmetry between formal and informal business enterprises.

Research participants raised strong views about information asymmetry within local financial institutions, which discourages small businesses from borrowing funds. In addition, MSMEs perceived a disconnect between those applying for business credit and financial intermediaries providing support services. The following segment discusses how low take-up rates of credit suggest potential credit rationing against MSMEs in both the formal and informal sectors.

One of the challenges faced when studying informality in Fiji was the lack of quantitative data and empirical studies on informality and productivity growth. The study used APO[6] Productivity Database, incorporating labor input, capital input, capital deepening[7] and total factor productivity (TFP) as predictor variables to measure impact on output growth (see segment "Empirical Study to Establish Links between Access to Capital and Productivity").

2 Similar to those offered by commercial banks and credit institutions to firms in the formal economy.

3 *"Talanoa"* is a culturally appropriate data collection method where two or more people engage in storytelling for information gathering and/or co-construction of knowledge (Tuibeqa A.T., 2005). Although semi-structured questions could be used as a guide, the researcher and the research participant were free to talk about anything and everything.

4 A key feature of *"talanoa"* which removes pressure from research participants thus creating a friendly and flexible environment for in-depth and rich narratives.

5 Conference was organized by the Fiji Commerce and Employers Federation (FCEF) in Nadi on 23–25 November 2023. An additional five executives were engaged but their accounts were very similar to the initial 10. The researcher had to terminate further recordings of *"talanoa"* transcripts since no new information was received.

6 APO Productivity Database 2023 Version 1 (Index) (xlsx) (Updated 7 November 2023).

7 Capital input and capital deepening data were used as proxies for 'Accessibility to Capital'.

Significance of the Study

Informality is pervasive in most developing economies [6]. Informal economic activities in these countries typically represent about one-third of output and over two-thirds of employment. This raises the question: why does informality exist? One strand of thought is rooted on a strong causal link between informality and poverty in rural and urban communities[8], providing an alternative economic system for the poor and vulnerable groups below the poverty line[9]. In the Fijian context, about 45% of the population falls into the poor and vulnerable groups. Economic activities operated by these groups are mostly informal enterprises, i.e., those without business license, registration, and tax identification number. While financial and nonfinancial institutions have transitioned these vulnerable groups through financial inclusion programs, access to credit remains a challenge [7].

This study specifically focuses on productivity growth linked to credit availability and accessibility in the informal sector. It captures the perception of research participants and how stakeholders improve finance accessibility for MSMEs in both formal and informal sectors. It highlights a strong positive correlation between finance access, productivity, and output growth.

Informality and Characteristics

Two perspectives frame the concept of informality: one pertains to noncompliance of legal and regulatory requirements while the other involves isolation of informal economic activities, credit rationing, and information asymmetry[10].

The ILO [8] defines the informal economy as all economic activities by workers and economic units that are, in law or in practice, not covered or insufficiently covered by formal arrangements. Generally, this is prevalent among MSMEs in poor and marginalized locations, typically involving less educated individuals engaged in primary and land-based activities. Often referred to interchangeably as the informal sector, it encompasses economic activities that are not regulated or monitored by the government. The ILO also discusses informality across various dimensions: informal economy, informal sector, informal enterprises, informal employment, the illegal or unregulated sector, all used interchangeably in this report.

The APO Report on *"Issues and Challenges on the Productivity Performance of the Informal Sector in Selected APO Members"* defined Fijian informality as "…units engaged in the production of goods and services to generate income for the individuals[11]. These employments could be very basic but strenuous, without any formalization, standards of operation, job security, absence of mandatory benefit, or conformance to labor-oriented legislations. The informal sector usually does not have any involvement of statutory stakeholders. It usually consists of employees, such as daily wage earners who are not on a company's payroll. They may be evading taxes and other legal compliances and be operating in unprotected or unsecure environments" [9].

In the Fijian context, the informal sector "comprises unincorporated enterprises owned by households. These enterprises produce at least some products for the market, work themselves or employ family workers with or without pay and/or paid casual workers and/or are not registered under Fiji's legislation, e.g., to tax or social security obligations, or regulatory acts[12]." The Fijian SME Development Act 2002 defines MSMEs as "business relating to manufacturing, processing, extraction, production, agriculture,

8 At different levels: individual, household, landowning units, village, and/or community enterprises.

9 Fiji's national poverty line was set at FJD2,179.39 per adult equivalent per year, or FJD41.91 per week.

10 Often weighs in favor of large firms (Perry et al. 2007).

11 ILO Resolution concerning statistics of employment in the informal sector - adopted by the Fifteenth International Conference of Labor Statisticians (January 1993) (https://www.ilo.org/wcmsp5/groups/public/---dg.reports/---stat/documents/normative instrument/ wcms_087484.pdf).

12 Refer to ps://www.statsfiji.gov.fj/images/documents/Releases/01_National-Accounts/01_Gross-Domestic-Product/GDP_Production_Technical_Notes.pdf.

agro-processing, tourism, wholesale and retail trade, service industries, cottage or home-based industries, export and other industrial or commercial activities"[13][10].

Table 3.1 exhibits distinctive characteristics of formal and informal businesses. The Fijian MSME owner-operators are often poorly skilled with limited education and training, lacking in motivation, engage in low-paying and labor-intensive activities, which are often categorized as "basic"[14].

TABLE 3.1

DIFFERENCES BETWEEN INFORMAL AND FORMAL BUSINESSES

Indigenous Business (Informal)	Nonindigenous Business (Formal)
Social capital, gain, and satisfaction	Financial capital, profitability, and economic satisfaction
Social gain or satisfaction	Financial profit, capital accumulation, wealth
Communal (nontransferable) property rights	Transferable and individually owned
Dependency: Communal social network and government support	Individualism: Independence and business autonomy
Business cannibalism - no new creation	Creative, innovation products, and services
People focus and factor driven	Profit focus, innovation and efficiency driven
Running a business is a necessity	Running a business is an opportunity
Employment and income focus	Exploitation of opportunities
Consumption oriented and reciprocity	Savings and acquisitiveness

Source: Tuibeqa AT, 2005.

In addition, MSME owner-operators lack supply contracts and workers' employment benefits suffer from limited financial resources to safeguard businesses from natural disasters, climate change, and global pandemic, such as COVID-19. These factors impact MSME growth and sustainability significantly, thus exacerbating their social and economic vulnerability, including their quality of life. Addressing these challenges is critical for the government in creating innovative solutions and pathways that integrate informal sectors into national policy formulations frameworks and public financial development dialogue.

Informality Contribution Trends in Fiji

The informal sector in Fiji contributed between 30%–35% of GDP. According to the World Bank estimates using dynamic stochastic general equilibrium (DGE) modeling, the contribution of informal output averaged about 31.3% per annum between 2010 to 2017, a decrease from 34.6% per annum between 1990–1999. However, Fiji's contribution was notably higher compared to informal sector contributions of PR China, India, Vietnam, Malaysia, Indonesia, and Singapore. Evidence from both developed and developing countries indicates that firms transitioning to formal status, including formal enterprises, exhibit higher labor productivity, wages, export potential, and highly likely to innovate and incorporate new technologies.

In Fiji, the informal sector plays a significant role in the development of rural economy, where over 40% of the population[15] relies on agriculture-based informal activities for their livelihoods. Figure 3.1 shows a declining share of the informal sector in national output. To a certain extent, this could be attributed to the National Financial Inclusion programs and in streamlining business registration and licensing processes.

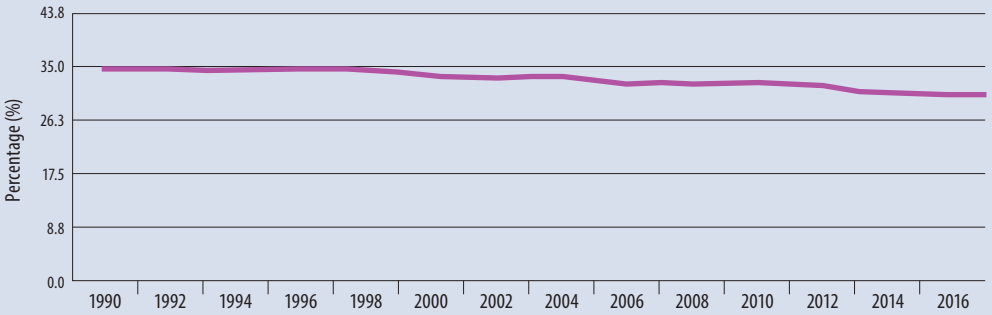
13 The MSME definition is based on the number of people employed and annual turnover or total assets: micro are businesses with 0–5 employees and with an asset value up to FJD30,000; small involves businesses with workers between 6–20 and an asset value between FJD30,00 and FJD100,000; medium are businesses with workers between 21–50 people and have an asset value between FJD100,000– FJD500,000.

14 With limited capital input, lacked creative business ideas, and limited support structure and market.

15 58% of the population lives in urban centers and 48% in rural areas, based on the Fiji 2019–2020 Household Income and Expenditure Survey.

FIGURE 3.1

INFORMAL SECTOR SHARE IN GDP

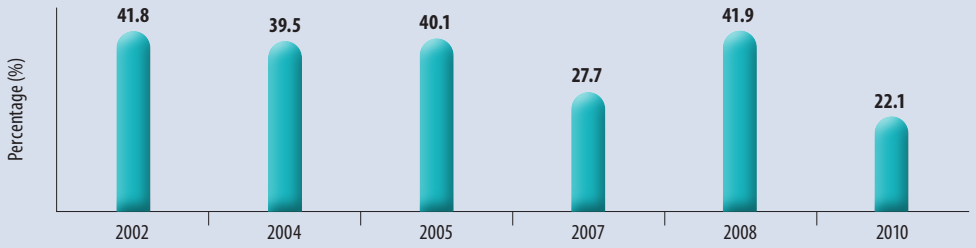


Source: World Bank Enterprise Surveys (WBES) 2022.

Similarly, Figure 3.2 shows a decline in the share of self-employment in total employment since 2010, with Fiji's total force hovering around 370,000 people[16]. Whether the impact of this trend continued post-COVID-19 period remains uncertain due to the lack of data availability and decline in labor force population.

FIGURE 3.2

SHARE OF SELF-EMPLOYMENT IN TOTAL EMPLOYMENT



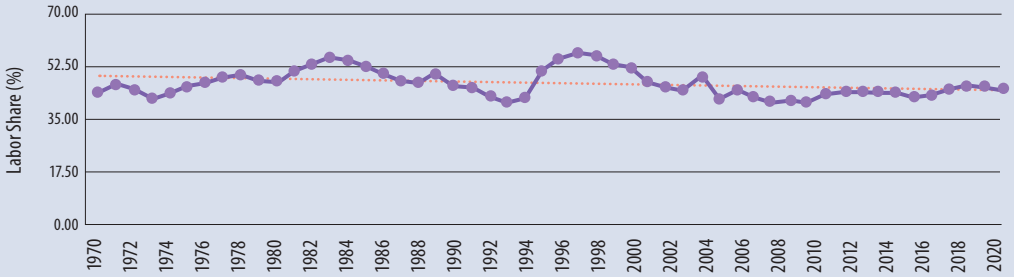
Source: WBES 2022.

The APO estimated labor share of income for self-employed workers, including unpaid family workers (Figure 3.3), showed a declining trend similar to Figure 3.2. This could be possibly influenced by the new Fijian government regulations to streamline business registration and licensing as well as the incentives to encourage informal MSMEs to transition to the formal sector.

16 Refer to https://tradingeconomics.com/fiji/labor-force-total-wb-data.html.

FIGURE 3.3

ESTIMATED LABOR SHARE OF INCOME OF SELF EMPLOYED



Source: APO Productivity Database 2023[17].

Other statistical indicators from the WBES 2022 (Figure 3.4) showed a high percentage of firms in Fiji, at 93.5%, were formally registered when they started operations. However, the competitiveness of informal businesses remains significant with 39.6% of firms competing against them.

FIGURE 3.4

SELECTED WORLD BANK INDICATORS IN FIJI

Percentage of firms in Fiji competing against unregistered or informal firms	39.6%
Percentage of firms in Fiji formally registered when they started operations in Fiji	93.5%
Number of years firm in Fiji operated without formal registration	1.2 yrs
Percentage of firms in Fiji identifying practices of competitors in the informal sector as a constraint	15.1%

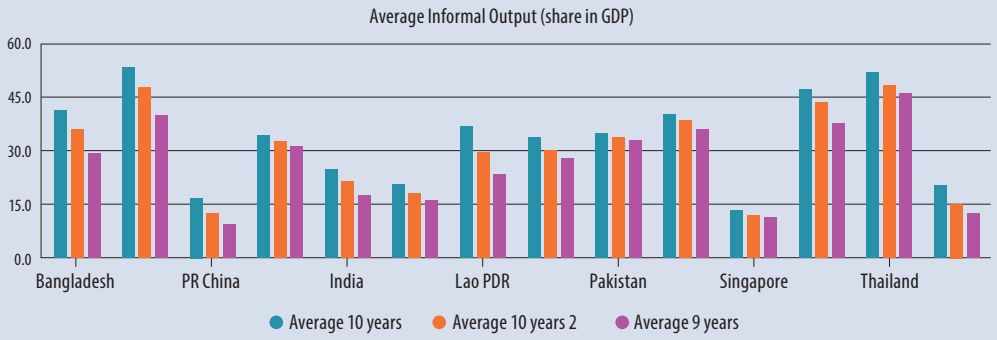
Source: World Bank Group (https://www.enterprisesurveys.org/en/data/exploreeconomies/2009/fiji#informality).

In comparison with other APO member economies, Fiji's average share of informal output in GDP was higher than Bangladesh, PR China, India, Lao PDR, Malaysia, Singapore, and Vietnam for the period between 2010 and 2017 (Figure 3.5).

17 APO Productivity Database provides the harmonized productivity accounts for Asian countries, developed by a joint project of the APO (Asian Productivity Organization) and KEO (Keio Economic Observatory), Keio University, Tokyo.

FIGURE 3.5

DGE MODEL ESTIMATES OF INFORMAL OUTPUT USING WORLD BANK DATA



Source: WBES 2022.

Factors Attributing to Fijian Informality

There is evidence from both developed and developing countries linking informality[18] to lack of access to: (i) credit; (ii) information and technology; (iii) supply chain and trade; (iv) education, training, and skilling; and (v) bureaucratic regulatory processes. These market imperfections underscore the necessity for government market interventions. From the perspective of Fijian MSME owner-operator, informality exists as the result of the following factors:

(i) Cumbersome registration process: The Ministry of Industry, Trade and Tourism (MITT) in 2020 recognized the excessive red tape involved in formal business registration in Fiji[19]. To address this, a risk-based business licensing process was adopted, where tighter controls were imposed on risky businesses. The focus was on: (i) streamlining and eliminating redundant processes; (ii) reducing the time taken to start a business; and (iii) reducing costs.

(ii) Costliness of business registration and licensing for MSMEs: An owner-manager running a village canteen shared the experience that required almost USD221[20] to formalize a small business[21].

(iii) Limited access to formal credit and support services: MSMEs are subjected to strict credit assessment and documentation requirements due to perceived high-risk nature of their business by financial institutions. Many claimed that financial institutions lack understanding of MSMEs' characteristics, business needs, and relevant support services, which are often extended to larger businesses.

(iv) Low perceived risk: Small businesses find it easier to operate informally with less hassle from regulatory authorities. There is flexibility and freedom to move around, allowing them to rise and disappear as they see fit.

18 These are referred to factors, such as tax evasion, cumbersome legal, regulatory, and registration process, expensive start-up costs, low level of education, lack of access to economic resources, to property, to financial and other business services, and to markets.

19 Fiji is ranked 102 among 190 economies in the ease of doing business, according to the 2019 World Bank annual ratings. Fiji's rank deteriorated to 102 in 2019 from 101 in 2018. Ease of Doing Business in Fiji averaged 78.08 from 2008 until 2019, reaching an all-time high of 102 in 2019 and a record low of 43 in 2008.

20 USD221 is about FJD500.

21 Examples of costs involved include business registration, licensing, occupational health and safety (OHS) compliance, weights and measures fees, health inspection fees, and utility connection, among others.

(v) **Low uptake of credit services:** The Demand Services Survey (DSS) 2020[22] showed only 9% of MSMEs reported using formal credit, a slight increase from 7% in 2014. Savings, remittance, and mobile money recorded significant changes between the 2014 and 2020 survey periods. The result implies that either credit funds did not match MSME needs, or credit rationing was applied. Credit rationing is a form of discrimination against MSMEs in the informal sector, where financial support and credit are refused by financial institutions\providers because of low returns and high-risk factors.

(vi) **Lack of awareness regarding formality benefits:** Apart from information asymmetry against MSME owner-managers, rural-based businesses often lack understanding of financial and regulatory requirements, financial products, policies, processes, and practices. This often hinders their ability to access financial products and benefits.

(vii) **Resource constraints:** MSMEs management are constrained by a number of factors, such as lack of access to capital, knowledge and technical skills, limited education, poor management skills, low product quality, and a general lack of ability and motivation to succeed. All these factors had a significant impact on MSME owner-operators to expand and/or secure formal financial support services from local financial institutions.

Sources of Finance and Accessibility: The Fijian Experience

Access to credit or finance is correlated with labor growth rates, MSME business development, and output growth. The Fijian National Financial DSS (2020)[23] showed the uptake of financial instruments offered by financial institutions had mixed results when compared to an earlier survey in 2014. This section explores the Fijian experience with credit accessibility and the sources of credit available to local entrepreneurs seeking financial services. In Fiji, credit accessibility refers to the ability of individuals, households, or businesses to obtain financial services and products, particularly credit or loans, from financial institutions or lenders. It encompasses the availability and affordability of financial products and services across different segments of the population, regardless of their income level, social status, or geographic location.

Fijian National Financial Demand Survey

A Pacific Financial Inclusion Report in 2011 estimated that nearly 50% of Fiji's population lacked access to banks or services of other financial institutions. Table 3.2 presents findings from selected areas of the National Financial Demand Services Survey (DSS) of 2014 and 2020 and details the development experience in Fiji.

Results showed a significant decrease in Fijians excluded from the formal financial sector, dropping from 36% in 2014 to 19% in 2020. However, formal credit uptake was also low with a marginal increase from 6.9% in 2014 to 8.8% in 2020. These findings suggest that although credit was available from formal financial institutions, many MSMEs struggled to access it or fulfill the stipulated lending terms and conditions.

Use of informal sources of financial services remained relatively high compared to formal sources. Based on the 2020 DSS, formal credit uptake was 9% while informal credit uptake was higher at 12%. This data indicates that Fijians continue to rely on informal sources of borrowing despite the availability of formal financial support.

22 Two separate Fiji National Financial Demand Services Survey (DSS) were conducted under the auspices of the Reserve Bank of Fiji - one in 2014 and the other in 2020.

23 DSS was carried out with a sample size of 1,001 respondents to assess the level of financial inclusion (including awareness of digital and green products) among Fijians with a specific focus on women, youth, persons with disabilities (PWDs), and self-employed entrepreneurs.

TABLE 3.2

SUMMARY OF 2014 AND 2020 NATIONAL FINANCIAL DSS

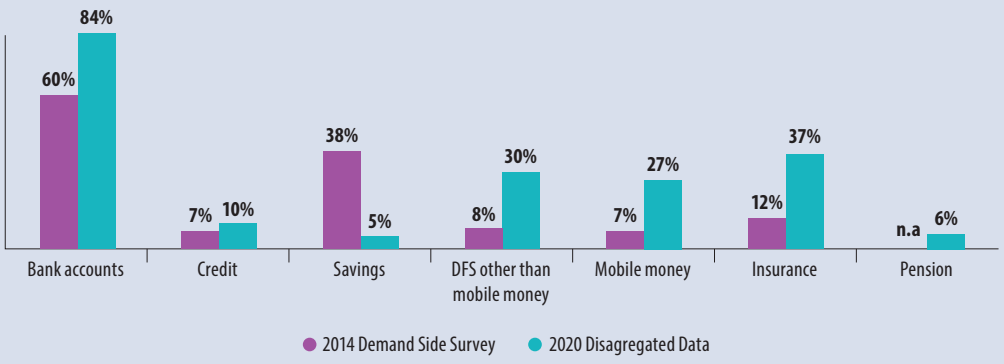
Indicators	2014 DSS	2020 DSS
Fijians excluded from formal financial sector	36%	19%
Gender gap in bank access	16%	7%
Self-employed individuals with access to financial services	68%	83%
Uptake of formal credit	7%	9%
Uptake of informal credit	17%	12%
Women with a bank account	52%	75%
Mobile money account ownership	7%	17%
Fijians saving money with formal financial service providers	38%	45%
Use of formal financial services of banks, credit unions, microfinance institutions (MFIs), and mobile operators	60%	78%
Use of other informal financial services	9%	1%
Rural - access to bank accounts	45%	74%
Urban - access to bank accounts	74%	85%

Source: Reserve Bank of Fiji (RBF) 2020.

Formal sources of credit were accessed by only 10% of Fijians, according to the Reserve Bank of Fiji (RBF), as highlighted in Figure 3.6. Most respondent preferred other financial instruments, such as bank accounts, savings, remittances, and mobile money (N = 1,001 respondents).

FIGURE 3.6

UPTAKE OF FINANCIAL INSTRUMENTS



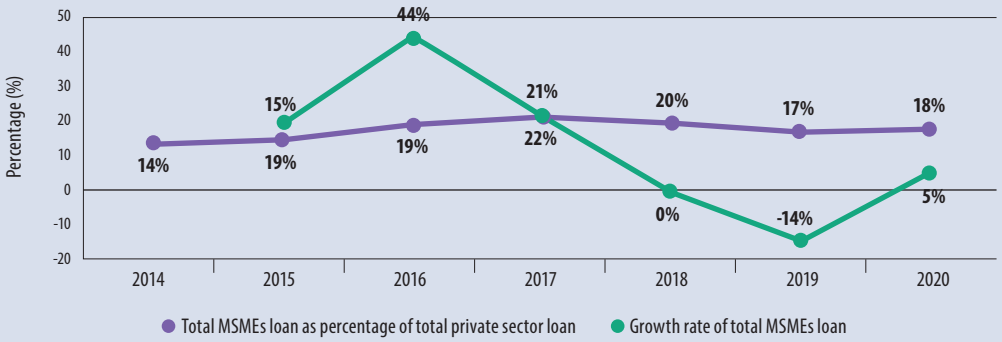
Source: RBF 2020.

The 2020 Fiji National Financial Services DSS reported that 8.9% of respondents used formal sources for credit while 1% reported having an existing loan. The most common formal source of credit are commercial banks (49%), followed by other financial institutions, such as finance companies and credit unions (39%), and microfinance institutions (MFIs) (11%).

Interestingly, MSME loans as a percentage of private sector loans have remained stagnant at around 18% per annum (Figure 3.7). The growth rate of MSME value, however, declined between 2016–2019.

FIGURE 3.7

MSME LOANS

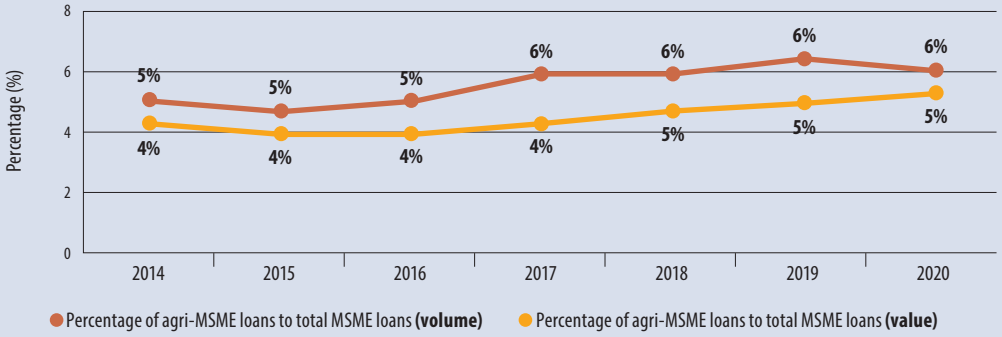


Source: RBF 2020.

Given that many MSMEs are primarily involved in agro-based activities, loans approved to agri-MSMEs have been dismal in terms of both numbers and value (Figure 3.8).

FIGURE 3.8

LOANS TO AGRI-MSME FROM FORMAL FINANCIAL INSTITUTIONS



Source: RBF 2020.

MSMEs struggled to expand their business operation and meeting other regulatory requirements without access to formal credit. The lack of credit significantly constrains MSME owner-managers' ability to grow and transition to the formal sector, thus perpetuating a cycle of informality. But why does MSME owner-managers prefer to remain in the informal sector? Several factors come into play, including flexibility it offers in terms of working hours, labor contracts, production methods, and the ability to quickly adapt to changing market demands and needs.

Sources of Funds for Formal and Informal Actors

Fiji's financial sector consists of both regulated and unregulated financial institutions (Figure 3.9). Regulated entities include commercial banks, licensed credit institutions, the Fiji National Provident Fund, the Fiji Development Bank, insurance companies (both general and life), restricted foreign exchange dealers, securities exchange, investment companies, and capital market intermediaries. In

Fiji's context, unregulated financial institutions refer to any financial entity not subject to the RBF's prudential regulation, such as leasing and factoring.

FIGURE 3.9

FINANCIAL SECTOR LANDSCAPE

Source: RBF 2020.

Though MSMEs can access targeted financial packages through commercial banks and FDB, stringent loan conditions and documentations have discouraged business owners from borrowing. They often cited their inability to understand and submit loan documentations[24], lack of equity contributions, and inability to provide collateral security as required by the banks. The well-established and well-connected large and medium enterprises are typically better positioned to borrow by being able to submit financial statements, cash flow forecasts, project costing, and have the ability to offer collateral security, and provide a 10% equity contribution.

Table 3.3 presents a list of formal and informal financial institutions currently offering credit and support services in Fiji. MSMEs primarily access financial assistance and support services from sources, like credit unions, money lenders, cooperatives, MFIs, government ministries through grants[25], and personal network that consist of families and friends. However, these sources often impose exorbitant fees and charges. Such costs could precipitate current financial demands and strain on limited resources earmarked for investment and business expansion. It is however to be noted that nonfinancial providers to MSMEs are limited in scale and susceptible to management issues. Further, MSMEs' continued reliance on informal funding institutions could further restrict their ability to access capital for large investment in technology and business expansion, thereby limiting their potential contributions to productivity and growth.

Microfinance Institutions (MFIs)

MFIs play a crucial role in Fiji, particularly in addressing the financial needs of households with very low incomes. The South Pacific Business Development (SPBD) microfinance model aligns in this mission, aiming to bridge the gap in credit access for vulnerable populations in Fiji.

The Human Development Index ranked Fiji 99 out of 191 in 2021. Approximately 31% of the population live below the poverty line and only 15% are salaried workers. The unmet demand for credit among households with very low income is estimated at USD12 million.

24 Documentations include financial statements, cash flow forecasts, budget, project costing, and technical aspects of the business, among others.

25 Government ministries' grants are often criticized by the public as political tool to buy citizens' vote or tick.

TABLE 3.3

FORMAL AND INFORMAL MSME SUPPORT SERVICES

Purpose	Name of Organization	Formal or Informal
Financial Services		
(a) Small business grants, guarantee, and concessional loans	Government ministries, BAF, NDP, IHRDEP, and FDB	Formal and Informal
(b) Micro credit and savings	SPBD, MFIs, NGOs and cooperatives, credit unions, money lenders, friends, and families	Formal and Informal
(c) Small business loans: Working capital and term loans	Commercial banks and FDB	Formal
Other MSME Support Services		
(a) Business name registration and tax registration	Registrar of companies, FRCA	Formal
(b) Business license	Municipal councils, rural local authority	Formal
(c) Training: Ideas generation, business planning, and budgeting	BAF, government departments and universities, NGOs, and external partners	Formal and Informal
(d) Advisory services	Private consultants, bankers, lawyers, and accountants	Formal and Informal
(e) Networking and mentoring	All stakeholders	Formal and Informal
(f) Export support services	Fiji Investment, RBF, FDB, and commercial banks	Formal (public and private)

Source: Tuibeqa A.T., 2017.
Key: Fiji Revenue and Customs Authority (FRCA), Business Assistance Fiji (BAF); Northern Development Program (NDP); Integrated Human Resources Development and Empowerment Program (IHRDEP); Fiji Development Bank (FDB); Reserve Bank of Fiji (RBF); NGO, SPBD, MFIs.

The SPBD is a registered MFI that provides financial services, mainly micro loans with a minimum of FJD50 to small and micro businesses who are unable to access credit from the banking sector in Fiji and other Pacific Island Countries[26]. Its main target groups include women, unemployed youths, people with disability, and disadvantaged groups in both rural and peri-urban communities. Of the total number of loans distributed: 99% are disbursed to women, 80% to clients living in rural areas, and 40% to single mothers.

Moneylending as a Convenient Source

Money lending is a legitimate business proposition[27] where lending activities are not monitored. Moneylenders offer a convenient and flexible source of credit, usually very small amounts and repayable over short periods. In Fiji, any person who lends money and charges interest is considered a money lender. Currently, the maximum interest rate permissible is around 12% per annum, although borrowers often find this rate excessive.

Credit Unions and Cooperatives (CUC)[28]

CUC have been active in Fiji for over 50 years with a large membership base compared to MFIs. The sector consists of approximately 15,000 members[29] and managing assets totaling over FJD25 million. The primary goal of credit cooperatives is to draw external funds into communities that need them, not

26 Include Samoa, Tonga, Solomon, and Vanuatu.

27 The Fijian Money Lending Act (MLA) 1978 is currently administered by the Ministry of Justice.

28 Ranked behind commercial banks, finance, and insurance companies, the Credit Unions Act 1978 legitimizes CUC in the provision of savings and credit cooperatives among members.

29 Roughly 1.6% of the estimated Fijian population of 940,000.

as charitable donations, but as loans offered at a very low interest rate[30]. Credit unions provide a secure environment for members to save and borrow at a fair interest rate and are subject to standard loan terms and conditions.

Government Grants

Fijian government ministries allocate grant funds through national budget provisions to stimulate job creation, income generation, business training and development, and for the vitalization of depressed rural economic regions. For example, the Ministry of Trade, Cooperatives and SMEs offers a FJD30,000 grant under a Youth Entrepreneurship Scheme (YES) to Fijian youths aged 18–40. The Integrated Human Resource Development Programme (IHRDP) is another grant scheme designed to create employment by collaborating across the public, private, and civil society sectors to address poverty-related issues through employment creation.

RBF Import Substitution and Export Finance Facility (ISEFF)

The RBF's ISEFF includes an export finance component, geared toward providing access to credit and improving the exporters' competitiveness in the international market. The import substitution facility is aimed at promoting domestic commercial agricultural production and renewable energy activities in public transportation. These facilities are offered through commercial banks, FDB, and licensed credit institutions. However, eligible businesses must meet the requirements of approved institutions and the ISEFF eligibility criteria. Interest charged on this line of credit is below 1% per annum[31] and the total amount disbursed under ISEFF was FJD500 million[32]. However, the amount allocated to an individual is limited to a maximum of FJD1 million per business.

Agribusiness Case Studies in Fiji[33]

Two agribusinesses (taro farmers) are presented as case studies to illustrate the impact of resource accessibility (capital and labor) on farm output. Although the two farmers are neighbors, the difference in their performance can be attributed to their ability to secure capital for the initial start-up and ongoing business management.

Case 1: Indigenous - i Taukei Farmer

The i Taukei farmer has been farming taro for over 20 years on a communal agricultural land[34] belonging to his village clan. He lives on the farm with his wife and two adult children in a corrugated iron roof house. He has access to over 40 acres of communal land, with 80% of which are still uncultivated. Over the years, his total taro or "dalo" production per annum is around 150 tonnes from the 10 acres he cultivates annually.

Using traditional techniques, the indigenous farmer relies mostly on friends and relatives from his village to clear the land, plant, and harvest taro. His initial application to the development bank for a loan to purchase farm equipment, tools, and bullocks was rejected because he did not have collateral security (proper lease), equity contributions, a farm plan, and financial projections. His taro production has been perceived as below average compared to the production levels of other farmers in the area. A financial grant by the government, however, enabled the farmer to hire equipment for land clearing, purchase hand tools, and repair his farmhouse. However, this did not have much impact on his taro productions or overall standard of living.

30 Since its conception, CUC has been synonymous with meeting basic needs and improving the livelihood of its members.

31 The approved lenders can borrow from RBF at this rate and on-lend to eligible businesses at a maximum rate of 3.99% per annum for a maximum term of five years.

32 The RBF disbursed over FJD90 million to 32 businesses in 2022 mainly in export financing.

33 During the course of the study, two case studies were developed from the researcher's network of indigenous farmers. The researcher was well-acquainted with the indigenous farmer as he was involved in the assessment of the farmer's loan application with the bank.

34 Fijian communal land is owned communally by land owning units. Members of the clan could use the land provided the head of the landowning unit grants consent. Unless there is intention to lease the land, members of the clan would not need any document as evidence of land usage.

Case 2: Chinese Taro Farmer

The Chinese farmer leased 20 acres of native land adjacent to the indigenous farmer. Though he did not live on the land, he managed to produce over 240 tonnes of taro annually within three years from cultivating approximately 10 acres. All the taro he produces is exported. Initially, the Chinese farmer had no farming equipment but hired contractors to plough his land. Through personal savings and family support, the Chinese farmer was able to develop the land and significantly increased his annual taro production. He reinvested the capital returns from taro sales into acquiring farm machinery.

To some extent, these case studies support the original claim that production and output can be improved with the access to financial resources. Despite their proximity as both farmers were neighbors, the Chinese farmer was able to sharply increase his dalo production due to his ability to access capital and reinvest returns into land development and improving farming practices.

Informal Sector Challenges When Accessing Credit

MSME owner-operators frequently express concerns about their lack of information on financial market offerings that would enable their ability to make informed decisions. They also feel that their interests and needs are often overlooked in the design and delivery of financial products and services. Too often, financial providers launch financial products without directly addressing the needs of MSMEs. The rationale behind needs assessment is that it provides stakeholders with invaluable input and informed decisions on whether to intervene. Today, there is a disconnect between financial service providers and those seeking financial assistance, such as MSME owner-managers. The low take-up rate of financial products and services suggests either there is credit rationing or insufficient demand for the products and services.

This report identifies other factors that restrict access to credit:

(i) Documentation and risks: Formal financial institutions often hesitate to lend to informal businesses, particularly those categorized as small and micro businesses due to their lack of collateral, credit history, and legal documentation, among other reasons. These businesses are perceived as risky borrowers, making it challenging for them to secure loans from traditional banks or financial intermediaries.

(ii) Regulatory factors: Lack of legal recognition and formalization poses a challenge to financial accessibility for the informal sector. This lack of formal recognition complicates establishing transparent financial transactions, engaging with formal financial institutions, or participating in government-led financial inclusion programs. In addition, informal businesses are often vulnerable to various risks, including natural disasters, theft, and market fluctuations.

(iii) Innovation and technology: Digital tools and online platforms help informal businesses to market their products and establish an online presence. However, lack of access to technology, innovation, and digital presence hampers their ability to enhance their products and services, optimize supply chains, and develop new offerings or unique value propositions.

(iv) Education, training, and skills: Access to specialized training in areas, such as marketing, finance, and technology is crucial for informal entrepreneurs to understand and adapt to market trends and customer demands. Though business start-ups and entrepreneurial programs are offered at universities, the course content and competency skills do not suite small business needs, thus creating a skills gap for entrepreneurs to enhance their business acumen and operations.

[33] During the course of the study, two case studies were developed from the researcher's network of indigenous farmers. The researcher was well-acquainted with the indigenous farmer as he was involved in the assessment of the farmer's loan application with the bank.

[34] Fijian communal land is owned communally by land owning units. Members of the clan could use the land provided the head of the landowning unit grants consent. Unless there is intention to lease the land, members of the clan would not need any document as evidence of land usage.

(v) **Market access:** Micro producers face challenges in accessing markets due to market barriers and inadequate infrastructure. They also lack access to market research and analytical tools for marketing and decision making, thus making it difficult to tailor their products or services to meet market demands effectively.

Private Sector Initiatives to Address Credit Gap and/or Accessibility

Addressing accessibility challenges in the informal sector requires targeted initiatives, such as providing training programs, subsidizing technology adoption costs, and establishing incubation centers. These centers would provide guidance and resources to help informal businesses effectively leverage innovation and technology. By bridging this gap and providing necessary institutional support can boost productivity, investment, market competitiveness, and output growth, thus encouraging the transition from informal to formal business enterprises.

TABLE 3.4

PRIVATE SECTOR FINANCIAL DEVELOPMENTS

Initiative	Description
1. Fintech Regulatory Sandbox	A mobile money wallet linked to debt card
2. Sole Payment Service	Monitors, manages, and maximizes financial resources under one digital platform. It aims at facilitating sustainable wealth creation and dedicated to providing efficient, reliable, and safe financial tools
3. Vodaphone MPAISA Mastercard	Allows the use of debit cards for online payments and purchases as well as withdrawals via ATMs and EFTPOS as long as customers have sufficient funds in their MPAISA wallets. However, many informal sector workers are facing difficulties with making payments. There appears to be a lack of uptake with the payment gateway in Vodafone's M-PAISA app, which had been setup to encourage easier electronic payments
4. WBC partnership with Mastercard	Focused on addressing existing challenges that impede customers access to products and services, including expanding the footprint of mobile banking and it usage
5. FDB Special Facility for SMEs	SMEs sustainability package and loans for women entrepreneurs. Special features which enable easy access to funding through the bank online portal
6. BPS satellite solutions	Allows customers to use BSP services and make transactions, such as deposits, withdrawals, balance enquiries, and updating PIN
7. UNESCAP partnership with RBF	To find innovative ways of financially supporting Fiji's women entrepreneurs. It is focused on policy, research, advisory services, and financial services for women-led businesses
8. ANZ MoneyMinded program	Provides basic skills of managing money through the MoneyMinded financial literacy modules; financial access using the agri-value chain finance model
9. WBC Microfinance Market Day	Provides entrepreneurs with a safe place from which they can sell goods. Also provides an opportunity for networking, sharing best practices, and skills training
10. RBF E-Commerce Aggregator Subsidy	Scheme that enables ECommerce aggregator to onboard SME subscriptions and commission fees related to infrastructure, legal, and access to finance and markets
11. The Informal Economies Recovery Project partnered with UN projects - Markets for Change and Reach	Coordination of an outreach program to the Rakiraki municipal market and Conua, in the province of Nadroga
12. The ILO and Fiji National Provident Fund (FNPF) are collaborating to raise awareness, provide advisory services, and register informal sector workers and micro business owners	ILO targets informal sector workers in the western division, as most of the impact of COVID-19 has been in tourism and agricultural dependent locales. This is also aligned with the Fijian government's recovery priority of ensuring overall social protection coverage for all Fijians

Table 3.4 presents financial initiatives undertaken by private-sector organizations and development agencies for the purpose of addressing market accessibility, information asymmetry, facilitating business transactions, improving access to credit, and providing business advisory services, among others.

Empirical Study to Establish Links between Access to Capital and Productivity

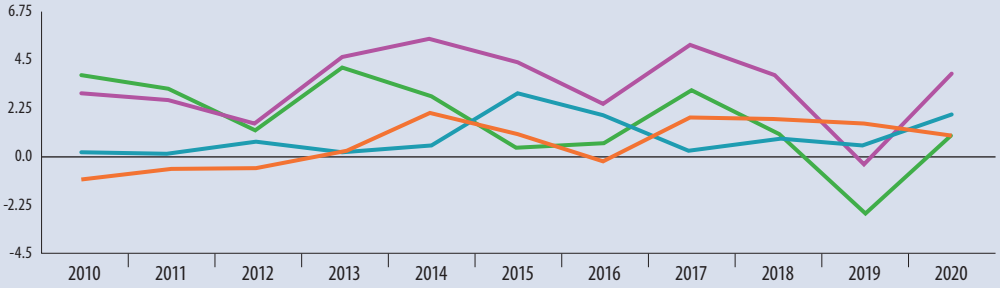
At the outset, informality refers to economic activities that operate outside the formal regulatory framework. Productivity, on the other hand, measures the efficiency of labor and capital inputs being transformed into goods and services while access to finance refers to the availability of loan funds, grants, and other financial support services for the purpose of starting new businesses or managing existing ones.

According to the 2013 World Bank Development Report, large enterprises tended to: (i) have higher labor productivity; (ii) offer higher wages to workers; (iii) have higher chance to be an exporter; (iv) more likely to add new product lines; and (v) more likely to incorporate new technology. Although Fijian MSMEs are crucial in the rural labor employment and economic activity, larger formal businesses tend to outperform MSMEs in terms of productivity, labor, and output growth.

Figure 3.10 presents three factors influencing output growth: capital input, labor input, and TFP. Although capital and labor inputs had rebounded post-COVID-19 period (APO 2022), TFP contribution was still unstable. The trend suggests that without a coordinated national productivity system involving all stakeholders, the technological inputs and investment efforts of individual actors will not be sufficient to impact productivity growth in both formal and informal environments.

FIGURE 3.10

DECOMPOSING OUTPUT GROWTH 2010–2020



Source: APO Data 2022.

The main hypothesis of this study is that accessibility to finance has a significant impact on informal sector productivity and output growth. Using the APO productivity database, appropriate measurement indices[35] were identified to estimate a linear regression equation that explains the links between access to capital and productivity. From the data, four regression models were developed, and Ordinary Least Squares (OLS) regression was employed to estimate regression coefficients, which modeled predictor variables, as summarized in Table 3.5.

35 The indices refer to output growth, labor productivity, capital input, labor input, and capital deepening as predictors. Capital deepening was also used as proxy for access to capital.

TABLE 3.5

SPSS OUTPUT TO ESTIMATE COEFFICIENTS OF THE LINEAR EQUATIONS

Variables	Model 1	Model 2	Model 3	Model 4
Data period	1971–2021	1971–2021	2000–21	1971–2021
Sample size, *N*	50	50	21	50
Dependent variable	Output growth	Output growth	TFP	GDP @constant prices
Predictor variables	*Labor productivity*	*Real income, Labor productivity*	*Capital deepening, Capital input related to IT capital, and Capital Sock which produced asset*	*Labor input, Labor productivity, Capital input, Real income*
Adjusted R Square *(Standard Error)*	0.846 (2.009)	0.868 (1.864)	0.658 (0.472)	0.984 (0.332)
Durbin-Watson	0.842	1.023	1.374	0.439
ANOVA F Stat *p value*	275.968 <.001	164.771 <.001	14.480 <.001	779.63 <.001
Coefficients				
- Constant	1.840 (6.52, p <.001)	4.013 (5.19, p <.001)	1.533 (13.413, p <.001)	0.104 (2.78, p =.008)
- LP	0.939 (16.61, p <.001)	0.932 (17.745, p <.001)	n\a	0.000 (-1.78, p = 0.86)
- Capital productivity	n\a	n\a	n\a	n\a
- Real income	n\a	-2.778 (-2.998, p =.004)	n\a	0.000 (-1.78, p = 0.86)
- Capital input	n\a	n\a	n\a	0.000 (-1.78, p = 0.86)
- Labor input	n\a	n\a	n\a	0.000 (-1.78, p = 0.86)
- Capital deepening	n\a	n\a	-0.24 (-2.883, p <.010)	n\a
- Capital input related to IT capital	n\a	n\a	0.077 (2.775, p <.012)	n\a
- Capital stock of which productive asset	n\a	n\a	-0.214 (-5.60, p <.001)	n\a
Collinearity Statistics - Tolerance - VIF	 1.000 1.000	 0.998 1.002	 Close to 1 Btw 1.04 and 1.22	 Btw 0.013 – 0.81 Btw 1.24 – 74.85
Collinearity diagnostic - using Eigenvalue, condition index and variance proportions	No multicollinearity	No multicollinearity	No multicollinearity	Serious multicollinearity

Based on the four models above, the following deductions can be made:

(i) From the adjusted R square, all four models showed a significant fit of the data and further implied that the proportion of the variation in the dependent variable could be explained by the independent or predictor variables.

(ii) The Standard Error of the Estimate (SEE) provided an idea of how well a regression model fit a dataset. Here, all four models showed a lower SEE below 2, indicating that the regression equations (or models) do fit the dataset.

(iii) Durbin-Watson (DW) statistics will always have a value ranging between 0 and 4. All four models had DW less than 2, suggesting the presence of positive autocorrelation. This indicated that the predictor variables effectively predicts future output growth.

(iv) Applicable when taking a sample from a large population, the ANOVA F value informed if there was a significant difference (p value for all four models was less than 0.05) between the levels of

the independent or predictor variables. From the obtained results, Model 3 showed a very low F value (F = 14.48), suggesting that there was not much variance if a different sample was used.

(v) Correlation coefficients of independent variables were positive, except for real income in Model 2 and capital deepening and capital stock for productive asset in Model 3. The p values were less than 0.05 except in Model 4 when real income, capital input, and labor input were introduced. Positive coefficients indicated a positive association between the predictor variables and the dependent variable, though this association was considered weak based on the values of the coefficients. In Model 3, negative coefficients implied that TFP improves when capital is directed toward consumption goods and services, and non-IT capital input.

(vi) Labor production (LP) is a composition of annual growth rates of labor quality, capital deepening, and TFP. As in all four models, LP and capital input were assumed (used as proxies) as accessibility to capital availability. When output growth and GDP were regressed on LP and real income as in Models 1 and 2, there could be support on the study claim that access to capital has a significant impact on productivity and output growth. In the case of Fiji, it is assumed that contributions from the self-employed and unpaid family workers are included in the consolidated APO data.

Overall, despite low and stagnant LP contributions to output growth over the 50-year period based on APO data source, the four models indicate a robust connection between access to capital and productivity. As the Fijian informality sector is shrinking, this study supports the push for access to capital in both formal and informal sectors. Model 3, with a reduced sample size (N=21), shows a notably improved regression performance.

Policy Intervention and Experiences

In the previous sections, the numerous challenges faced by Fijian MSMEs were discussed in terms of limited financial resources, including limited access to formal banking services, high cost of borrowing from formal institutions, lack of financial literacy, absence of insurance cover, and the lack of legal recognition. This section presents the response of local Fijian financial institutions, government ministries and private sector initiatives to address the ongoing challenges.

Policy Support toward Informal Businesses (Mostly MSMEs)

National Financial Inclusion

In 2008, the then Governor of the Reserve Bank directed all commercial banks in Fiji to establish microfinance facilities within their bank branches. A summary of subsequent initiatives in response to this directive are as follows:

i) Establishment of the National Financial Inclusion Task Force to reach the "unbanked" population in Fiji.

- Collaboration among commercials banks, licensed credit institutions, and private-sector organizations to reach out to rural remote communities with financial literacy programs and registration of new accounts, including provision of micro savings and credits in rural and remote communities
- Promoting and educating customers to adopt electronic banking through ATMs and MPAISA platforms
- Facilitation of mobile banking for opening micro savings account
- Community awareness and outreach campaigns
- Implementation of skills training programs, like Start Your Own Business

Government Ministry Programs

i) The Ministry of Trade, Cooperatives and MSMEs has revitalized several entrepreneurial programs, such as:

- Youth Entrepreneurship Scheme (YES)
- Northern Development Programme (NDP)
- Integrated Human Resource Development Programme (IHRDP)
- National Export Strategy

All these programs were launched with specific allocations from the national budget, targeting distinct groups and certain selection criteria. In addition, the ministry initiated the Trade Enhancement Programme (TEP) that targets and supports the development of skills-based individuals and entrepreneurs. The program provides financial support of FJD1,000 to skills-based businesses who require start-up funding.

ii) The Ministry of Trade, the Ministry of Economy and, the Reserve Bank of Fiji are collaborating with the FDB and commercial banks to offer packages that include:

- Subsidized loans, grants, and interest subsidies
- Launching of the Financial Inclusion program
- Organized community awareness and financial literacy training
- SPBD (MFI) receiving soft loans from the FDB

iii) To facilitate the registration of local MSMEs businesses, the Fijian government has approved:

- A one-year grace period for informal businesses to start and operate without registration and license
- Registration and licensing can be accessed through rural local authorities and local municipal councils

Tax Incentives for Small Businesses

The government has approved several incentives aimed at promoting registration and business start-ups.

- Businesses earning an income less than FJD500,000 per annum can enjoy a number of benefits, such as waiver of stamp duty on all instruments or written documents for SMEs. Effective 1 January 2016, it is applicable to registered businesses that are tax and customs compliant
- SMEs with a turnover of FJD300,000 or less per annum and registered for VAT qualify to file VAT returns annually instead of monthly under the VAT Act 1991
- Announced in the 2019–2020 national budget, all entities with an annual turnover of less than FJD500,000 were granted a free VAT Monitoring System (VMS) application software and a free smart card reader from the Fiji Revenue and Customs Services
- SMEs in the agricultural sector with an annual turnover of FJD500,000 or less per annum and exclusively involved in agricultural sector qualify for income tax exemption under the Income Tax Act 2006, provided that their business income is solely derived from agricultural activities
- A dedicated SME Support Centre has been established to provide all relevant information to entrepreneurs, ensuring they understand their tax obligations, including registration, filing, and payment responsibilities as well as to assist SMEs to meet their reporting requirements. The SME Support Centre also processes tax clearance applications for amounts below FJD20,000

Access to Education

In 2023, a number of educational awards and scholarship schemes were launched, including:

- Merit-based Higher Education - Level 7 Local Scheme (previously known as National Toppers Local Scheme)
- Merit Based Skills Qualification Scheme (previously known as Skills Qualification at Fiji National University (FNU))
- Scholarships for Students with Special Needs Scheme
- Scholarship for In-service Scheme for those employed in the public sector
- Opportunities for Masters and PhDs by research
- Merit-based Overseas Scheme (formerly known as National Toppers Overseas Scheme), focusing on undergraduate studies not offered at local universities, and postgraduate qualifications focused on specialized fields of Medicine and Health

In addition, competency-based training grants were made available through tertiary institutes and private sector to address immediate labor shortages in areas of construction, tourism & hospitality, and automotive[36]. In 2021, the Australia Pacific Training Coalition (APTC) and FNU entered into a partnership agreement to develop the quality and relevance of Technical and Vocational Education and Training (TVET) in Fiji. The partnership promotes capability development of TVET, which is essential for PALM[37] and postpandemic economic recovery.

Market Access

Fiji maintains Trade Commissions in Australia, PR China, New Zealand, North America, and Papua New Guinea. These commissions are tasked with undertaking investment and export marketing missions, organizing and participating in trade and investment exhibitions, and establishing and strengthening networks with relevant public and private stakeholders. They also conduct market research to identify potentials for investment and export opportunities available in the host country and relevant regions.

Government Efforts to Formalize the Informal Economy

The Fijian government's efforts to transition informal businesses to the formal economy include several strategic actions:

(i) Simplifying and streamlining registration and licensing requirements, lowered registration fees, and minimized paperwork required to encourage informal businesses to transition into the formal sector. These processes are now decentralized to rural local authorities and local municipal councils.

(ii) Substantially reducing tax rates, enacting the new Companies Act, relaxing business-opening hours, promoting private sector participation in strategic areas, and developing supportive infrastructure.

(iii) Encouraging public and private sector engagement to foster inclusive growth by generating employment opportunities, generating public revenue, and providing affordable goods and services.

36 Other grants approved by the government in 2023 include apprenticeship training, study loan scheme for In-Service Students, Allowance for Educational Awards, and back to school support.

37 Australia Labour Mobility (PALM) scheme allows eligible Australian businesses to hire workers from nine Pacific islands and Timor-Leste when there are not enough local workers available.

(iv) Developing the Wairabetia Economic Zone in the Western Division, which is designed with a "plug and play" concept with tailored incentives to attract investments in services and manufacturing industries, thus encouraging foreign direct investment.

(v) Partnering with the Singapore Cooperation Enterprise to provide technical assistance to improve the ease of doing business. Approvals processes for regulatory agencies in the provision of services, such as registration, land-use, administration, development control, environmental protection, employment relations, and tax administration will now use e-government services.

(vi) Improving tax administration through development of the National Tax Information System (NTIS), opening new Fiji Revenue & Customs Services (FRCS) offices across Fiji, and streamlining processes to improve efficiency and consistency in tax administration.

(vii) Collaborating with the International Finance Corporation (IFC) to review investment policies and legislation, and implementing the new International Arbitration Act to establish a dispute settlement mechanism for investors.

(viii) Transitioning Investment Fiji from a process orientation toward a performance orientation by adopting a seamless customer-centric model that focuses on improving the quality and effectiveness of service delivery. A Customer Engagement Model was adopted to better understand a customer's business, how to work with customers, and setting and delivery of outcomes.

(ix) Introducing a Customer Relationship Management (CRM) system at Investment Fiji to manage investor and exporter relationship, facilitate data gathering and dissemination, and also assist in follow-up and customer engagements tracking. Additionally, launching the Export Capability Program to assist exporters in finding new markets and expanding their business plans.

Policy Implications and Conclusion

Addressing and formalizing the informal sector requires a multifaceted approach that combines policy interventions, socioeconomic initiatives, institutional and regulatory reforms, and effective coordination among stakeholders involved in the development of Fiji's financial sector. To address challenges with the informal sector, several policy changes are proposed, including:

i) Recognizing that informality is about people, and not just systems or sectors. Understanding the characteristics of people involved, their business needs, and socioeconomic conditions are critical to ensuring that culturally appropriate policies, programs, and practices are designed and delivered.

ii) Assessing the business needs, demands, and interests of those in the informal sector are critical for effective program evaluation and design. Short-circuiting the needs identification or the process may undermine the impact and relevance of program designs, such as improving access to credit.

iii) Implementing broad-based policy reforms to accelerate financial sector development, focusing on private sector involvement, improving governance and regulatory frameworks, enhancing access to MSME financing, business start-ups and expansion, reducing tax burdens, technological improvement, creation of new innovative systems, boosting labor productivity growth, market competitiveness, increasing scholarships and grants for education and skills training, and output growth.

iv) Expanding public awareness through campaigns on benefits of transforming to the formal economy should be accompanied by pathways to transition, training programs on support services, and a streamlined business licensing and registration processes. The Fijian National

Financial Inclusion program should embed business development initiatives to boost new business start-ups and the management of existing businesses.

v) Recognizing the importance of access to credit from both formal and informal sectors for MSMEs for varied purposes. For example, business expansion, investment, trade, productivity growth, and livelihood creation, among others. While the formal financial sector mainly provides investment credit, the informal financial sector provides credit for consumption, transport, and communities obligations, as in the case of Fiji. Enhancing welfare for the poor necessitates broader access of both formal and informal sectors to the financial system.

vi) Conducting detailed analytical studies on the determinants of demand and supply for informal credit at household and individual levels using international benchmarks and models. This includes factors based on age, gender, education level, dependency ratio, household expenditure, business location (from the demand side) and lenders' credit rationing behavior, borrowers' creditworthiness, direction of lending, risks, asset values, and other relevant measurements (from the supply side). Policies that increase the capacity of households to acquire more wealth will bolster MSMEs' creditworthiness and make them less susceptible to credit rationing risks. Fiji should not be allowed to 'creatively destruct' informal economic activities given their critical role and contributions to the improvement of living standards among the people at the lower end of the economic strata.

vii) Evidence from both developed and developing countries underscores the significant contribution of the informal sector (MSMEs in the Fijian context) to poverty alleviation, women's empowerment, job creation, and economic growth. Fiji urgently needs conducive policies and operating environment to drive active participation in business, economic productivity through business expansion and diversification, promote technological upgrading, and spur innovation, particularly among the disadvantaged rural communities.

viii) Fiji requires a dynamic and vibrant MSME regulatory framework that addresses policy formulation, coordination, and comprehensive reporting of MSME activities. This framework should integrate research, education, and enterprise development through the infusion of science and technology. In addition, a 3–5 year MSME development plan is essential, specifying key strategic goals, objectives, key target sectors, and strategic actions.

ix) Utilizing the informal sector as a "business incubator" or business lab attached to a local university could prove to be worthwhile, where the entrepreneurial process for microentrepreneurs and nascent enterprises takes place. Such business support centers could provide office space, equipment, mentoring support, business coaches, and other support services.

x) Granting a 3–5 year grace period should be allowed for small and micro businesses to establish and grow without the hassle of formal registration and licensing. A zero rate tax reforms should be introduced to new and nascent entrepreneurs during the 3–5 years incubation period to allow the business to accumulate enough working capital for business continuation. Revenue contribution through taxation on informal economic activities may be insignificant, thus any government mandatory fees and cost during the early stages of business start-ups could have a detrimental effect.

xi) Utilizing a TVET-oriented program focused on competency skills, financial management, marketing, entrepreneurship, and modern technologies can be developed to improve SME owners' business acumen and productivity.

xii) Developing labor regulations that acknowledge the unique characteristics of informal employment should be pursued, including simplified hiring and firing procedures and regulations that accommodate part-time or temporary work arrangements. Raising awareness among informal sector workers and businesses about the benefits of formalization is crucial. This effort should be supported by outreach programs aimed at educating informal workers about the advantages of

formal employment, such as access to superannuation, government grants, social protections, and financial support services.

xiii) Creation and nurturing of an enabling business environment is crucial for the growth and development of the informal economy. Local governments and municipal councils should support market access for informal businesses by establishing designated market spaces or vendor zones, where informal businesses can engage in buying and selling, including the provision of infrastructure, such as electricity, sanitation facilities, and storage spaces. Furthermore, promoting the integration of informal businesses into value chains and supply networks can create new market opportunities and enhance their competitiveness, productivity, and sustainability.

Notwithstanding the efforts of local formal financial institutions discussed in this report, MSME owner-operators perceive a lack of appropriate financial products and services to satisfy business needs and demands. This suggests a disconnect between MSME owners' needs and the offerings of financial service providers in the development of financial products and services. It was hypothesized that a credit gap still exists in Fiji, where MSMEs struggle to access credit from formal financial institutions to develop new business start-ups, engage in trade negotiations, and adopt innovative finance and technology. The thesis proposed in this report is that improving access to credit will boost productivity among MSMEs, especially those in rural and disadvantaged communities where credit availability is limited (and credit retaining is prevalent). This implies that enabling MSMEs to access business loans and credit concessions could lead to increased productivity and output growth, assuming supportive factors, such as technological change and operational efficiency are in place.

CHAPTER 4

INDIA

Abstract

The unorganized or informal sector occupies a substantial share in the Indian economy, accounting for nearly half of the economic activities in the country, albeit in low productivity levels. While it provides employment to a large portion of the workforce, its contribution to value added is below par. Among the various bottlenecks contributing to low productivity in these informal enterprises, access to credit stands out as a significant factor. It is a well-established fact that higher credit growth leads to higher gross value added. However, a large majority of the enterprises suffer from a credit demand problem, relying exclusively on noninstitutional sources of credit for their short-term needs. A deeper exploration reveals underlying structural as well as policy challenges they face.

The explosion of fintech firms in the country aims to address some of the gaps of credit requirements for these enterprises. However, the solution remains in a balanced approach combining both public and private credit access. This study explores the credit market along with the specific needs of enterprises. Discussions around existing policy initiatives, incentive structures, and credit accessibility are crucial in addressing the working capital requirements of these enterprises. Resolving credit challenges in the informal sector and thereby enhancing productivity requires a multifaceted strategy that focuses on tailored solutions to achieve diverse growth trajectories of these enterprises.

Introduction to the Informal Economy and Productivity Growth

The informal economy forms a substantial segment in developing economies. The term "informal economy" implies the existence of a formal economy, which is why development economics often treat it as a residual economy. However, experience has shown that it is far from merely being a residue, given its significant and steady increase in size and contributions toward national output. Understanding the characteristics of the informal economy is crucial as there is no universal definition that applies to all developing economies. The International Conference on Labour Statisticians (ICLS) in its 17th meeting in Delhi in 2003 endorsed a definition of the informal sector that disaggregated informal employment into production units and jobs [1]. Thus the informal economy can broadly be categorized into the informal sector and informal employment.

This manner of categorization allows for country-specific definitions of the informal economy, more suitable to the operational features of each economy. Within the context of India, the terms "formal" and "informal" sectors are often used interchangeably with "organized" and "unorganized" sectors, respectively. The National Commission for Enterprises in the Unorganized Sector (NCEUS) [2] provided a generic yet definite characterization, basically referring to all unorganized sector as unincorporated private enterprises operating on a proprietary or partnership basis with less than 10 workers, usually operating from households, as belonging to the unorganized sector. Therefore, for practical purposes, the informal sector is closely aligned with the household institutional sector, making the household as the observational production unit. It is important to note that the informal sector definition is "market oriented" and excludes activities that are done by the households for own final use [3].

Such a definition implies low capital usage and low labor productivity. At a cursory glance into the activities of a large number of enterprises operating from homes would be difficult to typify as an enterprise. Further, unorganized or informal workers are those involved in either enterprises or households with no social security benefits. Therefore, in the context of India, a detailed specification of these terms is essential to understanding the informal economy.

According to the sixth economic census[1] conducted in 2013–14, there were 58.5 million establishments in India, with approximately 77.6% (45.36 million) involved in nonagricultural activities. Of these, 71.74% (41.97 million) were own account establishments (OAEs) and 28.26% (16.53 million) employed at least one worker. Unlike other establishments, OAEs do not employ hired workers on a regular basis. The decision to hire or otherwise has implications for output, revenue, and performance. The growth rate of OAEs between the fifth (2005) and sixth (2013) economic census was 56.02% while establishments which took hired workers were only 15.11%, indicating a lower entry barrier for smaller enterprises. As mentioned earlier, the establishment size has legal and tax implications in India, which may explain this phenomenon. In terms of ownership, nearly 90% of the establishments were proprietary with 15.4% owned by women [4].

The periodic labor force survey (PLFS) data in Table 4.1 shows that approximately 71%–75% of workers usual status (ps+ss)[2] are engaged in enterprises owned by households, either on a proprietary or partnership (P&P) basis. Although females comprise a relatively smaller percentage compared to their male counterparts, their representation is steadily increasing [5].

TABLE 4.1

PERCENTAGE OF WORKERS ENGAGED IN P&P ENTERPRISES IN NONAGRICULTURAL SECTOR

Category of Workers	PLFS (2020–21)	PLFS (2021–22)	PLFS (2022–23)
Male	75.3	75.2	77.9
Female	56.7	58.4	60.8
Person	71.4	71.8	74.3

Source: Various rounds of the PLFS (2020–23).

In 2020–21, the unorganized sector in India contributed 43.5% to the overall gross value added (GVA). This contribution has slightly decreased due to the COVID-19 pandemic [6]. However, there is a significant divide in the substantial efficiency gap between formal and informal firms, which is also evident in the global productivity differences [7–8]. According to La Porta and Shleifer [9], labor productivity differences between formal and informal firms in developing economies range from 30%–216%. In India, Krishna et al. [10] noted that from 2003–04 to 2007–08, the relative total factor productivity gap between organized and unorganized sectors was at 33%. In a more recent study, Basole, Chopde, and Nath [11] found a 25% differential when comparing observable characteristics of organized and unorganized units. There are many reasons for these differences, including better technological leverage, access to efficient human resources, investment in training and education, and access to external finance for formal firms.

Literature attributes various factors to the growth and persistence of India's informal economy. Mehrotra and Giri [12] identify several market failures induced by prevalent policy regime that have resulted in the informal sector's expansion. They highlighted that India's postindependence import-substituting industrialization (ISI) focused primarily on capital-intensive industries, which created a

1 India also initiated a seventh economic census in 2019; however the results have not been released at the time of writing this report due to delay from COVID-19 pandemic.

2 Principal status and subsidiary status.

vacuum for the largely unskilled labor formerly engaged in agriculture. There were limited avenues to absorb the bulk of the labor force to nonagricultural sector, resulting in concentrated labor in the burgeoning microenterprises. Due to the size of the enterprises, labor laws were also constricted, depriving social protection for workers. Further, the government's subsequent industrial policies reserved the manufacture of nondurable consumer products for the small-scale sector, followed by subsequent policy resolutions that not only maintained, but increased the list of such goods. Protectionist policies stifled competition which sees the persistent production of substandard products.

It has been observed since its inception, India has witnessed a policy-induced gap between the large firms (formal sector) and microfirms (informal sector). Incentive structures, pace of growth, workforce skillset, productivity, differential product and service offerings, and markets of formal-informal sector have been detached from each other. The disconnect is also reflected in the fact that only 12% of micro, small, and medium enterprises (MSMEs) have a subcontracting relationship with the larger firms, a worrying trend that raises concerns about India's future growth strategy.

At a unit level, the common understanding toward informality is an endogenous outcome shaped by the characteristics of firms and workers and the legal and economic environment in which they operate [13]. The specific manifestations that follow from this definition depend on the area of operation. Essentially, it comes down to a matter of choice for entrepreneurs, where a lower entry barrier and lax regulatory provisions create a vicious circle that keeps smaller enterprises anchored to these conditions. In his study, Kanbur [14] outlines various factors that contribute toward informality, such as a higher proportion of low-productivity enterprises, higher wages, lower optimal size of enterprise, higher private cost of regulation, and lower intensity of enforcement. His characterization of informality in terms of evaders, avoiders, and outsiders, who bypass legal regulations, makes it even more difficult to address these shortcomings. Enterprises operating outside the legal framework see good reasons to persist in this mode due to various constraints they may face in scaling up. Efforts toward formalization would require a dedicated approach and may not always be a guaranteed strategy.

Informal Sector Productivity and Credit Access

Productivity forms a crucial metric that determines the trajectory of any economy. A country with low productivity is caught in an inefficiency spiral that hinders growth and innovation in the long run. In India, the large informal sector, characterized by low capital availability and low-skilled workers, is a primary reason for the situation. Additionally, the impact of public policy through the informal small-scale industry (SSI) promotion policy cannot be ignored. As part of the dismantling of the SSI promotion policy in the liberalized era post-1990s, and especially post-2000s, goods manufactured by informal units were progressively de-reserved. This led to an increase in new market entrants and a rise in employment figures. However, this rise in employment was also accompanied by a fall in productivity due to the low output generated by these units [15]. The policy gap between the formal and informal sectors mentioned earlier continues to plague this sector.

TABLE 4.2

RELATIVE LABOR PRODUCTIVITY OF FORMAL VS INFORMAL SECTOR IN INDIA (2011–12 AND 2017–18)

Sectoral Productivity	2011–12	2017–18
Formal	5.76	4.76
Informal	0.58	0.57

Source: Joshi (2023).

In comparison to the formal sector, the informal sector presents a persistently lower level of productivity across different years, as evident in Table 4.2. The difference between them is approximately four to five times. The implications of low productivity between sectors also translate into a widening social

and economic gap. From the government's perspective, the loss in taxes due to the nonregistration of firms results in reduced allocation of welfare provisions for the populace. On a larger scale, addressing this issue would help individuals escape the clutches of poverty and deprivation.

Focusing specifically on the unincorporated nonagricultural sector in India, the labor productivity (gross value added per worker) data in Table 4.3 was examined. The data highlights regional divergence in labor productivity with the rural sector lagging significantly behind the urban sector. Additionally, labor productivity is approximately twice as high in establishments compared to own account enterprises (OAEs). Given the substantial size of the OAEs in the economy, this is concerning. In this regard, Kanbur [14] raises a pertinent question about the causality between informality and low productivity, asking which causes which - a crucial important question for effective redressal.

TABLE 4.3

LABOR PRODUCTIVITY IN INFORMAL SECTOR IN INDIA

Broad Activity Category	GVA per Worker (INR)								
	Rural			Urban			Rural + Urban		
	OAE	Estt.	All	OAE	Estt.	All	OAE	Estt.	All
Manufacturing	36,021	86,296	48,152	62,822	140,639	102,523	46,088	122,344	74,379
Trade	64,103	131,947	72,338	113,541	189,749	146,739	87,611	180,219	115,885
Other services	71,008	131,227	91,901	104,324	169,436	139,856	87,498	157,554	119,947
All	55,459	114,024	69,198	96,718	167,627	131,811	73,951	152,723	103,744

Source: Government of India (2017).
Note: For enterprises engaged in market production only.

The government of India has made several attempts to formalize the economy through various measures, such as the introduction of the Goods and Services Tax (GST), currency demonetization, digital solutions for financial services, and the enrollment of workers through internet portals. Bringing more firms within the ambit of law has specific advantages. For enterprises, registration opens avenues for access to government subsidies, incentives, credit channels, tax breaks, and more. These measures help firms grow and realize their true potential. Among them, credit access is a vital channel that can address the productivity concerns in the economy, either through the efficient reallocation of resources across deserving firms, or by reducing the incidence of informality, or mitigating macroeconomic volatility [16]. It is also believed that higher credit growth would lead to a higher gross value-added growth, and vice versa. Opening credit channels and developing robust credit markets are crucial steps toward economic development.

Most studies highlighting the critical role of credit in productivity enhancements have been conducted in the agricultural sector in the country, which is the mainstay of the economy and largely operates in an informal setup. Concerted policy directions aligning agricultural credit with priority sector lending have generated interest to study this phenomenon and yielded encouraging results[3]. Additionally, nonagricultural informal sector firms also report a positive relationship between credit access and firm performance [19]. The disaggregation in this case lies between the source of finance for these informal firms, with formal finance having definite advantages over informal sources [20]. Furthermore, credit access also fosters entrepreneurship in these informal firms [21].

The WBES 2022 indicates that around 21.5% of all firms in India consider access to finance as their biggest obstacle [22]. Importantly, this percentage is higher as compared to other economies in South Asia and all other economies combined. Disaggregated by sector, garments and hotels in India

[3] See Yadav and Rao [17] and Manoharan and Varkey [18].

particularly face these obstacles more than the others. The NSS 73rd round on unincorporated nonagricultural enterprises data (2015–16) also indicates that around 13.5% of informal sector firms faced problems with nonavailability or high cost of credit [23]. Credit access is one of the most pressing problems that unincorporated enterprises face in the country.

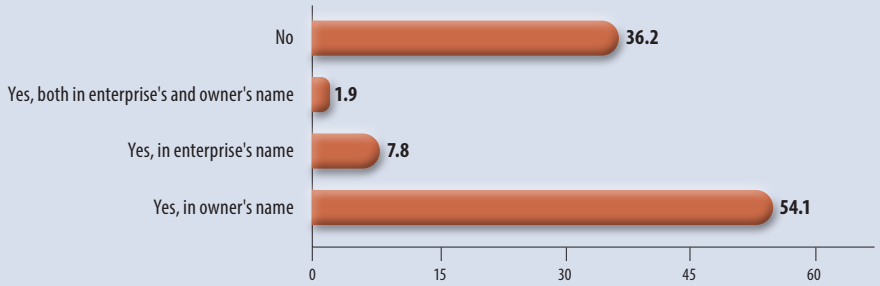
Access to Credit, Informal Economy, and Productivity: An Empirical Exercise

The MSME sector in India forms a significant chunk of the economy and is considered a growth driver of the Indian economy. It is important to note that microenterprises, which constitute own account enterprises, form the bulk of the MSME in India. As per estimates, of the 66.9 million MSMEs, only 590,000 are small and medium enterprises (SMEs) and approximately 93% of the microenterprises have less than five employees [12]. Data suggests a "missing middle" problem in Indian manufacturing, where there is a conspicuous absence of mid-sized firms, highlighting the growth trajectory that smaller firms are reluctant to make [24]. The link between credit access and this issue is an important question that needs to be investigated. Here, existing data is utilized to gauge the effect of financial accessibility on informal sector firms and probe whether access to credit bridges the gap between small own account enterprises to medium or large establishments.

Primarily, credit access helps ease the working capital requirements of enterprises. A key requirement for obtaining external source of credit is having a bank account in the name of the enterprise. Figure 4.1 shows that approximately 37% of informal enterprises do not have any bank account or post office savings account in their name or their owner's name. This underlines the importance of financial inclusion, which lies at the heart of the efforts of the government. Financial inclusion is even more significant for scale entrepreneurs.

FIGURE 4.1

PERCENTAGE OF INFORMAL ENTERPRISES MAINTAINING A BANK ACCOUNT



Source: NSS 73rd round (2015–16).

The research investigated the impact of having a bank account on GVA using data from the NSSO 73rd round survey on unincorporated nonagricultural enterprise (excluding construction). A one-way analysis of variance (ANOVA) was performed to compare the effect of having a bank account on GVA. The ANOVA showed a statistically significant difference in GVA between the various groups, $F(3, 138935)=82.90$, $p=0.00$. Tukey's (a post-hoc test that employs pairwise comparisons using a studentized range distribution to compare the mean of every possible pairs of groups) post-hoc criterion for multiple comparisons found that the mean GVA was significantly different between not having a bank account and having a bank account in the name of the owner or enterprise or both. However, there was no statistically significant difference in GVA between bank account in enterprise's name and bank account in both owner's and enterprise's name ($p=0.56$). Thus having a bank account is crucial for enterprises wanting to grow.

The government has introduced various schemes to address the loan requirements of small firms. Notably, the MUDRA loan scheme launched in the year 2015 has three categories of loans: Shishu (loans up to INR50,000), Kishore (loans from INR50,001 to INR500,000), and Tarun (loans from INR500,001 to INR1,000,000. These loans are extended by various banks, nonbanking financial companies (NBFCs), microfinance institutions (MFIs), and other financial intermediaries[4]. Based on the enterprise landscape in the country, more focus is given to Shishu loans. In 2022–23, Shishu loans accounted for the largest share of 69.13%, in terms of distribution by the number of accounts [25].

In this regard, an independent sample t-test was conducted to compare GVA for firms having financial loan assistance and other kinds of assistance from the government in the last three years. The other kinds of assistance ranged from subsidies, raw material provision, and training and development.

- There were no significant difference in the mean GVA of firms with financial loan assistance (M= 87,373.08, SD=464,303.53) and firms without financial loan assistance (M=609,338.57, SD=10,962,121.01), t(721.62)= -1.28, p=0.21
- When probing the effect of same financial loans on fixed assets, there was no significant difference in the mean of firms with financial loan assistance (M=2,185,034.26, SD=17,842,602.53), and firms without financial loan assistance (M=6,231,935.02, SD=76,892,262.90), t(768.76)=-1.390, p=0.17
- However, comparing the average number of workers in relation to financial loan assistance showed a significant difference. Firms with financial loan assistance (M=5.37, SD=16.43) had significantly fewer workers than those without (M=12.78, SD=85.1), t(753.70)= -2.31, p=0.02. This data showcases that a significant part of the government financial loans is used to hire labor

The WBES data [22] for informal businesses estimates approximately INR4,800 as the mean cost associated with workers, including their wages and other payments. However, this labor is not able to convert the given resources into output effectively. Perhaps the persistence of enterprises using rudimentary technology, the low skill level of workers, or financial mismanagement may also be contributing factors. India being a labor surplus economy with insufficient skills to maximize its human resources used remains a major economic concern.

To gain deeper insight into the usage of credit and loan facilities for enterprises, research was made into case studies of organizations that had received financial loan assistance from various institutional sources.

Case Studies

Case Study 1: J-WiRES

The Bihar Rural Livelihoods Promotion Society (BRLPS) - JEEViKA, under the state of Bihar government, runs its livelihood project for the social and economic empowerment of the rural poor. The project aligns with the National Rural Livelihoods Mission (NRLM) of the government of India, with financial inclusion as one of its pillars. Among the various interventions that it does in order to support the rural households, of particular importance is the focus on women self-help groups (SHGs). The SHGs act as a useful source of mobilization and financial accessibility in rural areas where traditional banking facilities is still nascent.

J-WiRES (Jeevika Women Initiative Renewable Energy and Solution), a private limited company registered in January 2020, emerged from a project of the government of India named "SoULS" (Solar Urja through Localisation for Sustainability). In this project, the Indian Institute of Technology Bombay (IITB) and EESL (Energy Efficiency Services Limited)[5] partnered with Jeevika to facilitate

4 See https://www.mudra.org.in/.

5 EESL is a joint venture of public sector units under the Ministry of Power, government of India.

the transition toward solar energy in Bihar. Similar initiatives were conducted in other Indian states by IITB and the respective livelihood mission.

The project aimed to increase the penetration of solar technology in rural areas through the "localisation-affordability-saturation (LAS)", model where JEEViKA acted as a zonal execution agency (ZEA), and various cluster level federations (CLFs) acted as the block execution agency (BEA). The SHG didis or sisters were involved in the entire process of assembly, distribution, repair, and maintenance of the solar lamps [21]. The solar lamps for school-going children were priced at INR100, and 1,750,000 lamps were distributed in the five districts of Bihar: Gaya, Nawada, Aurangabad, West Champaran, and Arrah. The proceeds from the sale of these solar lamps, approximately INR175 million were wholly channelled to a solar corpus that further supported efforts in this area. J-WiRES was established using this solar corpus, focuses on manufacturing, research and training, assembly, and trading of goods in the decentralized renewable energy (DRE) space.

J-WiRES has been certified with MSME and Bureau of Indian Standards (BIS) certifications and manufactures LED bulbs under its brand. Its product portfolio includes LED and inverter bulbs, solar LED torches, solar panel, solar lanterns, and BLDC fans (fans that consume lower electricity). The enterprise's positive net working capital and fixed asset investments over the years indicate a healthy picture, as shown in Table 4.4.

TABLE 4.4

J-WIRES FINANCIALS BETWEEN 2020–2023

	Year		
	2020–21	2021–22	2022–23
	INR		
Net working capital	4,624,409.67	4,732,980.03	6,534,576.26
Fixed assets	34,282.00	28,077.00	105,049.50

Source: Field survey.

Through this initiative, J-WiRES aims to maintain its presence by establishing solar marts through its SHG didis in the rural regions of Bihar. As of the latest figures, around 371 solar marts have been opened in 57 blocks across five districts in Bihar state. J-WiRES also helps women entrepreneurs by providing them loans of INR100,000 to set up their own solar marts. Several solar marts have been established with this initiative, with women folk involving their family members to support and expand their businesses. As part of their requirement for setting up of a solar mart through these loans, the SHG didis have diversified into buying and selling other traditional energy appliances as well. Without this intervention it is difficult to imagine the transition of SHG didis into entrepreneurs.

The model followed here is unique in the sense of approaching the credit problem of enterprises indirectly through a focus on sustainability. A large part of the success is also owed to the effective implementation of the women SHG program in Bihar. In this case, the initiative, conceived from the government of India, was localized by involving the state livelihood missions. Appropriate training and capacity building were provided to SHG members to ensure the model's sustainability.

The solar corpus formed from the project proceeds aided in the formation of the new company. The SHG didis now see ownership and explicit benefits in pursuing in this direction. The opening of solar marts is encouraged through financial support from state livelihood missions and profits earned from the sale of solar lamps and other appliances by J-WiRES. The establishment of J-WiRES has led the local community members to diversify into various other solar-run appliances to ensure their survival. To date, J-WiRES is an independent entity that runs only on profits earned from the sale of their products and projects. The focus on entrepreneurship development of local community members,

combined with the support provided by the SHGs, has led to a significant change in the solar off-grid space in this region.

Case Study 2: Bal Jyoti Foundation

Bal Jyoti Foundation located in Bodh Gaya, Bihar, is an NGO engaged in the manufacture and sale of handicrafts, bamboo products, and carpets, primarily involving rural women from nearby regions. It has made its presence felt by showcasing its products in local and international trade fairs in the national capital region of Delhi. The foundation is registered as a private trust under the Indian Trust Act, 1882 and is jointly managed by two siblings. One of the siblings also runs a tailoring business which caters to select consumers. In 2023, she applied for CM Udhyami Yojana, a state government scheme from the Bihar state's Department of Industries, aimed at providing loans to those falling under Scheduled Castes, Scheduled Tribe, most disadvantaged class, women, youth, and minorities in Bihar to start their own businesses. This scheme particularly targets microenterprises, serving the dual purpose of providing loans as well as uplifting marginalized communities. Details of the scheme are given in Table 4.5.

TABLE 4.5

DETAILS OF BIHAR CM UDYAMI YOJANA'S LOAN

Particulars	Details
Loan amount	Maximum up to INR1,000,000
Subsidy amount	INR500,000 (50% of the total amount)
Mandatory expenditure on capital purchases (60%)	INR600,000
Repayment time	7 years (84 EMIs)
Training cost	INR25,000 per unit

Source: https://udyami.bihar.gov.in/.

Through this scheme, selected entrepreneurs receive INR1,000,000 of which INR500,000 is a subsidy, and the remaining INR500,000 must be repaid through monthly installments over seven years. Of the total amount, INR600,000 must be spent on equipment and machines for the business, and the remaining INR400,000 for purchase of raw materials, labor charges, electricity, furniture, etc. Generally, borrowers can choose to invest in specific items based on their requirement, but institutions providing loans for specific requirements to the informal sector encourage the borrower to invest in productive assets that would generate income for them. Such mandates for expenditure on capital goods and fixed assets necessitate a long-term outlook for the enterprise.

TABLE 4.6

CORRELATION BETWEEN SELECT VARIABLES

	LNProductivity	LNCapital	LNLabour
LNProductivity	1	0.455**	0.185**
LNCapital		1	0.536**
LNLabor			1

Source: Computed from unit records of NSS 73rd round (2015–16).
Note: **Correlation is significant at the 0.01 level (two-tailed).

To understand this requirement, the NSS 73rd round unit records is used to generate a Pearson correlation between the natural logarithm of labor productivity (GVA per worker), capital (fixed assets, including plant and machinery, equipment, ICT equipment, building, etc., except land), and workers (number of workers employed, including full-time, part-time ,and working owners). As shown in Table

4.6, all these factors generate positive strong correlations with capital covarying strongly with labor (0.54), followed by productivity (0.46). Notably, investments in capital goods by the enterprises lead to discernible changes in productivity.

Further, proper accounts need to be maintained for the amount given through the scheme. During the application process, entrepreneurs can provide their own bank details but after selection, the scheme mandates that all transactions be conducted only through the current account in the name of the enterprise. This also draws attention to the existing low percentage of bank accounts in the name of the enterprises (Figure 4.1).

With the loan amount, the entrepreneur was able to start manufacturing and selling of garments on a much larger scale. Currently, she has hired three persons for the task: two master tailors and one female worker. She and her other family members also assist with the work. Through investments in her business, the enterprise has secured orders for school dresses and from other shops. Monthly sales have ranged from INR25,000–INR30,000. Among other miscellaneous costs, the enterprise plans to invest in establishing a web presence to increase its visibility in the coming years.

Contrary to the earlier case study, this case provides an example of direct funding opportunity from the state government to support and grow microenterprises. The entrepreneur started as an own account worker and has now, with the aid of credit for her venture, hired three workers. Although the enterprise is still in its infancy and has yet to complete one year of operations, the credit facility has given her the opportunity to be independent in her business pursuits and expand her customer base.

Sources of Funds and Challenges Faced in Finance/Credit Accessibility

India's Ministry of Finance acknowledges that credit access is a major problem that plagues small enterprises in India [26]. This remains true despite small enterprises considered a priority sector for lending since the bank nationalization era before liberalization. Postliberalization policies have changed, and the share of credit flow to small enterprises has been declining. Investigating the reasons for this, Nikaido, Pais, and Sarma [27] highlight that the administrative and default costs of lending to small enterprises are higher than those for large enterprises. Further, collateral from small enterprises provides a limited loan guarantee due to incomplete financial statements, lack of long-term goals, and limited business scope. In such situations, steady government policy support for the growth of small businesses becomes even more important.

As mentioned earlier, apart from government and alternative lending channels, credit availability for small businesses remains meagre. Examining the sources of funds for informal enterprises is useful at this point. Data suggests that informal sector borrowing occurs from both institutional as well as noninstitutional agencies. Reasons for borrowing from noninstitutional agencies include lower interest rates, longer repayment durations, or lack of access to formal borrowing sources.

Table 4.7 shows WBES data for India on borrowing scale for formal and informal sources. The data suggests that informal businesses typically finance day-to-day operations through friends and relatives while formal sources, like banks and other MFIs, are less preferred. Despite various digital solutions for loan availability, traditional sources, like banks and other formal institutions, cannot be replaced. Additionally, the hesitancy of traditional banks to lend money to the informal sector carries its own share of risks. Only 11%–12% of informal firms believed that registration would help them access financing or loans. There is a clear segregation in loans or financing for formal and informal firms. While formal firms prefer the institutional agencies for credit, informal firms rely on informal mechanisms for credit or what is called as the "shadow economy".

TABLE 4.7

FINANCIAL SOURCES FOR DAY-TO-DAY OPERATIONS FOR INFORMAL ENTERPRISES

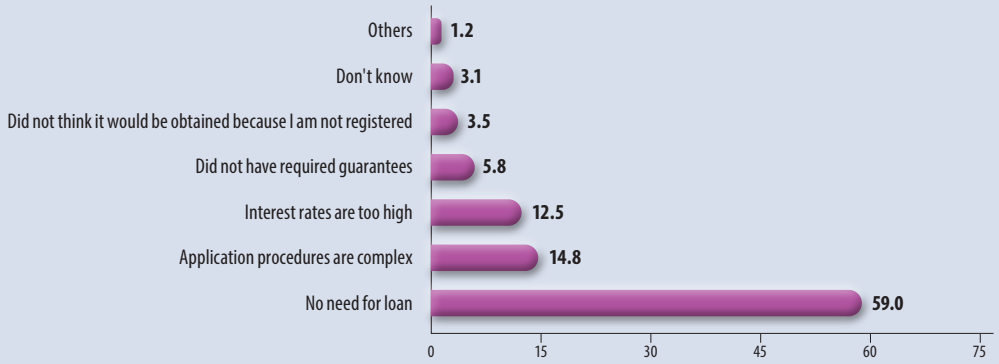
Financial Source	Various Agencies	Percentage
Formal	Banks	13.5
	Microfinance institutions	8.2
Informal	Money lenders	15.2
	Friends or relatives	30.5
	Total	100

Source: Computed using data from WBES, 2022.

Figure 4.2 shows that around 60% of informal businesses do not apply for loans because they feel there is no need for them. Others cite reasons such as complex application procedures, high interest rates, lack of required guarantees, or nonregistration of the enterprise as hurdles to obtain loans. These reasons are understandable given the specific attributes of informal enterprises and their owners, such as low literacy levels, nonregistered enterprises, regional disadvantages, or belonging to sunset industries. Due to these many reasons, informal enterprises often present a static picture where their sustainability and growth remain questionable.

FIGURE 4.2

REASONS INFORMAL ENTERPRISES NOT APPLYING FOR LOANS (%)



Source: Computed using data from WBES, 2022.

The rise in fintech firms in India has been touted as the game changer for financial inclusion. This has been made possible by the extensive penetration of mobile phones and the internet, along with India's demographic profile. Likewise, fintech and digital lending are reaching prospects where traditional lending models have shown definite limitations. The concerns raised about complex loan application procedures, lack of appropriate guarantees or collaterals, and nonregistration of enterprises are being addressed by these digital lending platforms. Despite this, the Fintech Association for Consumer Empowerment (FACE) of 2022–23 reports that business loans constitute only a meagre 6% of total fintech lending [28]. Therefore, it appears that there is essentially a demand problem among small informal businesses.

In a different outlook, the latest MSME Pulse highlighted a significant credit growth in the "micro" segment (credit exposure less than INR10 million) in MSMEs. With an overall compound annual growth rate (CAGR) of 2.5% for the MSME sector in India, lenders can tap into the new-to-credit

(NTC) “micro" MSMEs to bridge the credit gap in the sector [29]. These NTC customers are often neglected by traditional lenders but possess a strong credit appetite when matched with the fintech sector, necessitating careful calibration.

Additionally, micro businesses can benefit from supply chain finance (SCF) through bill discounting instruments that ease their working capital requirements. The Government e-Marketplace (GeM) portal and the TReDS (Trade Receivables Discounting System) portal also aid in the process of public procurement and immediate provision of credit requirements through financiers, respectively [30]. In another instance, SME exchanges supported by the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE) platforms also provide much-needed equity capital for SMEs, though awareness about these resources needs to be raised.

Despite these interventions, credit growth has not been at par with expectations. The NTC MSMEs, which projects a strong growth trajectory, need better credit access through the utilization of various techno-analytical capabilities of fintech firms and other large lenders. Investments in digital systems that enhance the speed of approvals and the quality of decisions are critical for assessing small businesses. The sophistication of lenders in analyzing future creditworthiness in the absence of bank statements and tax return documents is crucial. Additionally, the absence of collateral or guarantee remains a significant issue that plagues many informal businesses. A regulatory push to support unsecured business lending would be helpful in this regard.

Policy Intervention

There are a host of programs run by the Indian government to address the credit gaps in the MSME sector. All these schemes aim at enhancing growth and productivity. These efforts have two main objectives: first, to encourage MSME businesses, especially microenterprises, toward financial inclusion, and the second is to provide them with the necessary credit support based on their growth potential. Table 4.8 details the various credit support schemes offered by the government of India for MSMEs.

TABLE 4.8

VARIOUS GOVERNMENT CREDIT SUPPORT SCHEMES FOR THE MSME SECTOR

No.	Areas of Intervention	Government Schemes
1.	Financial assistance	• MSE-cluster development program • Scheme of Funds for Regeneration of Traditional Industries (SFURTI) • MUDRA-Pradhan Mantri Mudra Yojana (PMMY) • Technology and quality upgradation support for MSMEs (TEQUP) • Scheme for extension of financial assistance for generator set/diesel engine • Marketing assistance scheme by NSIC • Marketing support/assistance to MSMEs • Startup India scheme • SIDBI’s loans in 59 minutes
2.	Credit and financial services	• MSME Champions scheme (erstwhile CLCS-TUS) • Credit guarantee fund scheme for micro and small enterprises
3.	Reimbursement scheme	• ISO 9000/ISO 14001/HACCP certification reimbursement scheme
4.	Subsidy	• Prime Minister Employment Generation Program (PMEGP) • National SC-ST Hub scheme • Amended technology upgradation fund scheme (ATUFS) for textile sector • Integrated development of leather sector (IDLS) scheme • Government subsidy for small business for cold chain
5.	Funding support for business incubation	• Support for entrepreneurial and managerial development of SMEs

Source: Compiled from various government websites.

It is important to note that most of these government schemes for credit support are available for microenterprises, with support tapering off as enterprises grow larger. The rationale is that larger enterprises are better equipped to sustain themselves financially.

Conclusion

The growth of the informal economy has confounded development economists and policy makers alike. Despite India's decent rate of economic growth, it has not been able to move people from informal to formal economy. Instead, the informal sector continues to expand while the formal sector sees an influx of workers often engaged in informal employment. This dualism within the Indian labor market between high paying regular jobs vis-à-vis low paying informal unprotected jobs is also reflected in the Indian manufacturing sector, characterized by a "missing middle" problem. On one end, there are large productive enterprises while on the other end of the spectrum, small, unproductive enterprises dominate.

The worrisome aspect of informal sector growth in India is the proliferation of small-scale industries and microenterprises that show little inclination for growth. These enterprises work independently of formal sector linkages in supply chains, hindering their ability to develop capabilities and be productive in a competitive environment.

While one might argue that subsequent industrial policy resolutions created disincentives that hindered the growth of microenterprises in the country, the government's various current schemes also seem to "pull" microenterprises toward perceived incentives. The schemes listed in the previous section largely target microenterprises. For enterprises belonging to small (investment in plant and machinery being up to INR100 million and annual turnover of not more than INR500 million) and medium (investment in plant and machinery being up to INR500 million and annual turnover of not more than INR2.5 billion) categories, the government support through the various schemes gradually wanes down [31]. While it is understandable that larger firms require less support compared to smaller firms, the perceived diminishing in support acts as a mechanism to control the size of the enterprises. Thus the policy focus lacks a "push" for these enterprises to grow, which is a major concern in policymaking.

For these enterprises, it may be advisable to expand the government credit support options for microenterprises up to the category of small or medium enterprises. A longer handholding timeframe is needed to transition enterprises from self-employment to medium size because it is in the "middle" that credit accessibility appears to be most visibly absent. The hierarchical support provided to MSMEs may partly be responsible for microenterprises wanting to stay in their conditions with little to no demand for credit and growth.

Additionally, although studies have shown that the government's MUDRA loan scheme has created employment opportunities [32], Mahajan and Singh [33] argue its loan disbursals are not significantly higher than already existing provisions that banks, MFIs, and NBFCs have been providing. While the MUDRA annual report 2021–22 shows an overall 5% increase in the share of loan amounts, the majority (12%) comes from the Shishu category, which offers the smallest loan amounts among the three categories [34]. Larger loan sanctions under the Kishore and Tarun categories have seen lower percentage increases over the years, highlighting the persistent "missing middle" problem. This data becomes particularly concerning given the fact that MUDRA loan scheme has been in existence since 2015. Although there has been significant growth in total amount of loans sanctioned, most of the beneficiaries have been women entrepreneurs[6].

The MUDRA loan scheme, focused on aiding cash-strapped small enterprises, needs better alignment with the requirements of Shishu, Kishore, and Tarun loans. Additionally, the refinance option for

[6] See https://www.thehindubusinessline.com/money-and-banking/mudra-loans-show-record-growth-to-3-lakh-crore-in-q3-fy24/article67695266.ece.

MUDRA loans, limited to a maximum period of three years, falls short of the longer nurturing timeframe that microenterprises might require in terms of addressing their working capital requirements. Many microenterprises may succumb to the pressures in this short timeframe. Access to cash credit and overdraft facilities could partially ease their working capital constraints. Overall, improvements in the credit scheme are essential to bridge these gaps in loan disbursal.

Additionally, while labor contributes to productivity enhancements, the sector often relies heavily on part-time workers and helpers (owners' family members, including children). There needs to be a concerted effort to nurture the skills of the existing labor force through vocational education and training. The current skilling environment in the country is plagued by a number of issues, such as a lack of qualified trainers, demand-supply mismatches, and inadequate counseling and employments services, among others [35]. The low skill requirements in this sector also negates any wage increases for these workers.

According to a report by the National Productivity Council of India [36], the MSME cluster development scheme shows skewness in the setup of common facility centers (CFCs) and infrastructure development (ID) projects in various parts of the country. Several states have concentrated clusters while others remain underdeveloped due to geographical location, demand, and land requirements. The cluster approach is a well-recognized method for productivity enhancement and capacity building for small enterprises, and its benefits need to be more evenly distributed across different states of the country. Further, active involvement of state governments and original equipment manufacturers (OEMs) would add value to this scheme, which is currently lacking.

Involvement of small enterprises in supply chain finance, such as bill discounting lending, would benefit the growth of these businesses. The report also highlights the high cost of credit as one of main problems that enterprises face. Stronger forward-backward linkages in these clusters would expose small enterprises to global markets and encourage competitiveness. Further, data shows that credit utilization should focus on asset creation that would benefit the long-term sustainability of the enterprise in the long run. The Ministry of Micro, Small and Medium Enterprises can specifically focus on the generation of productive assets through its various schemes for deserving MSMEs.

The growth of the fintech sector in India has greatly benefitted many start-ups, reaching areas where government found it difficult to reach through its traditional banks and collateral requirements. The NTC MSMEs, with their high credit appetite, are well-positioned to take advantage of the fintech sector. Peer-to-peer (P2P) lending model, which bypasses dependence on traditional financial institutions and cluster financing models, can provide tailored services for enterprises within specific clusters. This would also bring down costs associated with the business and make it more competitive. Importantly, the regulatory framework needs to be supportive of the innovations in the fintech industry and ensure compliances are met before product launches. Right now, banks, MFIs, cooperatives, and the fintech industry present a complex credit market in India. As previously noted, MSMEs face various hurdles while securing loans, including complex loan application procedures, high interest rates, and demands for collateral, which limit their growth. A diversified credit market should accommodate enterprises of all sizes and their evolving needs.

The transition from informal to formal is not as straightforward as one would imagine. The central role of the entrepreneur or the decision maker is crucial in managing these informal businesses. The entrepreneur's attributes would guide the enterprise's future direction, as the business cannot be separated from its owner. The growth, stagnancy, or closure of informal sector largely depends on the individual or group of entrepreneurs involved in running the business. The decision to transition from going beyond one's own family members is indeed an "entrepreneurial decision". Therefore, the key question is how to make these entrepreneurs more "enterprising". Public policy should address the personal characteristics of entrepreneurs and influence their outlook. Education forms a cornerstone to shape these outcomes while incentivizing entrepreneurs to complete their secondary education is crucial.

Further, women have been a significant focus through their participation in various SHGs initiatives throughout the country. In the earlier case studies, one of these SHGs was discussed. The MUDRA loan scheme also highlights women entrepreneurs as a driving force. However, it is well-known that women comprise a large portion of the informal workforce in India and spend more time on unpaid activities compared to men [37]. This does not present a healthy picture of the situation. Working toward enhancement of the “agency" of woman is a credible goal, especially if there is a desire for women to engage in market activities and become independent. Multiple reports have noted a decrease in funding for various schemes, like National Urban Livelihoods Mission (NULM), National Rural Livelihood Mission (NRLM), SAMARTHYA (women empowerment and promotion of gender equality), and SAMBAL (scheme for adolescent girls)[7]. Policy schemes focusing on women should look beyond entrepreneurship and aim at the overall enhancement of their capabilities, starting from an early age.

Given the persistence of the informal economy in India, the regulatory and policy framework, which once viewed the informal sector as "residual", has undergone a significant overhaul. The codification of labor laws into four codes now accommodates the informal sector and its various employment forms. There is greater focus on financial inclusion by making available banking services to the earlier “unbanked”, the growth of private credit, market access, and the delivery of various government services to rural entrepreneurs, among other initiatives. Addressing the problems of the informal sector requires effort and necessary course corrections. At the same time, continuously raising awareness about initiatives aimed at enhancing the productivity of informal enterprises must be the cornerstone in these efforts. Therefore, a multipronged approach to address the challenges of the informal sector, rather than looking solely on credit access, will yield greater long-term benefits.

7 See https://thewire.in/women/paltry-budget-allocations-to-womens-schemes-belie-governments-tall-promises.

CHAPTER 5

LAO PDR

Abstract

Lao PDR possesses a diverse informal sector, where economic operations are carried out clandestinely or outside government regulation. Despite its significant presence, there is a lack of scientific studies to assess its current situation and productivity impact. The objective of this study is to analyze the informal economy's role and estimate its impact on productivity using World Bank Enterprise Survey (WBES) data, complemented by in-depth interview sessions with key respondents actively involved in the informal economy. One primary deterrent for not willing to register as a formal business, cited by informal businesses, is the lack of incentives and insufficient information. Access to financing also poses specific challenges within this sector, including issues related to formal documentation, scarcity of assets for collateral, and low financial literacy. According to the Management Practice Index, the services sector has higher scores compared to retail and manufacturing sectors. The reasons are attributed to the intangible nature of the services sector's output that requires proactive and responsive management for direct customer satisfaction. The government of Lao PDR has pledged to transition economic activities from informal to formal sector by integrating and regulating informal businesses and activities. These efforts involve enacting laws and initiatives designed to enforce registration, oversight, and taxation of previously unregistered businesses. This study provides several policy recommendations focused on incentivizing informal business, improving access to finance mechanisms, capacity-building initiatives, and other strategic interventions.

Overview of Informal Economy Statistics in Lao PDR

The informal economy in Lao PDR comprises an extensive array of entities that vary in size and composition across regions and economies. While quantifying the extent of informality is a formidable task, there is a general consensus that informal employment plays a crucial role in providing employment opportunities in developing nations. It also provides significant financial support to marginalized individuals in developed economies [1]. Labor-intensive production is a defining characteristic of informal firms, which are more prevalent in the services sector [2]. The informal economy refers to the production of goods and services primarily intended for the market that is not formally recognized by government authorities. Production and activities are concealed from public authorities due to institutional, financial, or regulatory reasons [3].

In the context of Lao PDR, the informal economy refers to the attributes and operations of unregistered enterprises whereas formal sector entities register with the appropriate authorities and adhere to licensing regulations. Regardless of their informal status, these enterprises play crucial roles in Lao society, which contributes to generating employment opportunities and income, economic flexibility and contribution, entrepreneurship, inclusivity, economic resilience, competitive cost of production, and increasing economic activities.

Similar to many developing countries, Lao PDR's informal economy can be characterized by a preference for agriculture, MSMEs (micro, small, and medium enterprises), informal employment, limited access to finance, tax evasion, and other issues. MSMEs comprise nearly 100% of all businesses in Lao PDR. Nevertheless, rural communities encounter significant obstacles in obtaining sufficient financial resources, a critical impediment to sustainable economic expansion and development [4].

Recent data shows that concerns about the business environment have grown in intensity over recent years. Many significant and persistent constraints have remained throughout this period, such as informal operations, where 40% of firms operate outside formal regulations [5].

Contribution of the Informal Economy to GDP and Employment

Recent years have witnessed robust economic growth in Lao PDR, which has reduced poverty and raised living standards, albeit from a low starting point. Concurrent with this expansion has been a continuous yet precarious evolution of labor market institutions. Despite the slow expansion of the industrial and service sectors, substantial decent work challenges persist, especially those associated with high levels of informality and vulnerability as well as inadequate skill levels in an economy that is still heavily reliant on agricultural [6]. The informal sector is estimated to account for 27.2% of Lao PDR's GDP, or roughly USD23 billion at purchasing power parity (PPP) levels [7]. In Brunei Darussalam, the proportion of informal employment is 31.9%; in both Cambodia and Lao PDR, it exceeds 90%. Even when agriculture is accounted for, the ASEAN region maintains a higher rate of informal employment (67.4%) compared to Asia-Pacific (59.2%), and the global average (50.5%) [8].

TABLE 5.1

PROPORTION OF INFORMAL EMPLOYMENT

	Lao PDR			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Agriculture	96.9	96.5	97.5	91.2	90.3	92.5	98.7	98.5	98.9
Industry	86.2	93.1	74.6	83.1	89.8	72.7	89.3	96.3	76.7
Service	68.7	61.3	75.7	65.8	57.2	73.4	73.9	67.9	80.5

Source: Lao PDR Labor Force Survey Report 2022.

According to the 2022 Lao PDR Labor Force Survey Report, a total of 2.1 million individuals aged 15 and above are engaged in informal employment with agricultural work constituting the majority of this category. The same survey report also underscores the essential role of informal employment in creating job opportunities. In general, there are three major sectors contributing in informal employment; agriculture (96.9%), industrial (86.2%), and service sectors (68.7%). The number of informal employments is even higher in rural areas in these major sectors, in which the figures are 98.7%, 89.3%, and 73.8%, respectively [9].

Tables 5.1 and 5.2 illustrate the disparity between informal and formal employment sectors, highlighting that the proportions of formal employment are substantially lower compared to informal sectors. Notably, the agricultural sector alone accounts for more than 71.9% of total employment, which is higher than the total proportion of agricultural sector of 56.8% in formal employment [9].

TABLE 5.2

PROPORTION OF FORMAL EMPLOYMENT

	Lao PDR			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Agriculture	56.8	58.4	54.9	34.4	37.9	30.6	71.9	71.5	72.4
Industry	10.2	11.7	8.3	12.8	14.8	10.7	8.4	9.8	6.7
Service	32.9	29.8	36.7	52.7	47.3	58.7	19.7	18.7	20.9

Source: Lao PDR Labor Force Survey Report 2022.

Main Causes of Informal Economy in Lao PDR

A variety of factors contribute to the prevalence of the informal economy in Lao PDR and other developing countries. To begin with, there are not enough employment opportunities available in the formal sector, which forces individuals to look for employment in the informal sector. In developing countries, the informal economy offers employment prospects to those without job security, social security, or formal work arrangements. It serves as a stepping stone where individuals can acquire skills, knowledge, and experience that may help them transition to formal employment [10]. A considerable percentage of the populace might be deprived of the prospect of obtaining vocational education and skilled labor opportunities, thereby impeding their ability to secure formal employment. As a result, they resort to informal activities that require minimal skill. Informal workers often exhibit characteristics that distinguish them to their formal counterparts, such as lower levels of education, reduced productivity, and a higher representation in sectors or occupations that offer lower wages [11.

The prevalence of poverty and income inequality also drives individuals to engage in the informal sector as they grapple with the challenges of meeting their basic needs. The informal economy can serve as a means of generating income for individuals who face limited opportunities within the formal sector. Insufficient or inadequately implemented labor regulations further enable informal sector businesses to operate outside the formal legal framework, allowing them to evade taxes, minimum wage regulations, and labor protections. This flexibility has the potential to enhance the appeal to both employers and employees engaged in informal employment [12].

In a small country like Lao PDR, the presence of robust social networks and interpersonal relationships within communities can contribute to the flourishing of informal economies. These networks serve as platforms for a range of informal activities, including family-owned enterprises, subsistence agriculture, and small-scale retail operations. Additionally, local customs and cultural norms may influence the prevalence and nature of informal activities in certain situations. For example, some communities with a tradition of subsistence farming or unofficial business ventures may sustain these practices over generations, contributing to the persistence of the informal economy.

Characteristics of the Informal Business Sector in Lao PDR

In many emerging markets and developing economies (EMDEs), informal economic activity is vital in supporting the livelihoods of the poor. On average, the informal economy contributes approximately one-third of GDP in these economies while informal employment accounts for about 70% of total employment [13]. Similar to numerous other countries, Lao PDR hosts a diverse informal sector where economic activities are carried out clandestinely or outside government regulation. This sector includes unregistered businesses, casual labor, and self-employment.

For one, street vending, one of the most conspicuous manifestations of the informal economy, has been extensively studied across multiple disciplines, with particular emphasis on anthropology, economics, and sociology, for more than four decades. This activity has a long history of being an integral part of the socioeconomic landscape of numerous communities [14]. Informal subsistence farming and agriculture are prevalent in Lao PDR with farmers selling their produce in local markets without official registration [15]. In the construction industry, unregistered laborers and contractors frequently engage in informal business practices, receiving cash compensation without legal protections or formal employment contracts [16].

Similar to other developing countries, small-scale manufacturing activities, such as handicrafts or cottage industries, may operate informally in Lao PDR. These businesses, which are not registered or regulated by the government, contribute to the informal economy. The handicraft industry is comprised of numerous small-scale businesses that manufacture a variety of products, primarily for the purpose of supplying the goods to the travel and tourism industry. Handicrafts are an essential component of the "informal economy", and as such, they are a source of income, employment opportunities, and ultimately a means of alleviating poverty [17]. In contrast to formal waste management systems, informal waste pickers and recyclers collect and sell recyclable materials by manually sorting and extracting materials from mixed waste. Informal waste collection areas are varied, including legal and

illegal dumpsites, on top of or beneath waste piles, in bins, at various transfer points, in transport trucks, or elsewhere [18].

Furthermore, local markets and informal retail establishments operate without official registration or compliance with government regulations. Domestic workers, including caregivers and house cleaners, are frequently employed informally and may lack legal protections or formal contracts. Informal online sellers may not comply with all legal and regulatory requirements, such as not registering their businesses, obtaining licenses or permits, or reporting income for tax purposes.

Challenges to Formalization and Related Assumptions

Data Sources

With the limitation of data, the case study of Lao PDR relies on secondary data sources to achieve its research objectives. Secondary research offers the advantage of drawing conclusions and insights without the need of collecting new data. This method leveraged on existing knowledge and expertise while conserving time and resources.

For Lao PDR's informal data analysis, this study utilizes information from the World Bank Enterprise Surveys (WBES). These surveys conducted by the Enterprise Analysis Unit delve into the activities and characteristics of unregistered businesses through the Informal Sector Enterprise Surveys. Although these unofficial enterprises are prevalent, they are frequently omitted from official databases, operational business compilations, and business sector surveys. The Informal Sector Enterprise Surveys aim to bridge this gap by employing stringent survey methodologies tailored to the sector's particular attributes. In addition to generating representative samples, the surveys utilized customized questionnaires and geographic sampling methods to identify these businesses.

As of 8 June 2022, the WBES team recalculated sampling weights specifically for cities in India, I.R. Iraq, Lao PDR, Mozambique, Somalia, and Zambia. For the context of Lao PDR, these enterprise surveys covered two significant locations: national capital Vientiane (273 cases) and Pakse district (88 cases), the capital of Champasack province. The survey covered nine key areas: demographics, workforce, gender, finance, operations, management practices, registration, technology, and infrastructure [19].

To understand the current state of access to finance within the informal sectors, this study also conducted 11 in-depth interview sessions with various informal sector participants in Vientiane between 10 October and 15 December 2023.

The Informal Sector Enterprise Surveys provide insights into the factors influencing the registration decisions of informal businesses. As an illustration, they reveal that businesses often opt not to be registered for reasons, including taxes, time constraints, and information scarcity. Conversely, the surveys also revealed that some businesses cite potential benefits in terms of improved access to capital, inputs, and customers if they were to register. Further, these indicators shed light on whether bribery constitutes a significant barrier for unregistered informal enterprises in maintaining their informal status.

According to the WBES, several factors contribute to the reluctance of businesses to register as formal business (RegV1 and RegP11 to RegV6 and RegP6) and other assumption related to business registration (RegV7 and RegP7 to RegV11 and RegP11) [20][1] .

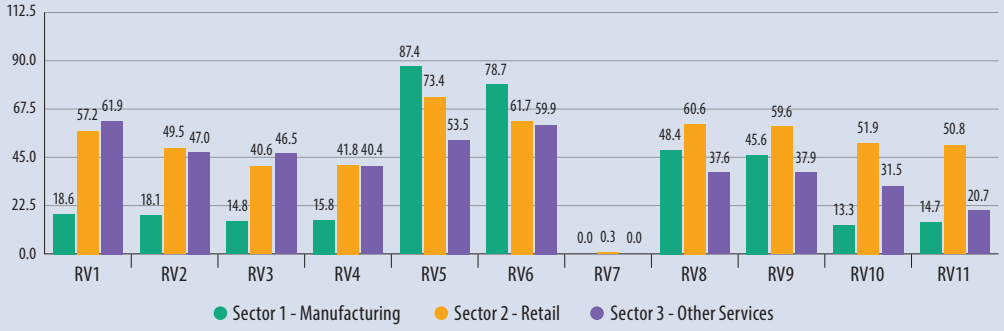
- **RegV1 and RegP1:** Percentage of businesses stating reason for not registering as time, fees, and paperwork - The proportion of companies citing registration expenses and time as the primary reasons for not being registered

[1] For Registration (Reg) issues in Vientiane (V), and Pakse, Champasack province (P).

- **RegV2 and RegP2:** Percentage of businesses stating reason for not registering as taxes - The percentage of enterprises justifying their nonregistration as a tax liability if they were to register
- **RegV3 and RegP3:** Percentage of businesses stating reason for not registering as meetings and inspections - The proportion of enterprises attributing their nonregistration to inspections and official meetings, failing which the enterprise is officially registered
- **RegV4 and RegP4:** Percentage of businesses stating reason for not registering as bribes - The proportion of enterprises attributing their nonregistration to the requirement for informal payments that would otherwise be required for registration
- **RegV5 and RegP5:** Percentage of businesses stating reason for not registering as no benefit - The proportion of enterprises affirming that their failure to register is due to the absence of any advantages associated with doing so
- **RegV6 and RegP6:** Percentage of businesses stating reason for not registering as lack of information - The percentage of enterprises attributing their nonregistration to a dearth of information regarding the registration process and the appropriate location
- **RegV7 and RegP7:** Percentage of businesses having to make informal payments to remain unregistered - The proportion of enterprises that rely on bribery, informal payments, or gifts to remain operational
- **RegV8 and RegP8:** Percentage of businesses stating benefit from registering as access to finance - The proportion of companies that believe that being registered could improve their access to financing or loans
- **RegV9 and RegP9:** Percentage of businesses stating benefit from registering as access to inputs and government services - The proportion of companies indicating that improved access to raw materials, infrastructure services, and government services could be an advantage of registration
- **RegV10 and RegP10:** Percentage of businesses stating benefit from registering as fewer bribes - The proportion of enterprises attributing financial advantages to registration, such as reduced reliance on informal payment systems
- **RegV11 and RegP11:** Percentage of businesses stating benefit from registering as better access to customers - Percentage of companies indicating that improved access to prospective clients could be a benefit of registration

FIGURE 5.1

REASONS FOR INFORMALITY IN VIENTIANE



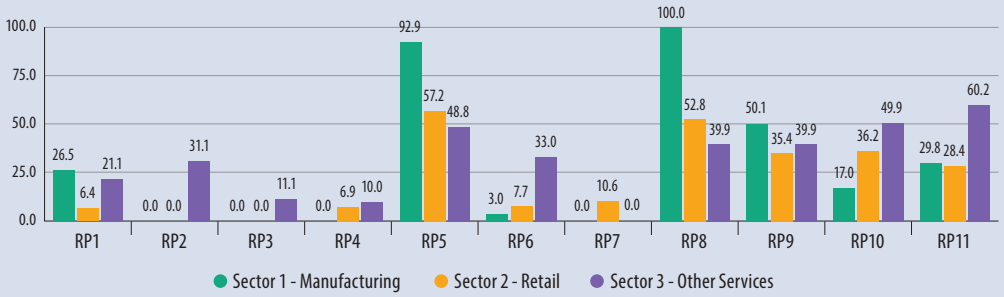
Source: Author's calculation based on WBES.

According to Figure 5.1, it is evident that Reg5 (no benefit) and Reg6 (lack of information) exhibit the highest average percentage compared to other factors. The trend is particularly higher in the manufacturing sectors (more than 87%), indicating that there is no tangible benefit from business registration. In contrast, Reg3 (meetings and inspection) shows a relatively low impact, suggesting that issues related to meetings and inspections are not significant issues.

Furthermore, Reg7 (having to make informal payments to remain unregistered) shows a relatively low impact percentage across manufacturing, retail, and other services. Conversely, Reg8 (access to finance), Reg9 (access to inputs and government services), Reg10 (fewer bribes), and Reg11 (better access to customers) demonstrate higher impacts with the retail sector.

FIGURE 5.2

REASONS FOR INFORMALITY IN CHAMPASACK PROVINCE



Source: Author's calculation based on WBES.

For Pakse district, it is clear that Reg5 (no benefit) supports the decision behind not willing to register as a formal enterprise. In other words, participants indicate that no future benefit can be acquired after registration.

Interview results highlight that there are many critical assumptions made by respondents. For instance, all respondents from the manufacturing sector believe that having a business license would make it easier to access finance. In addition, more than 60% of respondents from other sectors suggest that registration would make it easier to access customers.

Access to Finance

The informal sector encounters unique difficulties in obtaining financing due to its unregulated and frequently cash-oriented characteristics in its operations. This sector encompasses a wide range of activities, such as day labor, home-based businesses, street vending, and small-scale agriculture. Several identifiable issues related to accessing finance in the informal economy are identifiable.

First, access to formal financial services typically requires formal documentation, including bank accounts, legal business registration, and credit histories, which informal workers and businesses frequently lack. Shortage of tradable assets among informal sector participants may pose a barrier to obtaining credit from conventional financial institutions. Formal financial institutions often perceive informal economy participants as high-risk borrowers due to the lack of documentation and collateral, leading to limited access to credit and higher interest rates.

In matters of expenditures for acquiring financial products or services among enterprises and individuals operating in the informal sector, the financial burden associated with utilizing formal financial services, including bank fees and administrative costs, may be prohibitively expensive [21–23]. A lack of financial literacy and inadequate proficiency in managing formal financial products

among numerous participants in the informal sector can result in mismanagement of funds and heightened risk for lenders.

Businesses in the informal sector, such as those in agriculture or street vending, often experience irregular or seasonal income, making it challenging to meet the regular repayment schedules required by formal loans. Additionally, the absence of formal documentation and registration may prevent informal sector enterprises from accessing government programs and subsidies intended to assist small businesses and workers.

Without access to formal financial institutions, members of the informal sector frequently rely on community-based savings and credit groups, moneylenders, and local organizations for financing. However, this practice may expose them to financial vulnerability and high interest rates [24].

The access of informal sector enterprises to formal financial services may be impeded by certain regulations and licensing requirements that prohibit their formalization. Efforts to address these issues and improve access to finance in the informal economy may involve a combination of strategies, including financial education, regulatory reforms, digital financial services, and innovative credit scoring models. Governments, NGOs, and financial institutions can play a crucial role in designing and implementing solutions that promote financial inclusion for this significant segment of the population.

Access to Technology

Similar to many emerging economies, the informal economy's access to technology in Lao PDR has been inconsistent. Although some progress have been made in recent years, obstacles persist. Lao PDR's informal economy comprises predominantly small enterprises, street vendors, and agricultural sectors. Enhancing their technological accessibility could yield substantial implications for their livelihoods and overall economic development.

The government of Lao PDR has demonstrated commitment to advance digital inclusion by enhancing digital infrastructure and promote the expansion of the digital economy. The informal sector may receive indirect benefits from these initiatives. Mobile phone penetration in Lao PDR has increased substantially in recent years, enabling individuals engaged in the informal economy to access information, engage in customer communications, and carry out financial transactions.

However, compared to similar regional economies, Lao PDR lags significantly in nearly all measures concerning the accessibility, quality, and affordability of internet services. Rural and remote communities remain unserved or underserved despite the expansion of mobile broadband access. Internet penetration and access to broadband infrastructure remain insufficient. This may significantly impede the adoption of more sophisticated technologies by informal sector enterprises [25].

Online banking and digital payment systems, such as mobile wallets, are becoming increasingly popular. By mitigating the dangers associated with cash handling, these systems can be especially beneficial for small businesses. Although electronic commerce is still in its nascent stage in Lao PDR, informal sector enterprises may find it advantageous to broaden their clientele through the utilization of digital platforms. Critical factors can be altered with access to these platforms and digital marketing tools.

Access to Education and Capacity Building Programs

Ensuring access to training and capacity building for informal businesses in Lao PDR is a significant challenge. Informal enterprises frequently lack the necessary infrastructure, resources, and assistance required for expansion and success. Generally, informal enterprises function with restricted financial assets; they might find it a struggle to pay for workshops, training courses, or instructional materials. Informal businesses frequently have a tight budget, little cash flow, and limited capital. When informal business owners opt to allocate funds for training, they are compelled to do so at the expense of immediate operational requirements, such as inventory procurement or expense coverage. It might be difficult for them to rationalize the opportunity cost associated with attending training sessions, thus

making it challenging for them to set aside money for training initiatives, despite recognizing the importance of these initiatives for the growth of their businesses [26].

Geographical barriers further exacerbate the challenge, particularly for businesses in remote or rural areas, from accessing training centers and resources as they are usually concentrated in urban areas. A large number of Lao PDR farmers living in rural areas participate in unofficial agricultural practices. They raise livestock, such as chickens, ducks, and pigs on their lands and cultivate crops including rice, vegetables, and fruits. These activities not only allow them to provide food for their families, any excess produce generates income when sold in the community or local markets. The agricultural industry in rural areas employs 61% of Lao PDR's total workforce, with 75.5 % are engaged informally [27].

Several training initiatives have been launched for Lao PDR's informal workers. Since 2014, the Japan International Labor Foundation (JILAF) has conducted Community-Based Enterprise Development (CBED) training programs in several Southeast Asian countries, including in Lao PDR. Together with the Lao Federation of Trade Unions (LFTU) and Lao National Chamber of Commerce and Industry (LNCCI), JILAF collaborated with the ILO in Lao PDR to conduct CBED seminars to enhance skills among informal workers. Farmers in Savannakhet province and tuk-tuk drivers in Vientiane received CBED training prior to the COVID-19 pandemic.

According to JILAF, a key advantage of the training programs like CBED is empowering participants to form self-help groups to discuss shared issues and resolve challenges. The comprehension of their issues is enhanced through dialogues that occur throughout the educational activities. In addition, participants articulate their desired areas for improvement and exchange strategies to attain those objectives.

JILAF provides ongoing support, including technical and vocational education and training (TVET) skills, and guidance on other specialized competency development. However, these initiatives are only available in big cities, not covering informal business in faraway areas [28].

Access to Market

It is important to note that Lao PDR's informal businesses are predominantly located in rural areas, usually in geographically isolated and remote regions. Gaining access to larger, more lucrative markets is hampered by inadequate transportation infrastructure and long distances to trade hubs. Significant obstacles to market entry may include poor road infrastructure and limited transportation alternatives that lead to delays in bringing products to market and increased transportation costs. Northern routes are probably more expensive due to its mountainous terrain and poorer road conditions [29].

Generally speaking, informal businesses do not have official licenses or registration, which means they operate outside formal legal frameworks, have less interaction with government agencies, and are not subject to the same rules or privileges as established companies. This informal status also limits their access to market data, such as changes in demand, price trends, and customer preferences. This lack of information may hamper their capacity to respond to market dynamics and to make well-informed decisions. Further, some informal businesses may find it difficult to meet standards for product quality and safety. These companies might not have the funds to invest in quality assurance, certifications, or standard compliance, all which are necessary to enter into specific markets [30].

Informal Sector Productivity and Credit Access

Finance Accessibility, Informal Economy, and Productivity Growth

Despite some progress, financial accessibility continues to be a significant obstacle in Lao PDR, particularly in rural and remote regions. A significant portion of the population, especially in rural areas, continues to be deprived of fundamental financial services including credit, insurance, and savings accounts. The government and various organizations have been actively promoting financial literacy and the expansion of financial services, including mobile banking and microfinance programs.

It may be difficult for informal businesses in Lao PDR to gain access to finance due to a number of factors, including limited formal financial infrastructure, regulatory constraints, and a predominantly cash-based economy, which is similar to many other developing countries. Nevertheless, these businesses may consider pursuing various initiatives and alternatives to enhance their financial accessibility. For instance, the microfinance industry in Lao PDR is expanding, and a large number of microfinance institutes now provide financial services to micro and small-scale businesses, including informal enterprises. These institutions frequently offer financial products, such as savings accounts, small loans, and other financial services that are customized to meet their specific requirements. Microfinance in Lao PDR has been around since the early 1990s when the country first started opening up and moving toward a market economy. This coincided with the beginning of the country's transition into the modern era. The country's growth was supported initially by multilateral and bilateral development agencies, which helped establish village-based credit schemes and revolving funds [31].

In 2006, the Nayoby Bank was established by the government to provide financial support and alleviate poverty issues among individuals of all ethnic backgrounds. Operating on a nonprofit basis, the bank focuses on implementing the policy of providing credit to the impoverished and guiding investors to invest in impoverished cities. It is crucial to adhere to the government's policy guidelines to manage and utilize policy funds effectively to transform the natural economic base into productive assets. While it is not compulsory to have a business license to access funding from Nayoby Bank, applicants are still required to submit several documents, including a business plan, and collateral. The loan application must be submitted by a legal entity or a group, which may be approved by the village, district, or provincial government. The interest rates vary depending on the loan duration [32].

TABLE 5.3

NAYOBY BANK LOAN POLICY

Period of Loan	Short (less than 1 year)	Middle (1 to 5 years)	Long (more than 5 years)
Interest rates	5%	6%	7%
Focus areas	Agriculture and handicraft	Agriculture, handicraft, and small businesses	Agriculture, farming, handicraft, and small businesses

Source: Nayoby Bank official website.

Management practices have a substantial effect on the productivity of an organization. Setting distinct objectives, allocating resources, providing leadership, enhancing processes, and cultivating a positive work environment are all components of effective management. A previous literature found that innovation and management techniques have a strong and positive correlation with labor productivity. But the relative importance of each depends on the level of development. While high-quality management practices generally have a greater overall impact on lower-income economies, higher-income economies see the opposite effect of product and process innovation on their economies. Moreover, there is a strong positive correlation between average quality of management practices and labor productivity. Countries with higher average management practices tend to have a larger proportion of businesses implementing effective management practices compared to those with lower average management quality [33–34].

Access to Credit, Informal Economy, and Productivity

The Informal Sector Enterprise Surveys provide valuable insights into the financial practices of businesses and the financial attributes of their primary proprietors. These surveys, for instance, provide measurements that compare the relative utilization of different sources for financing operations, initiating business ventures, and executing significant purchases. Further measurements also assess the extent to which informal enterprises utilize financial services. For instance, regarding credit services, these measurements examine the proportion of enterprises that possess bank loans or

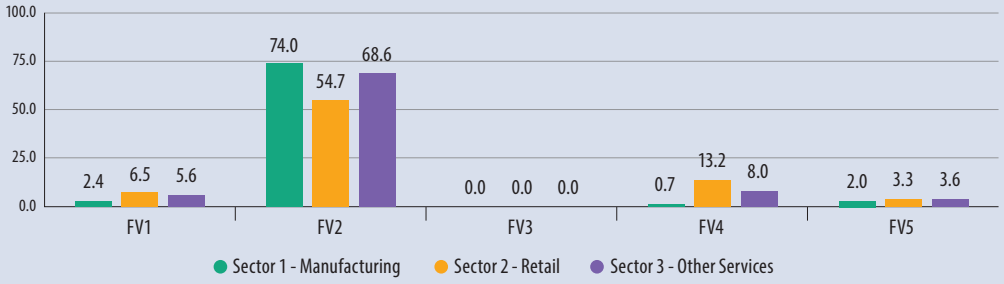
are in the process of applying for loans. For deposit services, they determine the proportion of enterprises that have a bank account.

There are five indicators related to access to finance (Fin), which has been retrieved from Vientiane (V) and Pakse district (P), Champasack province [20]:

- **FinV1 and FinP1:** Percentage of businesses, where the main owner has a bank account for the business - The proportion of companies whose principal owner maintains a bank account for business operations
- **FinV2 and FinP2:** Percentage of businesses, where the main owner has a separate bank account for the household - The proportion of businesses in which the principal owner maintains an individual bank account for the household
- **FinV3 and FinP3:** Percentage of businesses started or acquired with the main owner's own funds - The proportion of enterprises that were initiated or procured using the principal owner's personal funds
- **FinV4 and FinP4:** Percentage of businesses started or acquired with bank or microfinance funding - The proportion of companies that were established or acquired using bank or microfinance capital
- **FinV5 and FinP5:** Percentage of businesses started or acquired with informal sources of funding - The proportion of enterprises that were established or procured using informal funding methods

FIGURE 5.3

ACCESS TO FINANCE FOR INFORMAL SECTORS IN VIENTIANE

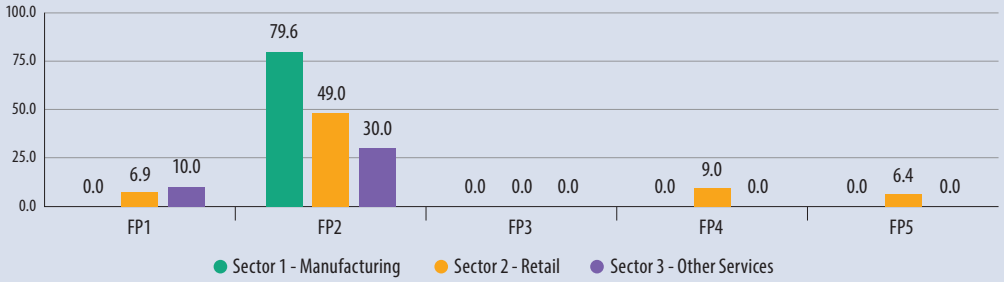


Source: Author's calculation based on WBES.

Figure 5.3 indicated that most of the respondents reported having a separate bank account for households. However, it is surprising that none of the respondents reported using personal funds to initiate their business.

FIGURE 5.4

ACCESS TO FINANCE FOR INFORMAL SECTORS IN CHAMPASACK PROVINCE



Source: Author's calculation based on WBES.

In Pakse district, the descriptive data outcome reveals very similar results to those in Vientiane. A relatively high percentage of manufacturing, retailing, and other sectors report having separate bank accounts for household use. Similarly, none of the respondents reported using personal funds at the initial stage of their businesses.

Management and Productivity

The characteristics of the management practices of businesses have been identified through the Informal Sector Enterprise Surveys. Indicators, such as the proportion of businesses that possess written business records, a planned budget, a profit and loss statement, and a sales target are also provided by the survey. Further measurements assess the managerial strategies employed by informal enterprises in both downstream and upstream sectors[2]. The latter is achieved by determining the proportion of enterprises that engage in communication with consumers and competitors while the former monitors the progress of suppliers.

Due to the limited data in the WBES, the Management Practice Index (MPI) offers the most effective way to assess management and productivity. MPI is derived from 14 components covering diverse aspects, such as market analysis, financial resource management, competitors' assessment, and inventory management. The index score runs between 0–100, where higher scores indicate better management practices. This 14 components are as follows [20]:

- **MgV1 and MgP1:** Percentage of businesses that visited competitors to see what products are put for sale - Percentage of enterprises conducted a product visit to a competitor enterprise within the preceding three months with the intention of examining the product offerings
- **MgV2 and MgP2:** Percentage of businesses that asked customers for feedback on potential new products - Percentage of enterprises have inquired with current consumers regarding any additional products that they ought to manufacture or distribute within the past three months
- **MgV3 and MgP3:** Percentage of businesses who spoke with former customers to see why they stopped buying - Percentage of businesses that contacted former clients to determine the reason they ceased purchasing from them or engaged in similar activities within the previous three months
- **MgV4 and MgP4:** Percentage of businesses that used any special offer to attract customers - Percentage of companies that utilized some form of promotional offer to entice clients within the previous quarter

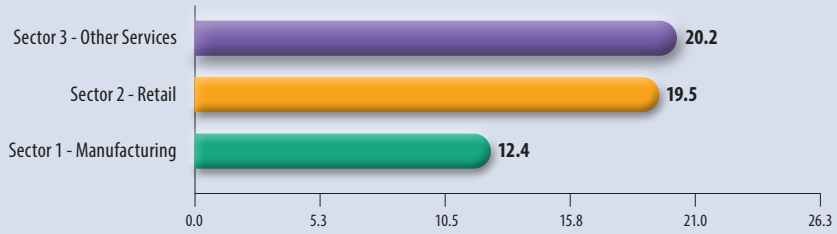
2 The terms "upstream" and "downstream" designate the beginning and end of any process or system, respectively, and frequently suggest a flow or movement from one point to another.

- **MgV5 and MgP5:** Percentage of businesses that asked suppliers which products are selling well - A number of businesses that inquired of their suppliers regarding the products that have experienced strong sales performance over the past three months
- **MgV6 and MgP6:** Percentage of businesses that attempted to negotiate with a supplier for a lower price - Percentage of businesses that made an effort to negotiate a lower price with a supplier within the previous three months
- **MgV7 and MgP7:** Percentage of businesses that do not run out of inventories frequently - Percentage of businesses that do not frequently experience inventory shortages
- **MgV8 and MgP8:** Percentage of businesses with planned monthly budget - Percentage of enterprises that have documented a budget for monthly expenses, including, but not limited to, rent, electricity, maintenance, and transportation
- **MgV9 and MgP9:** Percentage of businesses with sales target for next year - Percentage of businesses that have set a sales target for the upcoming year
- **MgV10 and MgP10:** Percentage of businesses comparing achieved sales to targets at least monthly - Percentage of businesses that compare actual sales to monthly sales targets
- **MgV11 and MgP11:** Percentage of businesses making budget of the costs it is likely to face next year - A percentage of businesses that have budgeted for the anticipated expenses for the following year
- **MgV12 and MgP12:** Percentage of businesses preparing a profit and loss statement at least once a year - Percentage of businesses that generate a profit and loss statement on an annual basis
- **MgV13 and MgP13:** Percentage of businesses with written or recorded business records - A percentage of businesses that maintain written business records
- **MgV14 and MgP14:** Percentage of businesses keeping accounts separate from household expenses (%) - Percentage of businesses that kept the accounts of the business separately from the household expenses

These components collectively provide a comprehensive picture of management practices in informal enterprises, which is essential for understanding their operational efficiency and productivity.

FIGURE 5.5

MPI IN VIENTIANE

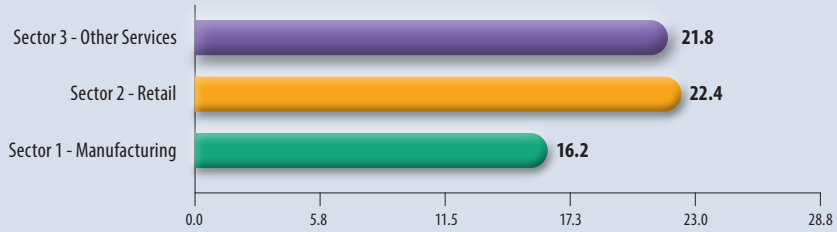


Source: Author's calculation based on WBES.

In Vientiane, it is observed that other services have the highest score of 20.2 out of 100, followed by retail sector (19.5) and manufacturing sector (12.4).

FIGURE 5.6

MPI IN CHAMPASACK PROVINCE



Source: Author's calculation based on WBES.

Turning to Champasack province, the retail sector leads with an MPI score of 22.4, followed by other services (21.8) and manufacturing sector (16.2).

In Lao PDR, there are several reasons why management scores might be higher in the service sector compared to manufacturing. First, due to the intangible nature of the services sector's output, proactive and responsive management techniques are necessary to directly impact customer satisfaction. In contrast, the manufacturing industry works with physical goods. Therefore, quality control procedures can be more standardized and don't require quick managerial intervention. The dynamic nature of customer preferences and technological advancements drive the service industry to constantly adapt and innovate, demanding cutting-edge management techniques to address shifting expectations. It is known that service industry needs innovation and creativity to remain competitive. Thus managers must inspire teams, cultivate an innovative culture, and put creative solutions into action to meet and satisfy evolving client needs.

Linking productivity in Lao PDR's informal sector to the credit gap solves one of the most important problems facing financial inclusion and economic growth. People in the informal sector often lack access to necessary financial services they need, which impairs their productivity and hinders growth as well as impedes formalization. Several key components of a policy aimed at closing this gap would work together for the sector to access credit, which would boost productivity and encourage formalization. The policy involves expanding microfinance, credit guarantee schemes, regulatory reform, enhancing financial literacy, and capacity-building efforts.

The higher managerial skill observed in Lao PDR's services sector compared to manufacturing can significantly impact the country's labor markets, economic structure, and long-term development plans. The development plan could involve enhancing the service economy, TVET, labor market adjustment, and balanced economic diversification. In particular, better skill levels in services management might encourage a structural shift in the economy from manufacturing to services. This could lead to policies promoting education, training, and investment in sectors, such as finance, tourism, and information technology.

Sources of Fund and Challenges Faced in Finance/Credit Accessibility

To understand the challenges related to access to finance and credit, an in-depth interview session was conducted with the informal business sector. As a qualitative study, there is no specific sampling size; data collection stopped when repetitive information was acquired. For this study, information was retrieved from 11 respondents working in informal businesses, including street food vendors (five

individuals), preorder service providers (three individuals)[3], and online sellers (three individuals). According to the interview sessions, respondents were unaware of and uninterested in accessing formal finance. Some borrow financial resources from other people but at much higher interest rates compared to market rates.

Selected statements from the respondents include:

"As a preorder service provider, we have no cost of running our business. We expect our customers to pay before placing orders…"
- A 30-year old female preorder service provider

"Selling through social media platforms does not use a lot of investment; we have to invest time to advertise on our Facebook, IG, and other platforms…"
- A 23-year old male preorder service provider

"I started this business 10 years ago with my family's savings. We think about access to finance in order to buy a new machine, but we do not know the process. Interest rates outside the system could be as high as 4% a month. For bank loans, it is too complicated and time-consuming. We do not have knowledge about the documents and the approval process..."
- A 50-year old male street vendor

"When I have to invest in new inventories, I have to borrow the funds from a friend. The interest rate was 2% a month, and we had to use our motorcycle as collateral. …"
- A 32-year old female online seller

The Institute for Industry and Commerce (IIC) under the Ministry of Industry and Commerce (MOIC) conducted a field survey on the cassava value chain across several provinces in Lao PDR. It was found that large numbers of farms primarily used cash to purchase machinery. They are interested in paying in installments, but they do not have enough knowledge or understanding of the associated rules and regulations[4].

During the interviews, the research team also asked respondents about the possible benefits they expect if they formalize their businesses. From their perspective, a registered firm is seen as more respectable and trustworthy compared to other businesses. This view could positively impact customer relationships, supplier connections, and other stakeholder interactions. Business registrations facilitate government transactions, including establishing a business bank account, securing financing, and engaging in contracts. Many financial institutions and associates often require verification of business registration.

From the interviews, respondents also acknowledged that registered firms might be eligible for government assistance programs, incentives, and services. This can include tax breaks, grants, and support with regulatory compliance, all of which promote economic growth. For issues related to intellectual properties and trademarks, registration typically conveys exclusive usage rights to the business name within the jurisdiction of Lao PDR. This prevents competing businesses from using identical or comparable names and mitigating consumer confusion. The data collection process also retrieved information from employees of informal businesses. Respondents indicated that registered firms offer retirement plans and health insurance, among other employee benefits, more efficiently. This endeavor enhances the organization's attractiveness to prospective personnel.

3 Responsible for ordering items from foreign e-commerce platforms, such as Shoppe and Lazada (Thailand), Aliexpress, and Taobao (PR China).

4 Based on IIC data collection for Cassava value chain analysis, November 2022.

Selected information retrieved from respondents:

"If our business is registered, it will be easier for us to access finance. Banks always ask for business registration documents. Bank offers more affordable interest rates and better regulation. It is more reliable for us, we plan to register soon…"
- A 33-year old female preorder service provider

"As a street vendor selling baked products, we believe that having a trademark is very important for us as we want to expand our business in the future. In order to register a trademark, we have to formalize our business. The reason we are not registering at the moment is because we want to see if the business is operable and sustainable…"
- A 40-year old male bakery owner - street vendor

"As an employee of this shop, I am fortunate to work with a considerate owner. However, generally, it is better to work under an organization or registered firm, so that employees can benefit from minimum wage law, social security schemes, working condition, and other benefits…"
- A 27-year old male gadget shop employee

"As a small business owner, our family always love the idea to have our business formalized or registered. However, the process is time-consuming, and we are not in a position to spend many days working on document submission. It is too complicated for our family…"
- A 44-year old female local clothing store owner

These respondents recognize the importance of access to finance in human resource development and capital investment. As part of the economic framework of businesses and economies in general, access to financial resources and productivity are interconnected elements. Given the availability of financial resources, businesses can invest in technologies that increase productivity and provide opportunities for the employees' professional development. This aligns with previous findings showing that financially constrained firms could potentially allocate resources toward productivity-enhancing strategies, such as innovation-based productivity growth [35].

Policy Intervention

In an effort to formalize economic activity, the government of Lao PDR has undertaken initiatives to transition informal enterprises and economic activities into the formal sector. This efforts typically involve executing policies and measures designed to compel the registration, regulation, and taxation of informal enterprises. To facilitate this transition, the government aims to simplify and streamline the licensing and registration procedures for businesses. Business registration can be completed at central level (Ministry of Industry and Commerce), provincial level (Department of Industry and Commerce), and district level (District Industry and Commerce Office). The application process is convenient; requiring an application form, a photocopy of applicant's passport (identification card or family identity book), a curriculum vitae (for foreigners), and the applicant's photo [36].

Providing informal businesses with access to credit and financial services at affordable rates can help these businesses grow and improve their operations. In Lao PDR, various microfinance institutions, including NGOs, commercial banks, cooperatives, and rural development banks, offer a range of financial services to low-income and underserved communities [31]. Additionally, the government adopts equitable tax policies that provide incentives for informal enterprises to transition to formal businesses.

The government of Lao PDR has decreased its value-added tax (VAT) rate from 10% to 7%, as stipulated by Presidential Decree No. 231/P, dated 21 December 2021. The amended legislation also expands the list of VAT-exempt activities and introduces a new VAT calculation specifically for activities related to electricity and minerals [37]. As highlighted earlier, informal workers now have

access to various training and skill development programs, which has resulted in an improvement in both their employability and economic prospects.

Conclusion

This study aims to shed light on informal sector productivity and access to finance issues in the context of Lao PDR. The analytical process incorporates both primary data collected through in-depth interviews and secondary data from the WBES. In terms of financial resource accessibility, the findings reveal that the informal sector faces distinct challenges in securing financial support due to its unregulated and predominantly cash-based nature. In order to access formal financial services, individuals and businesses require proper documentation, such as bank accounts, legal business registration, and credit histories, which are often lacking in the informal sector. Additionally, a shortage of tradable assets among informal sector participants can hinder their ability to secure credit from mainstream financial institutions. Moreover, a lack of financial literacy and insufficient expertise in managing formal financial products among many informal sector participants may lead to improper fund utilization and increased risk for lenders.

Informal businesses have both positive and negative impacts. Positively, informal businesses often rely heavily on human labor and are important sources of employment, especially for low-skilled and vulnerable workers. This can help reduce both unemployment and underemployment, contributing to inclusive economic growth. Informal businesses can also reduce poverty by providing employment and income opportunities to those working in the sector. Additionally, informal work offers flexible employment arrangements that are able to accommodate individuals who might have constraints, such as caregiving responsibilities.

However, there are several disadvantages. Workers in the informal sector often lack access to legal protections, social security, or healthcare, which can leave them vulnerable to exploitation and economic shocks. In contrast, workers employed by formal firms typically have access to all of these benefits. Informal businesses often struggle to access formal financial services, limiting their capacity for growth and investment. They may also have lower productivity due to less access to technology and resources, which can slow economic expansion. Last but not least, the presence of informal businesses can lead to unfair competition for legitimate companies, which are required to comply with regulations and pay taxes.

Policy Recommendations

Based on the study outcomes, several policy recommendations can improve the informal business environment in Lao PDR:

i) **Develop tailored microfinance initiatives:** Implement microfinance initiatives and credit facilities tailored exclusively to the needs of informal enterprises, offering competitive interest rates to facilitate expansion and growth investments.

ii) **Provide business development assistance:** Offer capacity-building programs and business development support to informal business operators, including business planning and financial literacy training, to enhance their operational efficiency and management capabilities.

iii) **Implement credit guarantee schemes:** Establish credit guarantee schemes to help small and medium businesses (SMEs) access credit that they might not otherwise obtain due to lack of collateral or a strong credit history. In developing countries like Lao PDR where SMEs are important to the economy but frequently face financial obstacles to expansion and innovation, this program is especially important. Under a credit guarantee scheme, a third party, such as government agency, financial institutions, or independent guarantee fund, can provide a guarantee to a lender that a portion of the loan to an SME will be repaid if the SME fails to repay the loan.

iv) **Enhance efficiency in the informal economy:** Collaborate with regional financial institutions and microfinance establishments to provide accessible and affordable financial services to small enterprises and

informal workers. Moreover, vocational training programs can be developed to improve technical skills, business management, and financial literacy among informal workers.

v) **Promote affordable technology adoption:** Encourage the adoption of affordable technology and innovation among MSMEs to enhance productivity and operational efficiency. Affordable technology enables companies to implement systems and tools that can optimize workflows without putting a heavy financial burden on them. Overall profitability may increase as a result of a more cost-effective operation.

vi) **Facilitate the transition from informal to formal business operations:** Simplify and streamline the registration process for unofficial enterprises by reducing paperwork, bureaucratic barriers, and associated costs. Introduce online submission and one-stop registration services to streamline the process, making it more accessible and efficient.

vii) **Incentivize formalization:** Offer tax breaks and exemptions to newly formalized businesses for a specified period to incentivize compliance and formalization. For example, tax holidays or reduced tax rates can be a powerful incentive for unrecognized businesses to come out of the shadows and pay their dues. Launch public awareness campaigns to educate proprietors of informal enterprises about the benefits of formalization by utilizing a range of communication channels, such as radio, television, and community engagement at the local level.

To make the formalization process easier, it would be beneficial to collaborate with local community-based organizations and associations by providing guidance and support to informal businesses at the grassroots level. These organizations have the potential to serve as intermediaries, playing a crucial role in bridging the gap between informal businesses and government initiatives toward formalization and economic development in Lao PDR.

CHAPTER 6

MALAYSIA

Abstract

This paper aims to assess the impacts of the informal sector on productivity within the context of Malaysia. It seeks to address three key objectives: understanding the status and economic features of the informal sector; examining the impact of financial accessibility of informal sector effects productivity growth; and exploring policy implications on the informal economy and productivity enhancement. Through primary (survey) and secondary data analyses as well as qualitative policy assessments through stakeholder engagement, the results highlight the urgent need to formalize the informal sector. The analysis indicates that informal employment potentially drags down overall productivity while formal employment contributes positively. This implies that the longer informal sector businesses operate in the market, the more their economic growth diminishes. Thus interventions to encourage informal businesses to transition into the formal sector are crucial to mitigate the adverse effects of the informal economy on both the overall economy and worker productivity. From a financial perspective, the results show that financial loans show a positive impact, but a lack of financial accessibility remains a major constraint in transforming the informal sector. For a holistic policy intervention, the proposed strategies for formalization in Malaysia extend beyond financial accessibility and encompass regulatory reforms, institutional changes, and interventions within supply chains.

Introduction

The informal sector, also known as the informal economy, refers to a segment of economic activity that operates outside the formal regulatory framework of a country. It typically consists of unregistered and often small-scale businesses, self-employment, and casual labor, where transactions may not be officially recorded, and workers may lack legal labor protections and social benefits. The informal sector plays a significant role in many economies, especially in developing countries, encompassing a wide range of activities, from street vending and unlicensed small enterprises to household labor and unregulated service provision.

The impact of the informal sector on a country's productivity is multifaceted. On one hand, it contributes to economic growth by providing employment opportunities, income generation, and entrepreneurial innovation. However, its lack of formalization, limited access to training, and absence of social protections can hinder productivity by reducing efficiency and leaving workers economically vulnerable. Balancing the positive contributions of the informal sector with the need for regulation and support is crucial to optimizing the informal sector's impact on overall productivity and economic development. When the sector is of significant size, it becomes imperative to comprehend the influence of the informal sector on productivity.

This paper aims to assess the impacts of the informal sector on productivity within the country. It seeks to address three important objectives: (i) understanding the status of the informal sector and economic characteristics; (ii) examining how financial accessibility within this sector impacts productivity growth; and (iii) exploring policy implications and productivity enhancement in the informal economy.

Addressing the first objective involves establishing the size and key characteristics of the informal sector in Malaysia. The second objective entails reviewing and stock-taking national policies aimed at formalizing the informal sector and empirically analyzing its productivity impacts. The proposed formalization strategies, which addresses the third objective, extend beyond financial accessibility and encompass regulations, institutional changes, and interventions in supply chains. These policy recommendations are derived from the findings obtained through secondary and primary data analyses as well as qualitative measures gathered through stakeholder engagement involving the government agencies and business associations.

This paper is structured into six sections. Beginning with the "Introduction", the following section "Informal Economy and Productivity Growth in Malaysia" provides the definition of the informal sector used in the official statistics in Malaysia and discusses its size and key characteristics. Section three's "Informal Sector Productivity and Credit Access" reviews the literature on the causes of informality and the role of financial accessibility in determining productivity and empirically assesses the impacts of the informal sector on productivity from the perspective of sectoral and firm levels. Section four, "Sources of Funds and Challenges Faced in Credit Accessibility" explores the major sources of funds for the informal sector and describes the challenges faced in accessing credit. Identifying the gaps in existing policies and drawing implications for productivity enhancement falls under the following section in "Policy Intervention". Finally, section six concludes the paper by offering potential strategies that can be considered to formalize the informal sector in Malaysia.

Informal Economy and Productivity Growth in Malaysia

This section defines Malaysia's informal sector as per official statistics and provides an overview of its characteristics based on the standard definition used by the national statistical office. The primary challenge in evaluating the informal sector's contribution to the national economy stems from data limitations. In Malaysia, the sole official data source on informal employment and the informal sector is a household-based survey. Ideally, a survey based on firms or establishments would be more suitable for examining the level and impact of the informal sector on productivity. In the absence of such survey data, assessing the informal sector's impact on GDP and productivity necessitates a modeling approach.

Background Statistics on the Informal Economy

Adaptation of ILO Framework for Defining Informal Sector

The primary data source for informal sector statistics in Malaysia is the Informal Sector and Informal Employment Survey, administered by the Department of Statistics Malaysia (DOSM). Notably, this survey has been conducted since 2013 and is integrated as one of the modules within the broader framework of the Labor Force Survey (LFS). The informal sector includes enterprises that meet the following criteria:

i) Enterprises not registered with the Companies Commission of Malaysia (CCM), professional bodies, or local authorities in the state of Sabah and Sarawak.

ii) At least one product or service, if not all, produced is meant for sale or barter transactions.

iii) Employment size is less than 10 persons and not registered under national legislation.

The execution of this survey adheres to the guidelines and suggestions set forth by the ILO, specifically referencing the "Measuring Informality: A Statistical Manual on the Informal Sector and Informal Employment". The survey's conceptual framework for employment in the informal sector encompasses individuals aged 15 to 64 years in households and covers various employment categories, including self-employed individuals, employers, unpaid family workers, and wage employees. It is worth noting that members of producers' cooperatives and the agriculture sector were excluded in the survey conducted by DOSM [1].

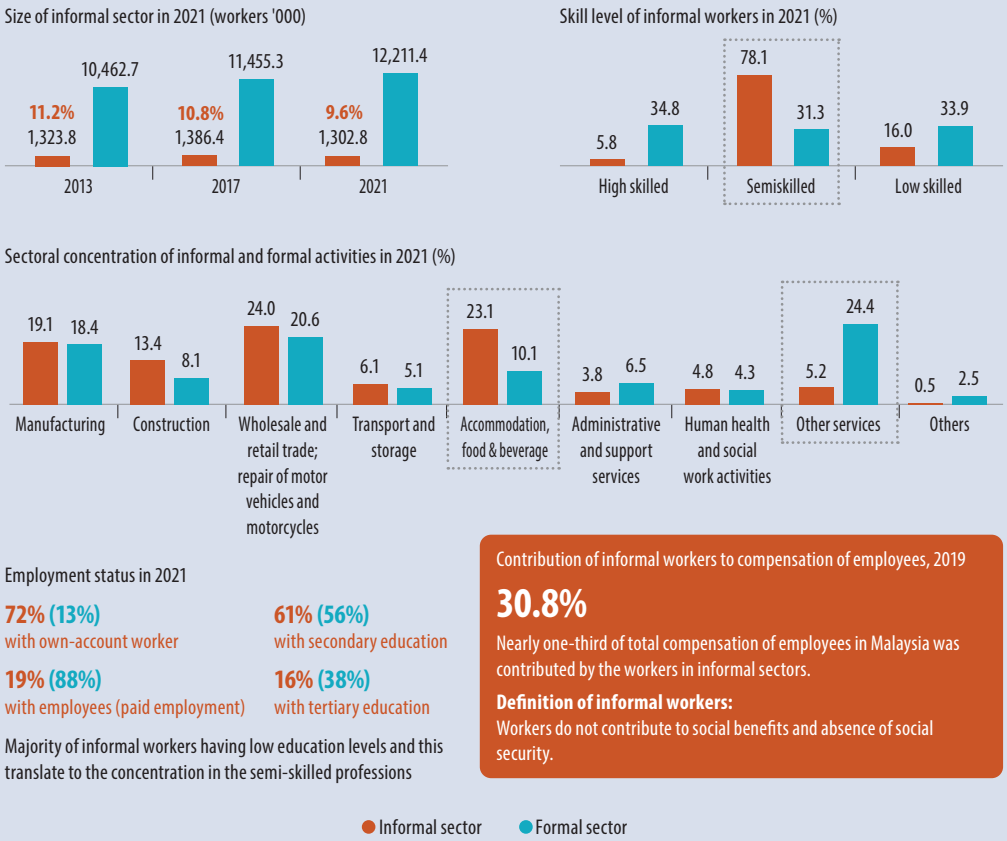
Implementing the ILO framework by DOSM bridges the gap between "employment in the informal sector" and "informal employment". Both concepts refer to different aspects of "informalization" of employment and to different targets of policy-making. While these concepts are not interchangeable, both are valuable for descriptive and analytical purposes, complementing one another. To ensure clarity, it is essential to establish coherent and consistent definitions and measurements for each concept, clearly delineating one from the other. Often, statistics users conflate the two because they may not be aware of the distinct observation units involved: enterprises versus individual jobs.

Key Characteristics of Employment Operating in the Informal Sector

The Informal Sector and Informal Employment Survey, conducted by DOSM, is structured as a household-based survey and integrated as one of the modules within the existing Labor Force Survey (LFS). As a result, the informal sector's primary features are reflected through its employment attributes. Figure 6.1, as illustrated in a table in Appendix 1, provides a summary of the essential employment characteristics within the informal sector.

FIGURE 6.1

KEY CHARACTERISTICS OF EMPLOYMENT IN THE INFORMAL SECTOR, EXCLUDING THE AGRICULTURE SECTOR (%)



Source: Reproduced with permission of DOSM [1].

- **Employment status:** In general, the total employment count within the informal sector has remained constant at 1.3 million, although its proportion has exhibited a declining trend, reducing from 11.2% in 2013 to 9.6% in 2021. A significant majority of individuals employed in the informal

sector, roughly two-thirds, operate as self-employed or own-account workers. In contrast, in the formal sector, over 80% of workers hold employee status or are engaged in paid employment (employees)

- **Economic sectors:** The distribution of employment across economic sectors shows a fair similarity between the informal and formal sectors. In 2021, the services sector accounted for 67% of informal employment, slightly lower than the 71% observed in the formal sector. Within the services sector, informal employment is primarily concentrated in wholesale and retail trade, motor vehicle repair, accommodation, and food and beverage services. In the construction sector, informal employment is notably substantial, surpassing the size of formal employment in this sector. In 2021, formal employment in the construction sector represented 8.1% of the total while informal employment stood at 13.4%

- **Education and occupation:** Education and occupational categories are interrelated, where higher levels of education correspond to a greater prevalence of skilled occupation categories. In 2021, a mere 15.8% of informal employment held tertiary education qualifications, in contrast to the 38.2% observed among formal employment. Consequently, informal employment predominantly occupied positions in skilled occupations (managers, professionals, technicians, and associate professionals) accounting for only 5.8% while formal employment boasted a significantly higher proportion of 34.8% in these categories

  The majority of informal employment held lower levels of education, with primary and secondary education accounting for 79.5%. Consequently, most informal workers were engaged in semiskilled categories, including service and sales workers, and craft and related trades workers constituting a substantial 78.1% of the informal workforce.

- **Age groups:** The distribution of age groups within informal employment does not exhibit substantial variation compared to formal employment. In both categories, the majority of workers fall within the age range of 25 to 54 years. The highest concentration of employment in both segments is found among individuals aged 25–34. Employment size tends to decrease as age levels increase

- **Income:** Income generated from the informal sector can be measured using the Compensation of Employees (COE), which encompasses salaries, wages, and additional payments to informal workers, such as allowances, bonuses, social benefits, and training costs. In 2019, the informal sector contributed nearly one-third of the total COE in Malaysia. The data used to calculate this share are sourced from the Household Income Survey, defining informal workers as those who do not contribute to social benefits and lack social security coverage

Main Causes of Informal Economy

The literature on measuring the causes of the informal sector in Malaysia is limited, indicating a lack of focus in policy and academic research to the causes and consequences of informality. Based on the available limited literature, factors, such as access to finance, education and training, adoption of innovation and information and communication technologies (ICT), economic conditions, and the influx of refugees are among the factors that influence the size and persistence of Malaysia's informal sector. Each of these factors are briefly explored and explained in the following paragraphs.

Access to finance is not seen as a critical factor enabling for informal businesses in Malaysia due to a well-established microfinance ecosystem [2–4]. Major microfinance institutions in Malaysia, such as Amanah Ikhtiar Malaysia (AIM) and Yayasan Usaha Maju (YUM), were both established in the late 1980s, followed by the Economic Fund for National Entrepreneurs Group (TEKUN) in the late 1990s. The only recorded financial access issue was mainly related to the traditional financial and banking institutions, especially during the early 2000s [5]. During this period, the institutions regarded low-income earners, including informal businesses, as nonbankable with high credit risk. While the microfinance ecosystem does not extend extensively to commercial banks, it contributes to the prevalence of business informality.

Concerning access to education and training, it is crucial to emphasize that there is also no conclusive evidence to designate it as the primary cause of the informal economy in Malaysia. Some studies suggest that there might be an indirect channel through which the lack of access to education and training may contribute to the informal economy [6]. This indirect connection is notably relevant for individuals with special needs and those from minority groups, who often encounter substantial barriers when trying to access high quality education and training programs, particularly in specialized vocational fields. Consequently, this impediment to skill development makes it challenging for them to obtain decent employment, thus pushing them into the informal economy.

Among others, ICT is pivotal in driving informal economic activities in Malaysia as it simplifies market entry by equipping individuals with essential tools and resources [7]. In 2022, a significant proportion of households in Malaysia owned mobile phones and computers, with 96% having access to the internet [8]. The proliferation of social media and e-commerce platforms also accelerated the growth of informal business activities in Malaysia. For example, TikTok Shop allows informal entrepreneurs to host live marketing to an estimated 4 million TikTok users in Malaysia [9]. In addition, the low operation and marketing costs through e-commerce platforms, such as Shopee and Lazada, have helped informal entrepreneurs market their products and services at lower prices, making them more appealing to buyers [10]. As such, these platforms empower informal entrepreneurs, enabling them to compete in unregulated markets and overcome market barriers to access new markets.

Another factor that primarily explains the expansion of Malaysia's informal economy is the need for people to navigate through crisis periods. Several studies have shown that crises, not only in recent periods, but also in the past, have led to people participating in the informal economy. For example, the economic downturn between 2007–08 led to decreased output in Malaysia and labor market shocks, resulting in retrenchments and many turning to the informal economy [4]. During the recent COVID-19 pandemic, many have turned to the gig economy, particularly in e-hailing and food delivery services, due to the need for instant income [11–12]. While the gig economy has provided income replacement to those severely affected by the pandemic, it has also become an easy option for fresh graduates to secure a higher entry wage than normal employment [13].

However, a new challenge has now arisen as there is a growing trend of informal business among foreign nationals in Malaysia, especially among refugees [6]. Rohingya refugees, for example, actively participate in the informal economy in their attempt to become less dependent on the United Nations High Commissioner for Refugees's (UNHCR) assistance and the government's generosity. The study between 2013 and 2016 found that despite the absence of their right to work, the Rohingyas persistently entered into the informal labor market as temporary, unskilled, and low-wage workers in various sectors, such as trade, services, and automotive. For self-employed Rohingyas, they tend to engage in small-scale and unregulated income-generating activities, with their goods and services offered beyond the needs of the Rohingyas and to a larger extent of consumers, including other migrant groups and the local community.

Understanding these factors sheds light on the dynamics and challenges of Malaysia’s informal economy, highlighting the complex interplay of economic, social, and policy factors shaping its growth and persistence.

Informal Sector Productivity and Credit Access

This section explores the relationship between financial accessibility and productivity in the informal sector. It draws insights from a synthesis of existing literature and empirical analyses. Despite the abundance of studies focusing on developing countries, there is a notable lack of research specific to Malaysia, emphasizing the need for a comprehensive review that incorporates insights from the national development plan, especially the short-term initiatives. Furthermore, empirical investigations are conducted at two levels to provide a better perspective on the relationship between informal sector productivity and access to credit.

A Literature Review on Financial Accessibility and Productivity Growth of Informal Economy

Empirical evidence linking financial accessibility and productivity growth in Malaysia's informal sector is scarce. There is almost a complete absence of studies that directly measure the impact of financial accessibility on informal sector productivity. Existing research can only indirectly link financial accessibility with productivity, focusing on related indicators, such as sales performance and micro, small, and medium enterprises (MSMEs).

Literature reviews and available policy documents suggest that microcredit access is expected to influence informal economy productivity in Malaysia. This is supported by the fact that microcredit program has been accessible since the late 1980s, initially aimed as a measure of poverty eradication [2–3, 14]. The introduction of the microcredit program in Malaysia modeled the work of Muhammad Yunus in Bangladesh, who established Grameen Bank (Village Bank) to provide poor, underprivileged women with credit access. The earlier microfinance institutions, AIM, was established in 1987, followed by TEKUN in 1998[1]. While AIM is a poverty-oriented institution, TEKUN provides microcredit loans to those living under and above the national poverty line.

Microcredit initiatives, detailed in Budgets 2023 and 2024, including those from AIM, TEKUN, Central Bank of Malaysia (BNM/Bank Negara Malaysia), and state-owned commercial bank, such as Bank Simpanan Nasional (BSN), signify their critical role in Malaysia's short-term development strategies (Table 6.1[2]).

TABLE 6.1

SUMMARY OF MICROCREDIT SCHEMES IN BUDGET 2023 AND 2024

Institution	Fund Size (2023)	Fund Size (2024)	Target Group
AIM	-	MYR100 million	Women from lower-income groups
TEKUN	MYR330 million	MYR330 million	Bumiputera microentrepreneurs, members of the Indian community venturing into business, and delivery riders
Bank Negara Malaysia (BNM)	MYR204 million	MYR467 million	Low-income microentrepreneurs, viable entrepreneurs/ microenterprises, including gig workers who utilize digital platforms and self-employed individuals
Bank Simpanan Nasional (BSN)	MYR1.15 billion	MYR1.4 billion	Women and youth aged 30 years and below, gig/ students from higher learning institutions or graduates starting a business, hawkers, veterans of uniformed bodies, persons with disabilities, and the Chinese community

Source: Reproduced with permission from Ministry of Finance (MOF) [15–16].

Relative to Budget 2023, Budget 2024 sees a significant increase in fund allocation, reflecting the importance of microcredit schemes in gearing Malaysia's short-term economic development. A major factor that justifies its importance lies in the sequential process of formalizing informal businesses into registered MSMEs. In this sense, microcredits are specifically aimed at empowering informal business operators, including those under the group of microenterprises. Simultaneously, for MSMEs, more than MYR8 billion in funds are made available under BNM [17]. Indirectly, separating credit sources for informal and MSMEs becomes a motivating factor for business formalization as it allows broader access to credit. Therefore, this strategic approach establishes a strong foundation affirming that credit access is not a major driver for the informal economy in Malaysia.

1 AIM and TEKUN provide microcredit services throughout Malaysia.

2 Other financial institutions include BNM and BSN (government-owned bank).

Formalizing the informal sector, especially those with significant growth potential, is necessary, considering the availability of various structural issues that are linked to the country's productivity landscape. This includes the low contribution of MSMEs toward GDP and the less equitable growth impacts on the compensation of employees (COE) [17–19]. Despite MSMEs constituting more than 98% of the registered businesses, with approximately 76.5% being microenterprises, their contribution to GDP is relatively small, hovering at an average of 37.9% between 2015–22 [7]. The Malaysia Productivity Blueprint highlighted that MSMEs in some sectors recorded a productivity gap of 1.4 times to 3 times lower than larger firms [20]. On the COE, marginal improvements of less than 0.5% annually were recorded between 2015 and 2019, making the compositions comparably lower than major Asian economies [21]. In short, the formalization process will lead to the growth of quality MSMEs and improve productivity.

Existing literature widely supports the need to formalize the informal sector through enhanced credit access due to its ability to mitigate productivity-related issues. Studies concurred that improving credit access through microfinance institutions, such as AIM and TEKUN, has a high potential to enhance productivity [3–4, 22]. For instance, a study on female microentrepreneurs highlights that the total amount of loans received has a relatively higher effect on productivity than factors, such as entrepreneurial competencies and education level [23]. From a broader perspective, the study by Nor et al. [14] suggests that every percentage increase in credit access correlates with a 12.4% rise in sales, thus improving the state of productivity of the microenterprises. More importantly, it is evident that credit access also positively impacts microenterprises' productivity levels through quality training and development programs [17]. As such, the literature calls for a more supportive environment for loan processing and repayment flexibility, especially from AIM and TEKUN.

Access to Credit, Informal Economy, and Productivity: An Empirical Exercise

The previous subsection highlighted the limited literature that directly investigates the impact of informality on productivity. The existing studies tend to measure indirectly the relationship and they may suffer from methodological perspectives that may not capture the true dynamics and observation of the informal sector's impact on productivity. To address this shortcoming, this subsection introduces an empirical assessment that quantifies the impact of the informal sector's influence on productivity. Econometric models are employed using two distinct datasets to provide varying perspectives into these relationships. First, secondary data are used to analyze the informal sector's effects at the sectoral level. Then, survey data are applied to delve deeper into the impact assessment by studying its effects at the firm level. Both analyses complement each other: sectoral data provides a macroeconomic perspective of the country's informal sector while survey data provides nuanced insights into the microlevel dynamics and realities of informal businesses.

Sectoral-level Assessment

A simple linear regression model is utilized to explore the relationship between the informal sector and productivity. This model aims to quantify the productivity gap between informal and formal sectors [22] and assesses how the informal sector influences GDP growth. The model depicting the impacts on productivity can be illustrated as follows:

$$log\,(lab_{prod_t}) = \alpha_0 + \alpha_1 log(X_t) + \varepsilon_t \quad (1)$$

where labor productivity (lab_{prod_t}) is proxied using real GDP per worker, and X_t represents independent variables that are interchangeably used to observe the share of informal and formal workers in total employment. By employing the shares of informal and formal employment, the analysis becomes less dependent on the scale or size of the economy or population being studied. This approach allows for a more robust regression analysis, thereby enhancing the ability to achieve the study's objectives.

The econometric model for measuring the impacts of the informal sector on GDP growth can be observed as follows:

$$log(GDP_t) = \beta_0 + \beta_1 log(X_t) + \varepsilon_t \quad (2)$$

where economic growth is measured using real GDP while the regressors are the share of informal and formal employment stated as X_t that is used interchangeably, ε_t denotes the error term, encompassing unexplained variations in employability that are accounted for the independent variables.

Accounting for the informal sector in GDP

In Malaysia, data on informal employment and economic transactions within the informal sector are captured in the official labor force statistics and GDP records. The primary source for collecting data on informal employment is the LFS, along with specific reports on the informal sector extracted from the LFS, published biennially. However, the specific distinction of the informal sector's GDP contribution in the national accounts has not yet been officially published. DOSM relies on various data sources to estimate the economic transactions of the informal sector, one of which includes data from the Household Income Survey [18]. Hence, the empirical analyses linking the informal sector to GDP in Equations (1) and (2) are comparable and justified.

The data on informal and formal employment is sourced from the Informal Sector and Informal Employment Survey, available only for the years 2013, 2015, 2017, 2019, and 2021, with limited sectoral aggregation. Due to these constraints, employing a panel econometric model is deemed the most appropriate approach. A summary of the data used in the analyses is provided in Table 6.2.

TABLE 6.2

DATA USED TO RUN THE IMPACT ASSESSMENT

Data Types	Sectoral Aggregation	Sources
Informal Employment	For the years 2013, 2015, 2017, 2019, and 2021 with the following sectoral aggregation: · Manufacturing · Construction · Wholesale and Retail · Transportation and Storage · Accommodation and Food & Beverage · Administrative and Support Services · Human Health and Social Work Activities · Other services · Others	Informal Sector and Informal Employment Survey Report [1]
Formal Employment	For the years 2013, 2015, 2017, 2019, and 2021 with the following sectoral aggregation: · Manufacturing · Construction · Wholesale and Retail · Transportation and Storage · Accommodation and Food & Beverage · Administrative and Support Services · Human Health and Social Work Activities · Other services · Others	Informal Sector and Informal Employment Survey Report [1]
Labor Productivity	Computed based on GDP per worker at sectoral levels for the years 2013, 2015, 2017, 2019, and 2021	Labor Force Survey National Account Statistics [24]
GDP	At constant price for the years 2013, 2015, 2017, 2019, and 2021	National Account Statistics [18]

Models (1) and (2) are estimated using Ordinary Least Squares (OLS) with robust standard error. In the analysis, four types of regression models are computed for informal and formal sectors using two different dependent variables: labor productivity and real GDP. Results of the estimation are provided in Table 6.3.

The findings reveal that informality has a detrimental impact on both the economy and productivity. The results consistently demonstrate that the informal sector, across all models, yields a highly significant and negative effect on productivity and GDP, approximately 0.5% for every 1% increase in informal activity. Conversely, the formal sector exhibits a significantly positive impact on labor productivity and GDP. For every 1% increase in formalized business activity, labor productivity increases by about 4% while the economy grows by approximately 5%. This underscores the importance of incentivizing informal business owners to transition into the formal sector, offering a potential solution to mitigate the negative impacts of informality on overall economic potential and worker productivity. Figure 6.2 plots the relationship between the informal and formal sectors on impacting productivity.

TABLE 6.3

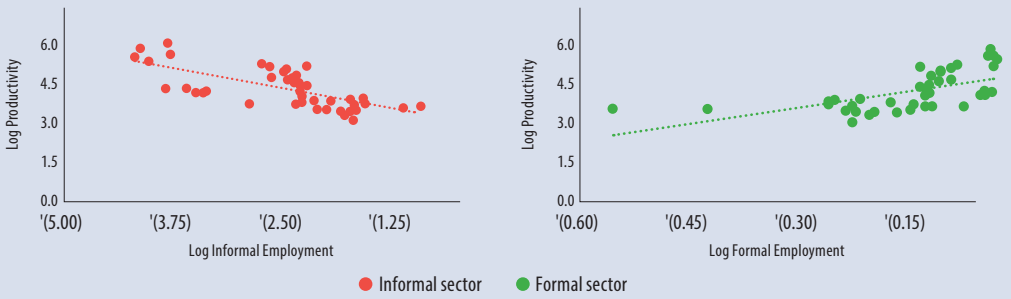
ESTIMATED IMPACTS OF THE INFORMAL SECTOR ON PRODUCTIVITY AND GDP

Independent Variable	Dependent Variable	
	Labor Productivity	Real GDP
Constant	2.8557*** (11.0051)	9.9815*** (27.9310)
Informal sector	-0.5994*** (-5.8894)	-0.5558*** (-3.9655)
R^2	0.4465	0.2678
Constant	4.8351*** (32.6829)	11.9912*** (69.3812)
Formal sector	4.0620*** (4.5835)	5.0974*** (4.9235)
R^2	0.3282	0.3605

Note: All models have been estimated using OLS with robust standard error following Newey and West [25] that correct for both autocorrelation and heteroskedasticity. Asterisks ***, **, * denote statistically significant at 1%, 5%, and 10% levels, respectively. Informal sector is computed as share of informal employment from the total employment from 2013 to 2021, whereas formal sector is constructed through the share of formal employment (subtract total employment to informal employment) to the overall employment between 2013–21, by nine different sector, such as Manufacturing, Construction, Wholesale & Retail, Transportation, Accommodation & Food, Administration, Health, Other Services, and Others. Figures in round brackets (…) are t-statistics while R^2 denotes R-squared of regression. All variables are in logarithm.

FIGURE 6.2

RELATIONSHIP OF FORMAL AND INFORMAL SECTORS WITH PRODUCTIVITY



Source: Computed from DOSM's published data [1].

The literature suggests that the adverse effects of informal economic activities primarily stem from limited market access [13, 26–27], resulting in low operational efficiencies or economies of scale. Additionally, workers in the informal sector tend to exhibit lower productivity levels due to their relatively lower levels of education. Studies by Galiani and Weinschelbaum [27] and Dimova et al. [28] have observed that highly educated workers tend to opt for the formal sector, where they can secure higher wages for their education and experience. Conversely, less educated workers are more likely to be absorbed into the informal sector.

For a more precise understanding of the factors influencing the behavior of the informal sector, analyses utilizing survey data in the following subsection "Firm-level Assessment" could provide valuable insights into this issue.

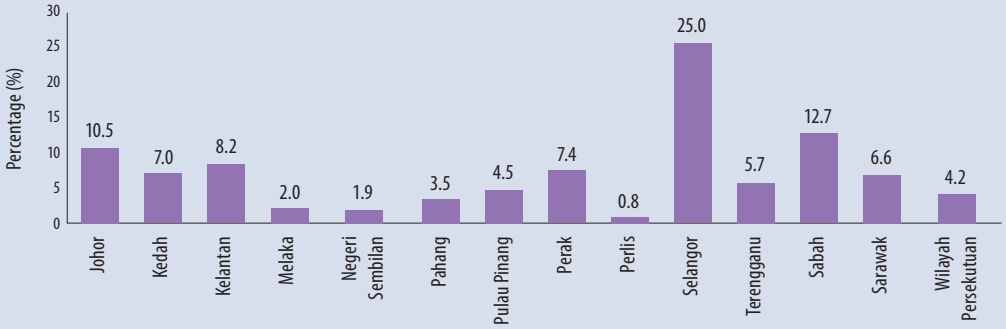
Firm-level Assessment

The current data availability at the sectoral level is insufficient to assess the influence of financial variables on productivity. To address this limitation, a snap survey was designed to gather information about the informality at firm levels. This survey acts as a valuable instrument for evaluating financial accessibility and productivity growth within the informal sector. By engaging in field surveys to gain valuable insights from informal sector firms and subsequently analyzing the gathered information, recommendations can be formulated based on the firsthand experiences and perspectives of individuals operating within this sector.

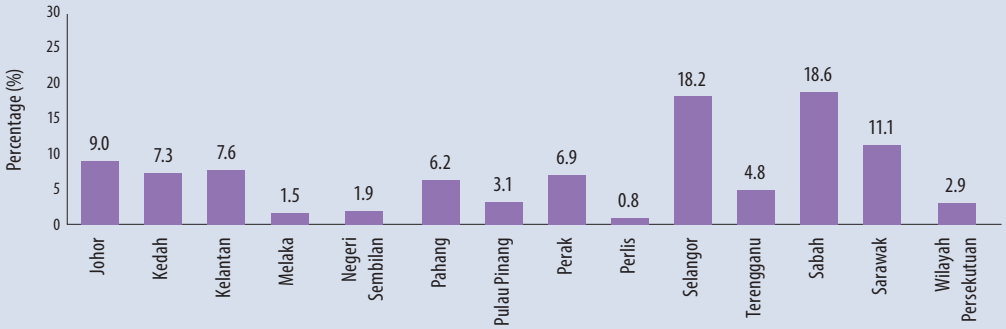
FIGURE 6.3

EMPLOYMENT IN INFORMAL SECTOR BY STATE IN 2021 (%)

Selangor (25.0%) recorded the highest rate of employment in the informal sector, **excluding** agriculture followed by **Sabah (12.7%)** and **Johor (10.5%).**



Sabah (18.6%) recorded the highest rate of employment in the informal sector, **including** agriculture followed by **Selangor (18.2%)** and **Sarawak (11.1%).**



Source: Reproduced with permission from DOSM [1].

The survey was conducted over two separate occasions in Malaysia's state of Selangor, specifically from 27–29 October 2023 and subsequently from 12–30 November 2023. During these periods, a total of 150 respondents were successfully surveyed with their responses collected. Selangor was selected as a survey location for several reasons. First, its accessibility and resource optimization advantages made it a practical survey location. Additionally, the decision was influenced by data derived from the Informal Sector and Informal Employment Survey Report published by DOSM in 2023 (Figure 6.3). These data clearly illustrate that Selangor dominates the nonagricultural sectors while informal agriculture activities are primarily dispersed in other states, particularly Sabah and Sarawak. Further, Selangor also has a high percentage of the informal sector in the agricultural sector. Given the cost considerations associated with conducting surveys in more remote areas and logistically challenging, focus on Selangor allowed researchers to maximize the efficiency and cost-effectiveness of the study. This strategic approach underscores researchers' commitment to comprehensively investigate the informal economy.

Sampling and Modeling

The purposive sampling technique, a methodical and targeted approach, was deployed to focus research efforts on specific subgroups or characteristics within the informal economy. This approach allowed researchers to gather in-depth insights by selecting firms engaged in specific informal activities or businesses that are typically hard to reach or concealed within the informal sector's complexities. Although this method fosters trust and connection through direct interaction, researchers remain aware of the possibility of selection bias, maintaining transparency about its limitations to ensure the integrity and relevance of the survey in relation to the research objectives.

In tandem with purposive sampling, researchers leveraged face-to-face data collection method as a crucial tool in the survey of informal sector firms. This method enabled researchers to establish a profound understanding of the informal business environment by directly engaging with business owners and operators. The face-to-face interactions fostered trust and created an environment conducive to honest and context-rich responses. In the diverse, often hidden, and locally dynamic world of the informal economy, this method allowed researchers to observe the physical environment, comprehend cultural nuances, and overcome access challenges. Its proficiency in capturing the complexities of the informal sector made it an invaluable instrument in the research, providing insight on this underexplored economic field.

The survey focused on eight dimensions of financial accessibility and productivity growth, which include: (i) demographic information; (ii) business or informal organization information; (iii) access to finance; (iv) access to ICT; (v) access to education, training, and skills; (vi) access to market; (vii) business/organization growth and challenges; and (viii) government regulations and support. Collectively, the survey consists of 32 carefully crafted questions designed to address the research objectives comprehensively.

The questionnaire and instruments employed in the survey are based on the literature review [10, 29–30]. These tools have undergone a comprehensive internal validation process, involving validation by an in-house expert team. The discussions aimed to gather valuable insights and feedback to further refine and strengthen the scopes and instruments. The questionnaire and instruments had gone through the pretesting process with the primary aim of ensuring the questions convey a clear understanding, alleviating respondents' hardship, and avoiding respondents' difficulties in answering. Profiling and key statistics derived from the survey are detailed in Appendix 2.

Data collected from the survey was analyzed using a simple linear regression model, used to establish empirical relationships observed from the descriptive statistics. An empirical analysis was conducted of the relationship between the informal sector business environment and sales performance. The utilization of sales performance as a proxy measure for labor productivity is a common practice in the literature [31]. The objective of this analysis was to examine the empirical factors that influence sales performance. The model is as follows:

$$Sales\ performance_i = \beta_0 + \beta_1\ Financial\ loan_i + \beta_2 Secondary(SPM)_i$$

$$+ \beta_3 Access\ to\ digital\ payment_i + \beta_4 Access\ to\ training_i$$

$$+ \beta_5 Years\ of\ establishment_i + \beta_6 Business\ access\ assistance_i$$

$$+ \beta_7 Impact\ of\ financial\ loan_i + \beta_8 Training\ in\ near\ future_i$$

$$+ \beta_9 Full - time_i + \beta_{10} High\ education_i + \beta_{11} Process\ to\ become\ formal_i$$

$$+ \beta_{12} No\ need\ to\ register\ business_i + \varepsilon_i \quad (3)$$

where the parameters $\beta s'$ are to be estimated and will indicate the impact of each regressor on sales performance if they are statistically significant and show the correct sign. The parameter ε_i is the error term which is assumed to have zero mean and constant variance. The subscript i, indicate the individual businesses (or the respondent) surveyed, that formed the sample.

TABLE 6.4

EMPIRICAL ESTIMATION OF FACTORS INFLUENCING SALES PERFORMANCE FOR THE INFORMAL SECTOR

Independent Variable	Dependent Variable
	Sales Performance
Constant	2.623*** (6.516)
Financial loan	0.720 *** (2.961)
Secondary (SPM)	-0.646** (-2.711)
Access to digital payment	0.131* (1.754)
Access to training	1.009** (2.230)
Years of establishment	0.008 (0.525)
Business access assistance	-0.249 (-0.952)
Impact of financial loan	0.109 (1.045)
Training in near future	0.391 (1.646)
Full-time	0.485 (1.104)
High education	-0.110 (-0.510)
Process to become formal	-0.266 (-1.251)
No need to register business	-0.353 (-1.273)
R^2	0.716
Adjusted R^2	0.542

Note: All models have been estimated using OLS with robust standard error following Newey and West [25] that is correct for both autocorrelation and heteroskedasticity. Asterisks ***, **, * denote statistically significant at 1%, 5%, and 10% levels, respectively. Figures in round brackets (…) are t-statistics while R^2 denotes R-squared of regression.

Empirical Results

The estimated impact of business environment on sales performance in the informal sector is shown in Table 6.4. Results were estimated using OLS with robust standard error. Out of the 12 independent variables considered in the analysis, findings indicate that only four variables hold statistical significance. The variable "Financial loan" exhibits significance at the 1% level while both "secondary" and "access to training" show significance at the 5% level. On the other hand, "access to digital payment" shows significance at the 10% level.

The coefficient for "financial loan" exhibits a positive and statistically significant correlation with sales performance. This suggests that informal sector firms that have access to financial loans are likely to enhance their sales performance by approximately 0.72%. However, the current business environment indicates that access to financial loans for the informal sector is constrained by the eligibility requirements set by financial institutions. Researchers' review of major commercial financial institutions reveals that informal sectors are not eligible for loans from commercial banks (see Appendix 3). When informal sectors are solely eligible for microcredit financing, as seen with programs, like AIM and TEKUN, it indicates the lack of inclusivity in the financial system for the growth of informal businesses.

Constraints on financial accessibility are also evident in the survey findings. Out of the total sample, 74% did not apply for or receive any financial assistance from institutions (see Appendix 2). No track record (20.7%), lack of collateral (16.4%), and high borrowing costs (21.6%) are the major obstacles to obtaining loans. Informal sectors lack established credit histories or the necessary documentation to prove their financial credibility. This absence of records can impede their ability to secure loans or attract investment. The formalization of the informal sector is the key to escaping this financial trap.

The analysis also reveals that "access to training" is statistically significant in influencing sales performance. This is supported by research conducted in various countries [12, 32]. Specifically, it suggests that these training programs have helped individuals in the informal sector acquire entrepreneurial skills and improve their understanding of business operations [33]. Furthermore, access to training in the informal sector addresses the key challenges faced by business owners, such as limited market access and lack of knowledge of effective marketing strategies [34].

Moreover, "access to digital payment" also demonstrates statistical significance despite having a slightly lower coefficient of 0.131. This indicates that increasing the frequency of the use of digital payments will increase 0.13% of the sales performance. It implies that offering customers better digital payment options or streamlining digital payment processes can potentially lead to higher sales for the business.

However, informal operators with secondary education (respondents who have SPM)[3] have a negative impact on sales performance. This implies that business owners with only a secondary education may experience a decline in their sales performance by approximately 0.646%. Therefore, it is crucial for business owners to seek further education and skill development beyond high school to improve their sales performance and achieve success in the dynamic and ever-evolving marketplace [35].

The remaining independent variables, including "years of establishment", "business access assistance", "high education" (diploma and above), "full-time" business ownership, "training in near future", "process to become formal", "impact of financial loan", and "no need to register business" do not demonstrate statistically significant relationships with sales performance at all specified significance levels. It can be concluded that these variables may not be important or may be less significant factors affecting the sales performance of the respondents.

[3] SPM refers to "Sijil Pelajaran Malaysia" or equivalent to Senior Cambridge Certificate, GCE O Level, and Malaysia Certificate of Vocational Education.

Sources of Funds and Challenges Faced in Credit Accessibility

To gain a thorough understanding of the funding sources and challenges faced by the informal sector in accessing credit, it is essential to analyze the results of the researchers' small-scale survey. By analyzing the eight dimensions of financial accessibility and productivity growth, it will be possible to determine whether the informal sector is utilizing formal or informal sources of funding and identify the major obstacles encountered in obtaining credit. The key results from the survey are presented in Appendix 2 while a summary of the results related to the sources of funds and challenges in credit access is provided in the following subsections.

Sources of Funds

The findings from the fieldwork conducted revealed that approximately 26% of the respondents received financial backing from formal channels, such as banks, cooperative grants, and microcredit institutions. Although this data suggests that there may be potential challenges in accessing credit, many informal business proprietors indicate a reluctance to incur debt. This hesitancy is underscored by the fact that a significant portion of businesses operate for less than three months, primarily engaging in market testing and requiring funds solely for daily operational expenses. As a result, approximately 57% of respondents primarily rely on personal savings for financing their businesses.

In addition to personal savings, informal entrepreneurs frequently leverage their social networks, predominantly family and friends, for financial assistance. Specifically, 29% of respondents acquire business capital from family members while 5% receive support from neighbors and friends. The reliance of close acquaintances for financial aid is commonplace, especially for addressing short-term financial needs or funding new business endeavors, given the modest returns typically associated with informal businesses. This approach mitigates concerns regarding high-interest repayment burdens often associated with formal financial institutions.

Informal business operators often opt for alternative sources of funds despite being eligible for formal finance due to their inherent advantages, including flexibility, convenience, and streamlined administrative procedures [36] This inclination for alternative funding methods reflects findings observed in previous studies, indicating that informal businesses exhibit minimal utilization of loans and bank accounts. Instead, a substantial portion of these businesses rely on sources beyond traditional financial institutions to meet their daily operational needs, with internal funds being a prominent example [37].

On the other hand, the limited utilization of formal funding sources also correlates with the burgeoning accessibility of markets facilitated by ICT. Half of the respondents (50%) utilize ICT platforms to market their products and services, with 74% leveraging social media platforms, such as Facebook, Twitter, Instagram, TikTok, and WhatsApp. The availability of such digital platforms reduces fixed costs, a significant component of business operations. Consequently, this reduction in fixed costs lowers risks and encourages informal business owners to explore alternative credit sources.

In summary, alternative financing sources serve as a complement rather than a replacement for formal financing. This reliance on informal financing is a global phenomenon, involving both formal and informal financial institutions. The prevalent use of informal financing by informal businesses stems from the obstacles they encounter in accessing formal finance, compelling them to explore alternative funding avenues. Detailed findings are available in Appendix 2.

Challenges Faced in Credit Accessibility

Findings from the survey highlight that the primary challenges associated with credit accessibility in Malaysia are mainly related to banks' perceived risks, the lack of established credit histories, and high borrowing costs (refer to Appendix 2). To avoid such challenges, a notable proportion of informal business operators prefer to seek financial assistance from TEKUN and AIM. This preference is attributed to credit being easily accessible from these institutions, often without requiring guarantors or upfront fees. However, applicants must allow official representatives to visit and observe their

business activities. This requirement is aimed at ensuring that the businesses are genuine and the loan would be used for its intended purpose.

In contrast, formal financial institutions do not directly extend credit schemes to informal businesses. Instead, they tend to offer personal or business loans due to the perceived risks associated with loan affordability and incidences of bad debt (as highlighted in Appendix 3). The informal sector's lack of transparency and standardized financial documentation further contributes to financial institutions viewing individuals and businesses in this sector as high-risk borrowers. This view is further compounded by regulatory barriers, red tape, and legal restrictions in certain regions, making it difficult for informal workers to formalize their businesses and access financial services.

Another significant hurdle faced by informal business operators in Malaysia when seeking financial aid is, despite the availability of financing guarantees, the absence of a track record. It hinders their ability to secure loans or attract investments. Unlike the formal sector, where financial institutions rely on borrowers' credit histories to assess their creditworthiness, informal businesses often lack established credit histories or the necessary documentation to prove their financial credibility. This absence of records hampers their ability to access credit and thus restricts their growth.

Moreover, high borrowing costs are also identified as significant challenges hindering informal workers' access to financial resources. The exorbitant interest rates and fees associated with loans in the informal sector can escalate into overwhelming debt burdens, posing a grave risk to financial stability for individuals and businesses alike. These costs can potentially trap borrowers in cycles of indebtedness, impairing their ability to meet financial obligations, and invest in economic opportunities, thereby jeopardizing their financial stability. For example, although credits are easily accessible from AIM, the financing rate is estimated to be between 8% to 10%.

Collectively, these factors stress the difficulties informal businesses face in accessing credit from regulated institutions in the formal sector, thereby limiting their financial prospects and opportunities for advancement.

Policy Intervention

Formalization of the informal sector is a critical endeavor, requiring careful and gradual approach, especially as informal activities are predominantly found within microenterprises, a subset of the MSMEs. By implementing strategic measures, such as providing credit support, training and skill development programs, enhancing digital inclusion, rationalizing tax, and enforcing regulations can yield substantial benefits for these enterprises. These interventions not only improve their competitiveness but also incentivize them to transition into formal entities, instead of operating informally.

Shifting from Indirect to Direct Approach of Formalization

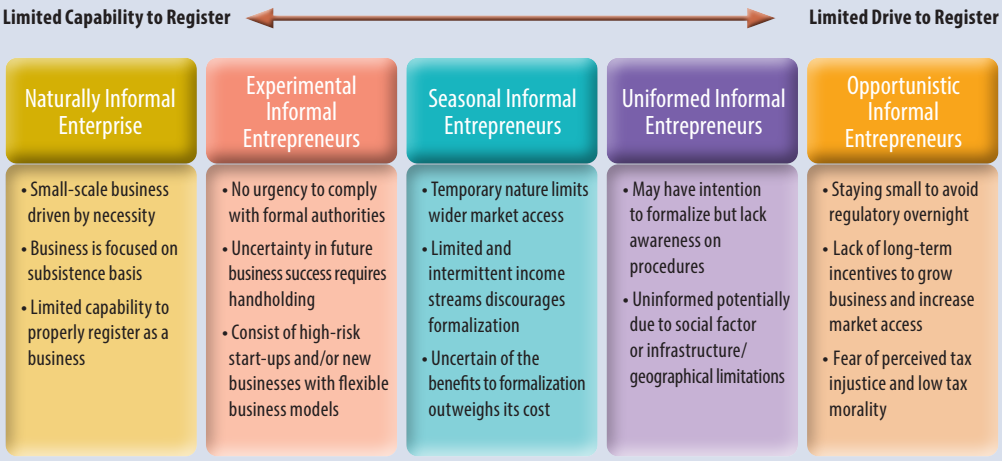
Previously, Malaysia's approach to tackling informality was more indirect than direct. The 12th Malaysia Plan (2021–2025), a national medium-term planning document, primarily focuses on the formalization of informal sectors through two key initiatives: enhancing MSMEs and transforming the labor market by strengthening welfare protection.

An exemplar of this approach is evident in the allocation of separate funding streams for informal businesses and formal MSMEs within the annual budgets. This strategy facilitates access to microcredit schemes specially for operators of informal businesses, particularly benefiting marginalized groups, such as women from lower-income backgrounds and specific communities. Meanwhile, MSMEs receive additional funds channelled through participating financial institutions (PFIs), consisting of all licensed banks, designated development financial institutions (DFIs), and Credit Guarantee Corporation Malaysia Berhad (CGC). In this case, the separation of credit sources is primarily aimed at motivating business formalization as it allows broader access to credit.

The policy shifting toward a direct approach is evident when the Ministry of Entrepreneurship and Cooperatives Development initiated the "Formalizing the Informal Entrepreneurs Plan" to streamline this process further. The strategic roadmap outlines six key strategies to accomplish its objectives: (i) raising awareness and effective communication about business formalization; (ii) increasing facilitation in the business formalization process; (iii) improving the competence and ability of informal entrepreneurs toward business formalization; (iv) providing incentives for business formalization; (v) establishing a legal and enforcement framework that supports business formalization; and (vi) strengthening governance and monitoring system for business formalization efforts. Five groups of informal entrepreneurs, as shown in Figure 6.4, are targeted under the strategic roadmap: natural, experimental, seasonal, uninformed, and opportunistic informal entrepreneurs.

FIGURE 6.4

CATEGORIES OF INFORMAL ENTREPRENEURS BASED ON THE MOTIVATIONS AND FACTORS GOVERNING BUSINESS REGISTRATION DECISIONS



Source: Reproduced with permission from the Ministry of Entrepreneurship and Cooperatives Development [38].

The strategic roadmap aligns with pivotal policy frameworks governing entrepreneurship in Malaysia, particularly the National Entrepreneurship Policy 2030 and the 12th Malaysia Plan (2021–2025). The National Entrepreneurship Policy 2030 serves as the cornerstone document outlining the overarching entrepreneurial landscape while the plan focuses specifically on informal entrepreneurs. The overarching goal of the plan extends beyond mere formalization, aiming to amplify the number of new entrepreneurs, institute legislation and social protection mechanisms, mitigate noncompliance issues, augment the economic contribution of MSMEs, and foster a conducive ecosystem for entrepreneurship.

Additionally, with almost all Malaysians having access to the internet (97.4%) and a significant portion (74.8%) of them using internet banking [39], digital banking has become an integral part in Malaysia's banking sector, offering ease of access and various banking services to customers [40]. Efforts to promote digital payments must capitalize on this foundation, focusing extensive awareness campaigns targeting informal businesses and customers, and emphasizing the advantages of digital payments. This also includes facilitating seamless integration of digital payment systems through education and training.

Financial Accessibility and Inclusiveness Policy Gaps

The Malaysian government has initiated various strategies to formalize informal business activities. One major strategy adopted was based on the financing perspective, whereby the government expanded

the microfinancing schemes through various financial cooperatives, later involving multiple financial and banking institutions [5]. Aside from the financial aspect, the government has also actively rolled out plans to expand education and training programs for entrepreneurs. Community colleges, for instance, play a vital role in delivering knowledge and entrepreneurial skills to local communities, aiming to produce skilled workers and encourage graduates to become entrepreneurs [41–42]. The overall strategies for supporting the financial accessibility of the informal entrepreneurs are well-highlighted in the recent tabling of the Budget 2024, as highlighted in Table 6.1.

Various agencies, such as BNM, TEKUN, and AIM offer microcredit loan facilities to informal sector entrepreneurs. However, the main limitation of these microcredit facilities lies in the size of loans that can be borrowed for informal business expansion (see Appendix 3). Commercial financial institutions do not extend credit facilities to the informal sectors, and this constraint explains the incidence of lack of financial inclusion.

Although the government's policies and initiatives related to financial accessibility for the informal sector are receiving attention, there are concerns about fragmented and poorly coordinated efforts at higher levels. This fragmentation can be clearly observed in the "Formalizing the Informal Entrepreneurs Plan", where financial accessibility and inclusion are not explicitly prioritized as strategies to promote formalization of the informal sectors. On the other hand, empirical assessments indicate that financial accessibility is among the key factors affecting productivity growth. The gaps between policy formulation and empirical analysis could lead to ineffective policy interventions.

Conclusions

This paper underscores the necessity for formalizing the informal sector in Malaysia. In the Malaysian context, sectoral planning and development mandates the need for specific policy documents at the national level. These specialized policy documents are essential for guiding the formalization of the informal sector and act as a coordinator between ministries, agencies, and the provision of specific development funds to support related policies. The absence of such policy documents results in a lack of priority for formalization by the government and related agencies, including financial institutions. Based on this study, the following four key areas need to be emphasized in policy documents aimed at formalizing the informal sector.

i) **Enhancing financial accessibility:** The findings clearly demonstrate the positive impact of financial loans on business performance. However, the lack of financial accessibility for the informal sector remains a major constraint. While the government's policies and initiatives addressing financial accessibility for the informal sector have garnered attention, they suffer from fragmentation and lack of coordination at higher levels. Currently, only microcredit facilities with limited loan amounts are accessible for the informal sector, provided by a handful of agencies, such as TEKUN and AIM. This study's research assessment unequivocally indicates the absence of financial assistance provided to the informal sectors by commercial banks.

ii) **Regulatory measures:** Formalizing the informal sector through regulation is a complex undertaking that seeks to integrate businesses and activities operating outside the formal framework into the mainstream economy. The current regulatory environment in Malaysia often falls short in prioritizing the formalization of informal businesses. This can be attributed to several factors, including the absence of comprehensive regulations and effective monitoring mechanisms to eradicate the growth of the informal sector. To formalize the informal sector, it is essential to establish a clear regulatory direction and framework that encourages its integration into the formal economy. This can be achieved through a combination of measures, such as enforcement of the regulations on employing methods, which includes inspections, penalties, or other compliance mechanisms to ensure individuals and organizations comply with the rules.

    Concerning regulatory reform, the reintroduction of the Goods and Services Tax (GST) has the potential to improve formalization along the value chain, especially as most informal businesses

depend on formal businesses for the supply of raw materials. With GST reintroduced, informal businesses would be indirectly motivated to register their business, enabling them to apply for refunds and exemptions. This would ultimately improve the transparency of business transactions and the collection of indirect tax.

iii) **Rural decentralization:** The process of rural decentralization can potentially have a significant impact on the legitimization of informal businesses. Establishing government services and institutions, such as the Companies Commission of Malaysia (CCM), closer to rural informal business communities, can facilitate accessibility and nurture the formalization process. This is particularly important as researchers' survey indicated that around 39% of the respondents operate their businesses in rural areas. Therefore, rural decentralization presents a promising opportunity to formalize the informal, which, in turn, contributes to a better state of productivity.

iv) **Empowering business associations:** Empowering business associations emerges as an important strategy in successfully transforming the informal sector. Facilitating the registration of informal businesses with the relevant associations is necessary for several reasons. First, business associations possess valuable insights into the necessary training programs required by the informal sectors, making them well-equipped to bridge the knowledge gap. Second, their involvement could significantly diminish communication barriers and the existing disconnect between informal sectors and governmental entities. Through active engagement and representation, business associations can serve as effective intermediaries, ensuring that the needs and concerns of the informal sector are effectively communicated to the government, thereby fostering a smoother transition toward formality.

Appendix 1

KEY CHARACTERISTICS OF EMPLOYMENT IN THE INFORMAL SECTOR (EXCLUDING AGRICULTURE SECTOR)

	2013		2017		2021	
	Informal	Formal	Informal	Formal	Informal	Formal
Total employment excluding agriculture sector	1,323.8	10,462.7	1,386.4	11,455.3	1,302.8	12,211.4
Share to total employment (%)	11.2		10.8		9.6	
Employment status (%)						
Employers	2.6	4.4	2.2	4.4	1.4	3.8
Employees	20.7	87.8	20.4	84.5	19.3	88.4
Own account workers	70.4	5.4	69.4	8.7	72.0	12.6
Unpaid family workers	6.3	2.4	8.1	2.4	7.3	3.1
Economic sectors (%)						
Manufacturing	16.0	20.1	17.4	19.8	19.1	18.4
Construction	19.5	9.9	20.0	8.6	13.4	8.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	17.6	19.4	20.4	19.2	24.0	20.6
Transport and storage	4.2	5.5	3.5	5.3	6.1	5.1
Accommodation and food & beverage	13.8	8.2	16.1	9.6	23.1	10.1
Administrative and support services	5.5	4.7	6.0	5.2	3.8	6.5
Human health and social work activities	15.7	2.7	8.3	4.1	4.8	4.3
Other services	7.2	25.3	7.7	25.2	5.2	24.4
Others	0.6	4.2	0.6	3.0	0.5	2.5
Occupational categories (%)						
Managers and professionals	3.6	18.3	1.9	21.1	2.5	21.0
Technicians and associate professionals	3.9	11.8	2.9	12.9	3.3	13.8

	2013		2017		2021	
	Informal	Formal	Informal	Formal	Informal	Formal
Service and sales workers	41.2	22.5	45.5	22.4	43.7	24.5
Craft and related trades workers	32.8	10.0	35.3	8.9	34.5	6.8
Elementary occupations	13.0	11.2	10.6	9.6	11.0	9.9
Others	5.5	26.3	3.8	25.1	5.1	23.9
Educational levels (%)						
No formal education	4.9	1.7	4.7	1.4	4.6	2.1
Primary	23.1	12.6	22.5	9.0	18.2	4.2
Secondary	63.4	56.4	60.4	56.3	61.3	55.5
Tertiary	8.6	29.3	12.4	33.3	15.8	38.2
Age groups (%)						
15–24	13.5	17.8	14.5	16.2	15.1	17.6
25–34	21.4	36.5	23.3	36.8	28.9	33.3
35–44	25.1	23.6	25.4	24.0	23.3	25.8
45–54	25.8	16.4	22.9	16.6	21.3	16.2
55–64	14.2	5.6	13.9	6.4	11.5	7.2

Source: DOSM (2022).

Appendix 2

KEY PROFILING AND CHARACTERISTICS OF 150 RESPONDENTS GATHERED FROM THE SURVEY

Profiles	Characteristics	Scores (%)
Gender		
	Male	64.7
	Female	35.3
Age groups		
	15–24	16.0
	25–34	29.3
	35–44	20.0
	45–54	22.7
	55–64	10.7
	65 and above	1.3
Education levels		
	Primary	11.3
	Secondary	59.4
	Tertiary	29.3
Employment categories		
	Employers	76.7
	Employees	23.3
Employment status		
	Full-time	62.7
	Part-time	37.3

Profiles	Characteristics	Scores (%)
Reason participating informal sector		
	Absence of jobs that match the qualification	12.0
	Generate additional income	36.7
	Conduct business flexibly	22.7
	Running an inherited family business	15.3
	Other reasons (e.g., self-interest, retirement plan, local opportunities)	13.3
Reason for not registering business		
	Complicated registration procedure	24.7
	High registration costs	6.0
	No enforcement for formalities	13.3
	Unnecessary requirement	36.0
	Not renewing the business license	20.0
Access to finance		
	Received financial assistance	26.0
	Not received financial assistance	74.0
Types of loan received		
	Bank	41.7
	Cooperative grant	22.2
	Microcredit	8.3
	Others (e.g. TEKUN NASIONAL, Amanah Ikhtiar Malaysia)	27.8
Alternative sources of finance		
	Family/Relatives	29.3
	Neighbors/Friends	4.7
	Private money lender/Unlicensed money lender	8.7
	Own savings/Asset	57.3
Constraints in getting business loans		
	Lack of collateral agreement	16.4
	High borrowing cost	21.6
	No track record	20.7
	Seen by banks as risky	16.4
	Others (e.g. no need for a loan, have enough capital)	25.0

Appendix 3

KEY INFORMATION GAINED FROM INTERVIEW SESSIONS WITH FINANCIAL INSTITUTIONS

Financial Institution	Providing Financial Assistance for Informal Sector? (Yes/No)	If No		If Yes		
		Reasons	Type of Financial Assistance	In Form of Loan or Gift?	Amount	Installment Plan (for loan)
Banks						
Hong Leong Bank	No	Affordability of the loans and avoiding bad debt incidences	Business loan			
Bank Rakyat	No					
CIMB Bank	No					
RHB Bank	No		Personal and business loan			
Bank Simpanan Nasional	No		Personal loan			
Islamic Financial Aid						
Zakat* Labuan	No	Provide financial assistance only for registered company	Zakat			
Zakat* Melaka	No					
Zakat* Pulau Pinang	Yes			Gift	Depends on the capital	
Zakat* Selangor	Yes					
Zakat* Negeri Sembilan	Yes					
Microcredit						
Amanah Ikhtihar Malaysia (AIM)	Yes			Loan	MYR5,000 – MYR10,000	Depending on the amount of loan
Economic Fund for National Entrepreneurs Group (TEKUN)	Yes			Loan	MYR1,000 – MYR5,000	60 months (12 months moratorium)

Note: *Zakat is an Islamic finance term referring to the obligation that an individual has to donate a certain portion of wealth each year for charitable causes.

CHAPTER 7

MONGOLIA

Abstract

Informal entrepreneurship and informal employment were forbidden by law during Mongolia's socialist era, making it a relatively new phenomenon in the country. The informal sector includes nonagricultural enterprises that are owned and operated by households, typically with few regular paid employees. The size of Mongolia's informal economy is estimated to be 15.1%, which represents approximately USD8 billion at GDP PPP (purchasing power parity) levels in 2023. Out of Mongolia's workforce of 1.26 million people, 500,000 (39.5 % of total employment) are engaged in the informal sector, with men making up 58.4% of employees and women at 41.5 %.

The primary drivers of informal economy include challenges, such as limited access to finance, paying taxes and insurance premiums, lack of knowledge of tax and fee laws, difficulties in accounting, lack of capital and equipment, weak competitiveness, and lack of educational qualification and skills.

Empirical analysis suggests that expanding financial services and improving access to credit are correlated with increase in labor productivity in both the informal and formal sectors. Studies highlight that the informal sector faces significant challenges in obtaining financial access, with barriers including insufficient collateral (88.5%), documentation requirements (85.9%), high interest rates (78.2%), short repayment period (58%), and bureaucracy hurdles (58 %).

While several relevant policy interventions have been implemented, they do not directly address informal labor productivity and access to credit challenges.

Introduction to Mongolia's Informal Economy and Productivity Growth

Paul Krugman asserted that the key determinant of a country's long-term ability to improve its living standards hinges largely on productivity growth, particularly in terms of output per worker [1]. However, the informal economy and its growth present challenges to developing nations, notably: (i) the productivity gap between informal and formal sectors; and (ii) the widespread prevalence of informality itself. Why is the informal economy undesirable? On one hand, the informal sector typically produces a significantly lower levels of output compared to the formal sector for many reasons. Although productivity growth within informal sector is crucial, its formalization is even more critical. Without formalization, the formal economy cannot benefit from the productivity gains of the informal sector as its activities operate without registration, standardization, and often without tax contributions. In addition, informal workers lack social protections.

Despite these drawbacks, the informal sector is known to employ a large number of workers in many developing countries, including Mongolia. As of 2022, informal workers in Mongolia numbered approximately half a million, accounting for nearly 50% of Mongolia's total workforce (Figure 7.3). These factors and statistics collectively underscore the significance of the informal economy in a nation's economic development and social well-being. Therefore, countries grappling with informality should strive to formalize informal businesses and employment. However, informal sector often resists formalization. Hence, this report aims to uncover the root causes of informal activities from the perspective of the informal sector, examine the association between financial accessibility and labor

productivity in the informal sector, understand the challenges faced in financial accessibility, and explore related policy interventions in the case of Mongolia.

The remainder of the paper is organized as follows: (i) providing an introduction to the informal economy, discussing its contributions to the formal economy, the productivity gap, and the root causes of informal economic activities in Mongolia; (ii) delving into the relationship between informal sector productivity and financial/credit accessibility; (iii) identifying the sources of funds, challenges faced in financial/credit accessibility; (iv) analyzing relevant policy interventions, and (v) finally, concluding the report with policy implications.

Statistical Overview of Mongolia's Informal Economy

Informal economy is a relatively new phenomenon in Mongolia. It emerged following the collapse of its Soviet-style communist regime before 1990. Informal entrepreneurship and informal employment were prohibited by law during the socialist era. When the centrally planned economy collapsed, the informal sector emerged during the transition period to free-market economy and democratic political system.

By definition, the informal economy is where informal sector activities and informal employment are carried out. According to Roubaud and Van Thi (2022, p.3), based on the OECD's definition, the following working definition is provided [2]:

"The informal economy: *Partially/totally by-passing public regulations; its activities are not necessarily carried out with the deliberate intention of avoiding payment of taxes or social security contributions;"*

Additionally, Roubaud and Van Thi (2022, p.4), drawing from the ILO's definition, also provided [2]:

"The informal sector: *All private unincorporated enterprises that produce at least some of their goods and services for sale or barter, are not registered (no business license) and are engaged in nonagricultural activities (or without written accounts, etc.);"*

"The informal employment: *Employment with no protection (social insurance; written contract, wage slip, etc.)"*

In Mongolia, the informal sector includes enterprises meeting specific criteria:

- **Owned and operated by households:** These exclude enterprises which are public incorporated companies and quasi-corporations which operate financial accounting systems similar to public companies
- **Employ few regular paid workers:** Informal sector enterprises are categorized into those with no regular paid employees ("informal own-account enterprises") and those with one or more regular paid employees ("enterprises of informal employers"). Household-operated enterprises with more than a specified number of regular paid employees may be excluded depending on national circumstances. For example, the cut-off point might be five or more employees, or 10 or more employees
- **Are not registered:** In some countries the operational definition includes whether the enterprise or its employees are registered. However, this information is not always known to respondents in household surveys
- **Nonagricultural in nature:** For practical purposes, household enterprises engaged in agricultural activities are generally excluded from the informal sector [3]

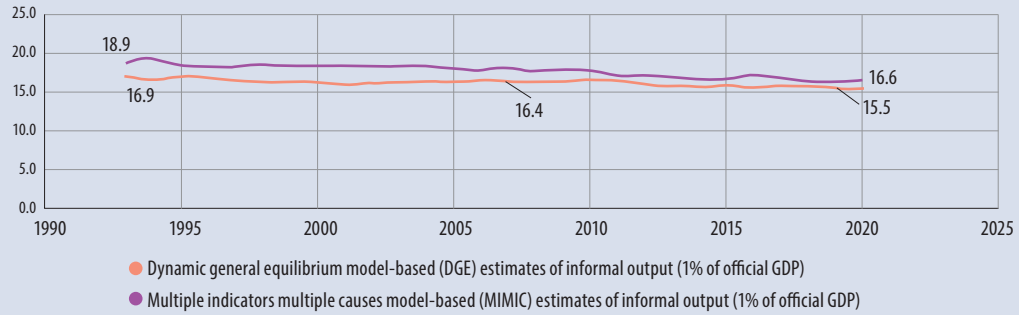
Informal employment in Mongolia encompasses individuals engaged in informal jobs, such as employees without social protection coverage, paid annual leave, and/or paid sick leave. It also includes employers and own-account operating informal sector enterprises, or those engaged in household production solely for personal use, along with contributing family helpers [4].

Contribution of the Informal Economy to GDP and Employment

Although the informal economy significantly contributes to Mongolia's GDP and employment, which has received a lot of attention, studies on informal economy is scarce. The size of Mongolia's informal economy is estimated to be 15.1%, which represents approximately USD8 billion in GDP PPP levels for 2023 [5]. Figure 7.1 presents estimates of the informal economy's contribution to GDP vary based on different models: the dynamic general equilibrium (DGE) model and multiple indicators multiple causes (MIMIC) model. DGE estimation of informal economy contribution as a percentage of GDP is 15.5% while MIMIC is 16.6% on average. Over the past decade, review of other studies have shown that estimation of contribution of informal economy to GDP has been fluctuating at around 9.2%–15.7%.

FIGURE 7.1

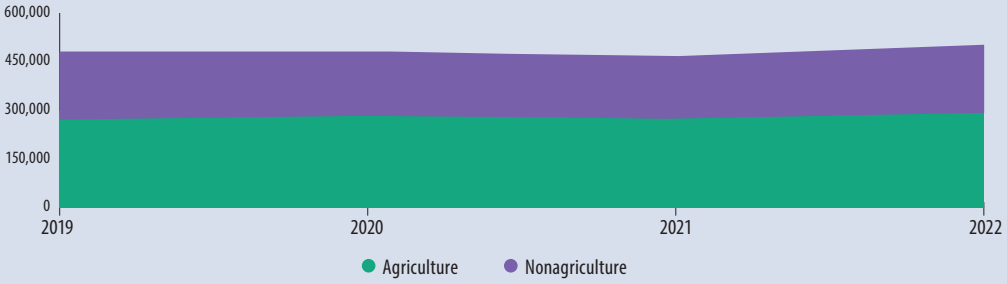
CONTRIBUTION OF INFORMAL ECONOMY TO GDP BETWEEN 1993–2020 (%)



Source: Author's own calculation with data generated from the World Bank, Informal Economy Database 2020 [1, 6], under the Creative Commons Attribution 4.0 International license.

FIGURE 7.2

INFORMAL EMPLOYMENT IN MONGOLIA

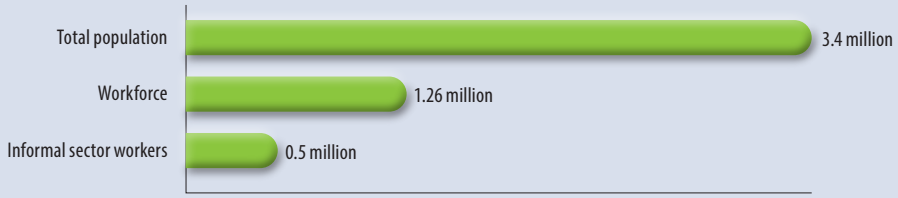


Source: Author's own calculation with data generated from Mongolian Statistical Information System, NSO.

The National Statistics Office (NSO) of Mongolia released a report on research on the informal economy in 2015 and 2018, estimating its share at 15.5% of GDP in 2015 and 9.8% in 2018. Despite a decline in its GDP from 2015 to 2018, illegal production, including activities like prostitution and the sale of illegal drugs, grew significantly by 5.3 times [7].

FIGURE 7.3

NUMBER OF WORKERS IN INFORMAL SECTOR



Source: Own calculation with data generated from Mongolian statistical Information System, NSO.

Mongolia's current population stands at 3.4 million, with 70% living in urban areas and 30% in rural areas. Of the country's 1.26 million workforce, 37.5% are engaged in informal sector employment, totaling 500,000 individuals, which constitutes 39.5% of total employment. Men comprise 58.4% of informal sector employees while women account for 41.5%.

The informal sector is generally divided into two categories: agricultural and nonagricultural with a total of 500,304 employees. Among these, 284,926 (56%) are working in the nonagricultural sector. Table 7.1 presents the share of informal employment in total employment from 2009 to 2022 across various regions and capital city, Ulaanbaatar.

TABLE 7.1

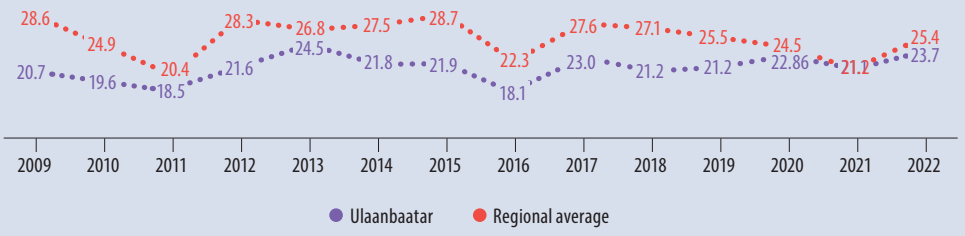
REGIONAL INFORMAL EMPLOYMENT RATES, EXCLUDING NONAGRICULTURAL ACTIVITIES (%)

Region	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ulaanbaatar	20.7	19.6	18.5	21.6	24.5	21.8	21.9	18.1	23	21.2	21.2	22.8	21.1	23.7
Western region	36.9	33.6	23.9	37.3	29.7	34.7	34.6	27.8	33.4	32	25.7	28.3	30.9	29
Khangai region	29	23.8	22.7	32.6	24.5	27.1	27.6	20	26.2	24.5	24.3	25.5	21.9	29.4
Central region	25.4	23.6	16.6	24.2	29.5	26.5	26.9	22	26	27.7	23.5	19	15	16.8
Eastern region	22.9	18.6	18.3	19.2	23.3	21.5	25.7	19.3	24.7	24.2	28.4	25.1	17.1	26.5
Country average	26.98	23.84	20	26.98	26.3	26.32	27.34	21.44	26.66	25.92	24.62	24.1	21.2	25.08

Source: Author's own calculation with data generated from Mongolian Statistical Information System, NSO.

FIGURE 7.4

INFORMAL EMPLOYMENT RATE IN RURAL AND URBAN AREAS (%)



Source: Author's own calculation with data generated from Mongolian Statistical Information System, NSO.

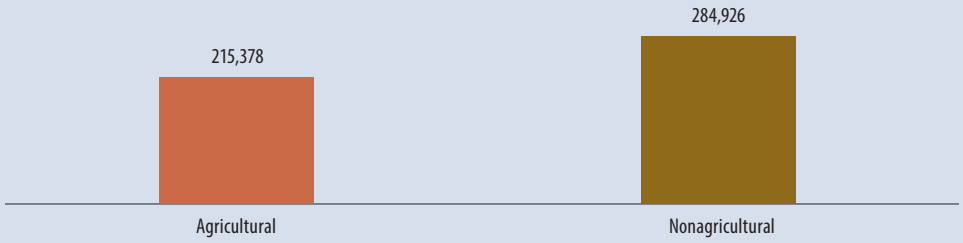
As of 2022, the Mongolian average informal employment rate is 25%. The Central region exhibits the lowest informal employment rate at 16.8%, whereas the Khangai region records the highest at 29.4% (Table 7.1).

Figure 7.4 shows the share of informal employment in total employment from 2009 to 2022 across different regions and Ulaanbaatar. Although there have been fluctuations, the overall trend has seen a slight increase both nationally and in Ulaanbaatar in 2022.

Notably, the figure also reveals a decrease in informal employment rate during the COVID-19 pandemic, followed by an uptick in 2022.

FIGURE 7.5

NUMBER OF EMPLOYEES IN INFORMAL SECTOR IN 2022



Source: Author's own calculation with data generated from Mongolian Statistical Information System, NSO.

Table 7.2 presents number of employees in informal sector in 2022 by classification of economic activities by regions.

TABLE 7.2

INFORMAL EMPLOYMENT BY CLASSIFICATION OF ECONOMIC ACTIVITIES IN 2022

Classification of Economic Activities	Western Region	Khangai Region	Central Region	Eastern Region	Ulaanbaatar	Total
Agriculture, forestry, fishing, and hunting	67,998	103,520	61,579	61,579	131,829	284,926
Mining and quarrying	125	994	245	245	1,809	3,486
Manufacturing	4,591	7,724	3,356	3,356	22,001	39,543
Electricity, gas, steam, and air conditioning supply	47	756	0	0	156	974
Water supply; sewerage, waste management, and remediation activities	47	0	535	535	102	738
Construction	2,731	4,459	1,736	1,736	23,955	34,854
Wholesale and retail trade, repair of motor vehicles, and motorcycles	8,043	9,793	5,448	5,448	31,978	58,441
Transportation and storage	4,549	6,447	3,312	3,312	16,609	31,929
Accommodation and food service activities	945	2,546	1,401	1,401	6,298	12,637
Information and communication	196	0	0	0	2,323	2,647
Financial and insurance activities	0	0	157	157	664	876
Real estate activities	0	0	0	0	1,189	1,189
Professional, scientific, and technical activities	11	405	94	94	1,224	1,862
Administrative and support service activities	458	882	37	37	1,482	2,985
Public administration and defense; compulsory social security	0	0	6	6	123	145

Classification of Economic Activities	Western Region	Khangai Region	Central Region	Eastern Region	Ulaanbaatar	Total
Education	400	26	416	416	1,665	2,507
Human health and social work activities	40	145	50	50	930	1,229
Arts, entertainment, and recreation	360	138	0	0	2,042	2,540
Other service activities	1,899	2,356	1,436	1,436	8,706	15,566
Activities of households as employers	53	0	180	180	662	894
Activities of extraterritorial organizations and bodies	0	0	0	0	336	336
Total	**92,493**	**140,191**	**79,984**	**79,984**	**7,577**	**500,304**

Source: Author's own calculation with data generated from Mongolian Statistical Information System, NSO.

TABLE 7.3

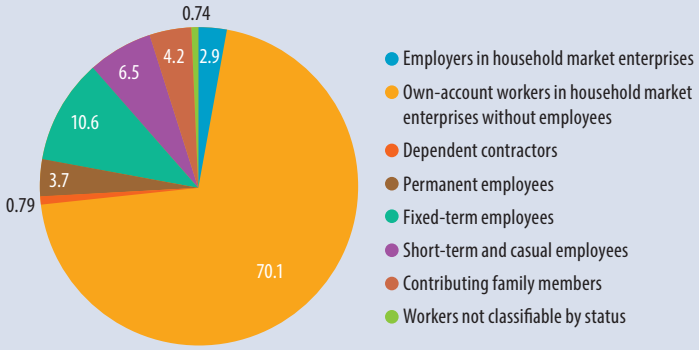
INFORMAL EMPLOYMENT BY STATUS OF EMPLOYMENT IN 2022

Status	Including Agricultural Activities						Excluding Agricultural Activities					
	Western Region	Khangai Region	Central Region	Eastern Region	Ulaanbaatar	Total	Western Region	Khangai Region	Central Region	Eastern Region	Ulaanbaatar	Total
Employers in corporations	0	0	51	0	0	51	0	0	0	0	0	0
Employers in household market enterprises	1,355	2,363	2,277	3,931	4,601	14,528	438	821	743	457	4,037	6,496
Owner-operators of corporations without employees	83	573	53	0	102	812	83	492	53	0	102	730
Own-account workers in household market enterprises without employees	75,986	114,066	58,785	41,812	59,923	350,572	14,430	20,004	11,338	5,732	54,710	106,216
Dependent contractors	631	1,790	975	401	135	3,932	0	540	321	0	135	996
Permanent employees	3,014	3,222	1,514	4,598	5,945	18,293	3,014	3,036	1,215	3,403	5,822	16,490
Fixed-term employees	3,500	4,611	2,895	1,152	40,779	52,937	3,176	4,322	2,420	488	40,031	50,438
Short-term and casual employees	2,488	6,895	2,271	3,069	17,900	32,622	2,266	6,530	1,426	1,315	17,239	28,776
Paid apprentices, trainees, and interns	477	362	0	0	894	1,733	446	362	0	0	894	1,701
Contributing family workers	4,174	4,351	10,846	561	1,176	21,108	414	564	799	34	1,053	2,864
Workers not classifiable by status	784	1,958	317	282	375	3,717	226	0	89	127	229	671
Total	**92,493**	**140,191**	**79,984**	**55,807**	**131,829**	**500,304**	**24,494**	**36,671**	**18,405**	**11,556**	**124,252**	**215,378**

Source: Author's own calculation with data generated from Mongolian Statistical Information System, NSO.

FIGURE 7.6

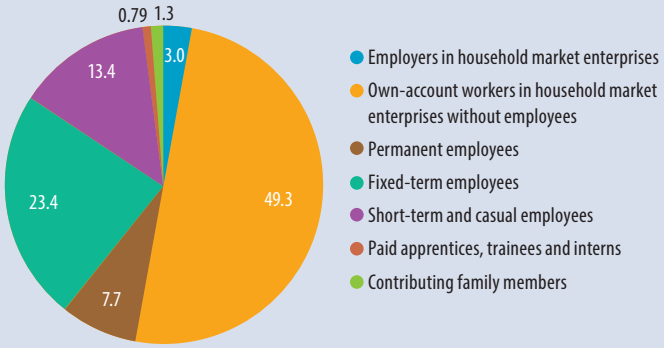
INFORMAL EMPLOYMENT BY EMPLOYMENT STATUS (INCLUDING AGRICULTURAL ACTIVITIES) IN 2022 (%)



Source: Author's own calculation with data generated from Mongolian Statistical Information System, NSO.

FIGURE 7.7

INFORMAL EMPLOYMENT BY EMPLOYMENT STATUS (EXCLUDING AGRICULTURAL ACTIVITIES) IN 2022 (%)



Source: Author's own calculation with data generated from Mongolian Statistical Information System, NSO.

There are more than 57,000 enterprises operating in sales, service, and maintenance industries, constituting 48% of Mongolia's informal economy. The annual production per employer in these sectors averaged MNT11.6 million, marking a 45.9% increase since 2013 [6].

Productivity Gap between Formal and Informal Sectors in Mongolia

The productivity gap refers to the difference in productivity levels between the informal and formal sectors, which focuses on per-worker labor productivity in Mongolia.

To estimate this gap between 2006–20, formal sector per-worker labor productivity data was sourced from the APO Productivity Databook [8–20]. The informal sector productivity was derived from output data collected through the Informal Economy Survey as well as GDP per capita PPP (constant 2017 USD) data from World Development Indicators and ILO [1, 6, 21–22]. For simplicity, the analysis utilized the DGE method.

Table 7.4 shows that in 2020, informal sector's per-worker labor productivity was USD11,259 while the formal sector saw USD31,700 per employer. In the base year of 2006, these figures were USD5,371 and USD6,000, respectively.

The per-worker labor productivity gap is then estimated at 36% for 2020. This means informal sector workers produce only 36% of what formal sector workers do per individual. In monetary terms, this gap is equivalent to USD20,441, highlighting a substantial disparity that indicates the need for informal sector productivity to align more closely with the formal sector.

As shown in Figure 7.8, the pattern emerging from the per-worker labor productivity and its gap resembles a "fork" shape, suggesting that the size of the economy would double if informal sector is formalized.

TABLE 7.4

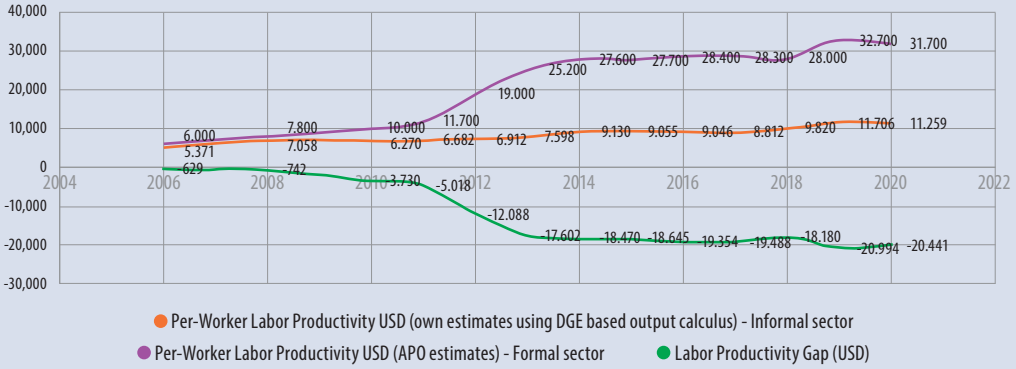
MONGOLIA'S PER-WORKER LABOR PRODUCTIVITY AND PRODUCTIVITY GAP BETWEEN FORMAL AND INFORMAL SECTORS (2006–20)

Year	Informal Sector	Formal Sector	Per-worker Labor Productivity Gap (USD)	Per-worker Labor Productivity Gap (ratio IS/FS)
	Per-worker Labor Productivity USD (DGE method)	Per-worker Labor productivity USD (APO estimates)	(DGE method)	(DGE method)
2020	11.259	31.700	- 20.441	0,36
2019	11.706	32.700	- 20.994	0,36
2018	9.820	28.000	- 18.180	0,35
2017	8.812	28.300	- 19.488	0,31
2016	9.046	28.400	- 19.354	0,32
2015	9.055	27.700	- 18.645	0,33
2014	9.130	27.600	- 18.470	0,33
2013	7.598	25.200	- 17.602	0,30
2012	6.912	19.000	- 12.088	0,36
2011	6.682	11.700	- 5.018	0,57
2010	6.270	10.000	- 3.730	0,63
2008	7.058	7.800	- 742	0,90
2006	5.371	6.000	- 629	0,90

Source: Informal labor productivity - author's own estimates; formal labor productivity - Estimates collated from the annual APO Productivity Databook of 2011–22, 2009 [8–20].

FIGURE 7.8

MONGOLIA'S PER-WORKER LABOR PRODUCTIVITY AND PRODUCTIVITY GAP BETWEEN FORMAL AND INFORMAL SECTORS (2006–20)



Source: Informal labor productivity - author's own estimates; formal labor productivity - Estimates collated from the annual APO Productivity Databook of 2011–22, 2009 [8–20].

Statistics and Characteristics of Firms Operating in Informal and Formal Economies

The state of informal employment in Mongolia's survey report [4] compared characteristics of informal and formal sectors using the enterprise survey (ES) [23], self-employment surveys [23–26], and labor force survey (LFS) [27] are highlighted in Figure 7.9.

FIGURE 7.9

COMPARISON ON EMPLOYMENT CHARACTERISTICS IN FORMAL AND INFORMAL SECTORS

Source: The State of Informal Employment in Mongolia Survey Report [4].

Based on the 2007–08 LFS data, Heinz provided insights into the shares of formal and informal economies within informal employment [28]. A comparison of these data to 2019 figures reveals an increase in the share of the formal economy in informal employment while the share of household units has decreased (Table 7.5). Heinz also reported that agriculture's share in Mongolia's informal economy was 68.1% [28]. However, according to the LFS 2019 report, agriculture's share in informal employment indicated a decline to 59% [27].

TABLE 7.5

PROPORTION OF INFORMAL EMPLOYMENT WORKERS (EXCLUDING AGRICULTURE) BY ECONOMIC UNIT

	2007–08	2019
Formal sector	0.363	0.423
Informal sector	0.553	0.565
Household unit	0.084	0.013

Source: Heinz 2010 [28] and NSO LFS 2019 report [27].

Main Causes of Informal Economy in Mongolia

Upon reviewing available studies on the informal economy in Mongolia, several key causes have been identified:

i) **Access to finance:** Access to loans is the most critical barrier to entering the formal economy. Only 19% of respondents in a quantitative survey of 600 business owners reported having financed their businesses using commercial loans, with most among those ages 45–55. This suggests that young people are affected disproportionately by the structural limitations of financial markets in Mongolia, such as collateral requirements and high interest rates driven by weaknesses in the lending sector as well as macroeconomic challenges, like inflation and currency fluctuation. Half of business owners (51%) used family or personal savings to start their venture while 17% had done so through loans from friends and family [29].

ii) **Paying taxes and insurance premiums:** The burden of paying taxes and insurance premiums is one of the main barriers for informal business owners to formalize their business. According to the State of Informal Employment in Mongolia Survey [30], about 63% of respondents cited high income tax levels, social insurance costs, health insurance rates, and tax compliance expenses as reasons for discouraging firms from registering in the formal economy or employing all their workers on a formal basis. Informal businesses often evade taxes and fees that are imposed on business enterprises and relatively few informal sector workers pay for social insurance [28]. Excessive costs generated from taxes and premiums also restrict the creation of jobs in the formal sector. Studies from Latin America suggest that some businesses choose informality as a preference as they perceive costs involved outweigh the benefits of formalization, thus it is not worthwhile [24, 29].

iii) **Knowledge of tax and fee laws:** Lack of knowledge of tax and fee laws and difficulties in accounting prevent informal operators to formalize their business [29].

iv) **Bureaucracy and corruption:** Bureaucracy and corruption within public offices is a major administrative and financial burden on informal operators. They face enormous difficulties to register their business and obtain official permits. Anderson [31] noted that "There is no escaping bureaucracy, but informals face less of it". A recent survey [29] showed that the complexity of registration procedures is one of the barriers to enter formal economy while a study [27] stated that the firms are requested or expected to give gifts or informal payments when they secure construction permits (35%), government contracts (19%), or during meetings with tax officials (16%).

v) **Lack of capital and equipment:** The State of Informal Employment in Mongolia Survey [4] indicated that 25.3 % of the informal businesses are not formalizing their business due to lack of capital and equipment. To obtain business permits, specific requirements and standards must be fulfilled, such as requiring certain types and number of tools, equipment, buildings, and facilities depending on the type and scope of the business activities. Cost of purchasing assets and equipment, and rental fees for assets/equipment are often costly for small businesses.

vi) **Weak competitiveness:** A significant number of respondents to the State of Informal Employment in Mongolia Survey [30] indicated a lack of interest in changing their current situation due to weak competition. Market entry is difficult because of competitive pressures from imports, as Mongolia is a landlocked country between Russia and PR China.

vii) **Lack of educational qualifications and skills:** Informal business employees often lack the necessary educational qualifications and professional skills required for formal employment. This skill gap poses a challenge when transitioning to formal jobs [30].

These factors collectively contribute to the persistence of the informal economy in Mongolia, highlighting the complex barriers that hinder formalization efforts.

Informal Sector Productivity and Credit Access

Financial Accessibility, Informal Economy, and Productivity Growth in Mongolia: A Literature Review

The informal sector significantly contributes to total output and economic growth. However, it is often overlooked in official GDP accounting, particularly in developing countries [32], including Mongolia. From a GDP production perspective, productivity growth stands out as a key economic indicator of innovation [33], measured by indicators like labor productivity, capital productivity, and total factor productivity (TFP). In the context of Mongolia's informal sector, labor productivity emerges as particularly relevant for several reasons:

- Mongolian informal business activities primarily revolve around trading and services [3]
- These activities tend to be more labor-intensive [2] rather than capital-intensive
- The high number of people employed in this sector, as elaborated in previous sections, further underscores the significance of labor productivity

Moreover, the relevant literature explores the relationship between informality and access to finance [34–35]. In Beck and Hoseini's [35], access to finance is measured by variables, such as financial depth (bank credit to state domestic product) and financial outreach (branch penetration). Financial depth reflects access to credit while the financial outreach variable reflects financial inclusion. Their findings imply that the effect of financial inclusion (measured by bank outreach) is strong and significant in reducing the incidence of informality while access to credit (financial depth) has no significant impact on the productivity of informal firms, although it increases the productivity of formal firms in India.

Based on this background, the empirical section investigates the link between labor productivity (in the informal and formal sectors) and financial accessibility through a qualitative case study approach. The study utilizes the relevant secondary datasets obtained from various international databases, including the Informal Economy Survey, the World Development Indicators, and the Global Findex Database from the World Bank, the Labor Force Survey from the ILO, the Financial Accessibility Survey from the IMF, and the Productivity Database from the Asian Productivity Organization [1, 6, 21–22, 36–39]. It should be noted that APO's data is used to account the labor productivity values for the formal sector, not the informal sector.

Informal sector labor productivity is defined as a per-worker labor productivity estimate within the informal sector, reflecting per-worker GDP at market prices[1]. It is expressed in PPP, constant 2017 USD, in line with the APO's methodology. The estimate is derived from output data of the informal sector from the Informal Economy Survey, GDP data from the World Development Indicators, and estimates of number of informal employment from the Labor Force Survey. The datasets provide country-level estimates spanning the period from 2006 to 2020.

Access to finance is commonly assessed through the financial inclusion variable [40]. The World Bank's Global Findex Database furnishes comprehensive data on global access to financial services, encompassing payments, savings, and borrowing, collectively referred to as financial inclusion. It is important to note that the Findex Dataset diverges from the IMF's Financial Accessibility Survey; the former captures demand-side information (users) while the latter focuses on supply-side information (providers).

Literature on Mongolia

Studies of the informal economy in Mongolia point to a lack of resources. Availability and accessibility of financial resources and bank credits remain critical issues. The 2021 Informal Employment Survey for Mongolia [4] highlighted that one of the primary benefits of having their business registered is to have easy access to credit and credit guarantee funds, indicating that financial accessibility of operators in informal economy is quite limited.

Over half of the informal businesses (54%) indicated not having the financial capacity to overcome an extensive crisis. The share was higher for informal businesses in cities (65%) compared to rural counterparts (43%). Overall, only 13% of respondents reported having bank deposits, less so in rural areas (10% compared with 16% urban respondents) while only 20% reported bank loans as an option. Other options included financial support from family and friends (15%), finding a new job (8%), benefits from price increase of their products (6%), access to donor organization funds (4%), support from customers (3%), and participation in public tenders (1%) [31].

Studies on informal economy [29, 41–43] show that labor productivity is significantly lower for informal firms than for formal firms. Labor productivity of informal firms is about one-fourth that of formal firms. The gap in productivity is explained by several factors, such as economic development (GDP per capita) and business environment (corruption, burdensome regulations to the firms, and freedom to businesses) [41].

Suitcase trader at the Narantuul market, male, age 49
It didn't require too much knowledge. I just needed to be physically fit. The only big constraint was that financial resources and bank credit weren't available, so I sold some of my household items, borrowed some money from friends, and took a "suitcase" trip to PR China. My friends and others supported me, but I relied mostly on my wife and myself. My wife helped me a lot and there was no pressure from legal and administrative authorities.

Small trader, female, age 32
With no money of my own, I didn't have the slightest idea how to begin. Fortunately, my brother helped me. I borrowed money from him on condition that I would pay it back when I started earning income from my business. When I began I didn't lack knowledge and expertise since I'm qualified in accounting. The only things I need were money and credit [31].

[1] Our estimate of per-worker labor productivity in the informal sector uses GDP at market prices, not at basic prices. It means the indirect tax on product is not accounted due to data constraint.

Access to Credit, Informal Economy, and Productivity in Mongolia: An Empirical Exercise

Analysis 1: Informal Sector Labor Productivity and Financial Inclusion

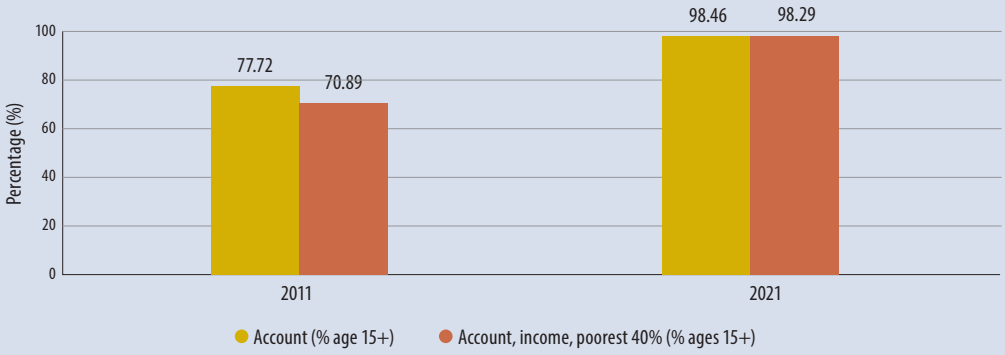
Mongolia demonstrates exceptionally high levels of financial inclusion, signifying widespread use of financial services in the daily lives of ordinary Mongolians, including those engaged in informal activities. Recent data on financial inclusion strongly supports this assertion, revealing that nearly every Mongolian adult holds an account with either traditional financial institutions (such as banks) or mobile money service providers (mobile money) as of 2021. Specifically, the proportion of the population aged 15 and above with an account stands at an impressive 98.46%, according to the World Bank's Findex Database (Figure 7.10). Notably, this figure marks a substantial increase from the initial level of 77.7% recorded over the past decade.

On the flip side, the output of the informal economy accounted for 15.5% of the official GDP as of 2020, marking a decrease of 0.9% between 2006 and 2020, as indicated by the World Bank's estimates using the Informal Economy - DGE method (Figure 7.1). Concurrently, labor productivity per worker in the informal sector experienced a substantial increase of approximately 110% during the same period (Figure 7.11), surging from USD5,371 in 2006 to USD11,259 in 2020. Estimates of the MIMIC method of the informal economy output provides slightly higher values than that of the DGE method, indicating USD5,770 in 2006 and USD12,113 in 2020. Drawing from these observations, the following hypotheses emerge:

- A higher level of financial inclusion is associated with a reduction in the incidence of informality
- A higher level of financial inclusion is associated with an increase in the level of labor productivity of informal sector

FIGURE 7.10

MONGOLIA'S COMPARISON OF FINANCIAL INCLUSION BASED ON POPULATION ACCOUNT OWNERSHIP BETWEEN 2011 AND 2021



Source: World Bank (reproduced with permission of the Creative Commons Attribution 4.0 International license - https://datacatalog.worldbank.org/public-licenses#cc-by); The Global Findex Database [36] (https://www.worldbank.org/en/publication/globalfindex/Data).

Note: The level of financial inclusion is indicated by: (i) the share of the population (aged 15 and above) with an account; and (ii) the share of the poorest population (40% by income aged 15 and above) with an account. Both indicators show over 98% coverage, indicating a very high level of financial inclusion. The data is publicly available and allowed to use for any purpose granted by the World Bank under the Creative Commons Attribution 4.0 International license.

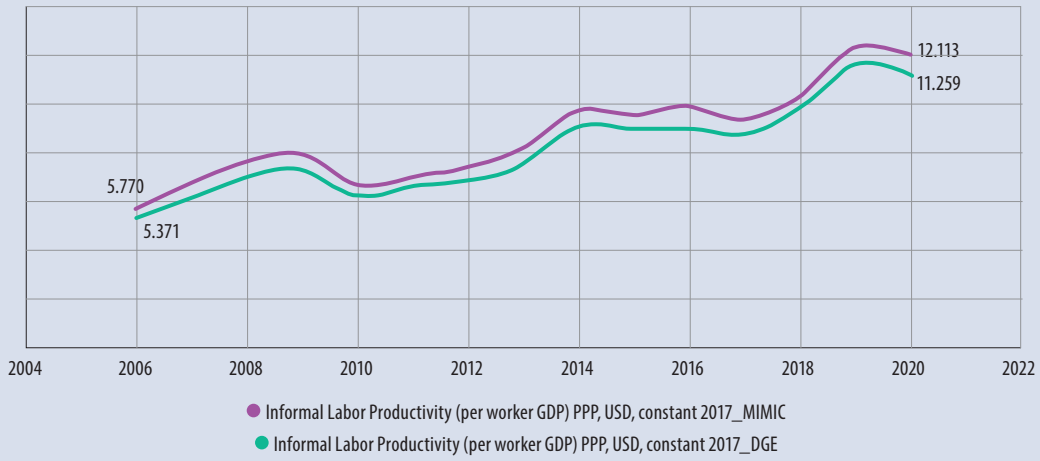
In terms of access to credit, its coverage is considerably lower compared to account outreach. Nevertheless, it is noteworthy that on average, about one-third of the population aged 15 and above borrowed money, considering the inherent characteristics of the credit market, such as moral hazard and adverse selection. Specifically, Findex data indicates that 35.4% of individuals aged 15 or older

borrowed money from a formal financial institution or using a mobile money account as of 2021 (Figure 7.12). There is not a significantly large difference among income groups either. Data from the same year reveals that only 6% more of the richer population had a loan compared to the poorest population (see Figure 7.13). While this data suggests the use of credit may be somewhat equal among income groups, it is not sufficient to justify the need for and access to credit for informal businesses and employees.

Moreover, the use of credit for business purposes decreased in 2017 compared to 2014 (Figure 7.14). In 2014, 9% of individuals aged 15 or older borrowed money for business purposes, but it reduced to 4% in 2017.

FIGURE 7.11

INCREASE IN PER-WORKER LABOR PRODUCTIVITY IN THE INFORMAL SECTOR (GDP, PPP, USD, CONSTANT 2017) INCREASED BETWEEN 2006–20

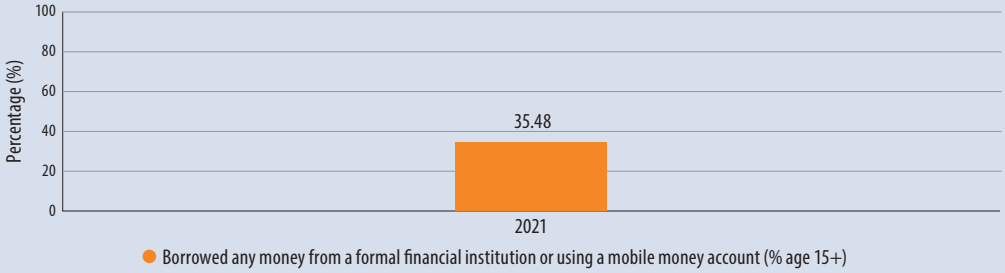


Source: Author's own estimate.

Note: (i) The level of per-worker labor productivity (USD) is estimated based on the output estimates of informal sector as a percent of official GDP reported by World Bank's Informal Economy Survey; (ii) the GDP data from World Bank's World Development Indicators; and (iii) the number of employments in informal sector data from ILO's Labor Force Statistics [3, 29, 30, 32].

FIGURE 7.12

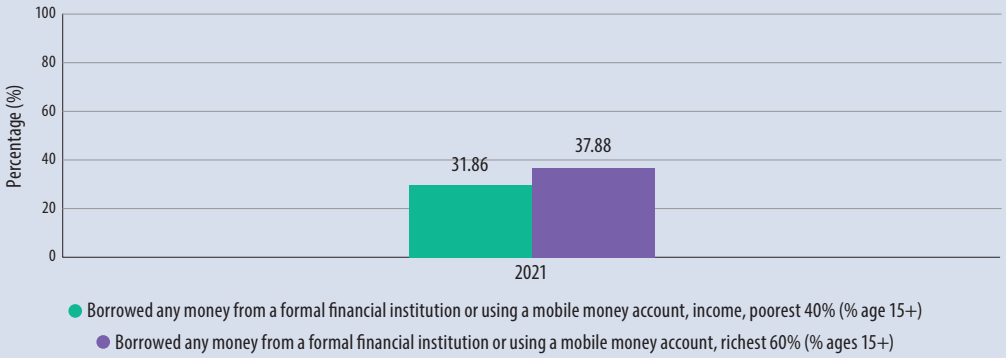
MONGOLIA'S USE OF CREDIT IN 2021



Source: World Bank (reproduced with permission of the Creative Commons Attribution 4.0 International license - https://datacatalog.worldbank.org/public-licenses#cc-by) and The Global Findex Database (https://www.worldbank.org/en/publication/globalfindex/Data) [36].

FIGURE 7.13

MONGOLIA'S USE OF CREDIT BY INCOME GROUPS IN 2021

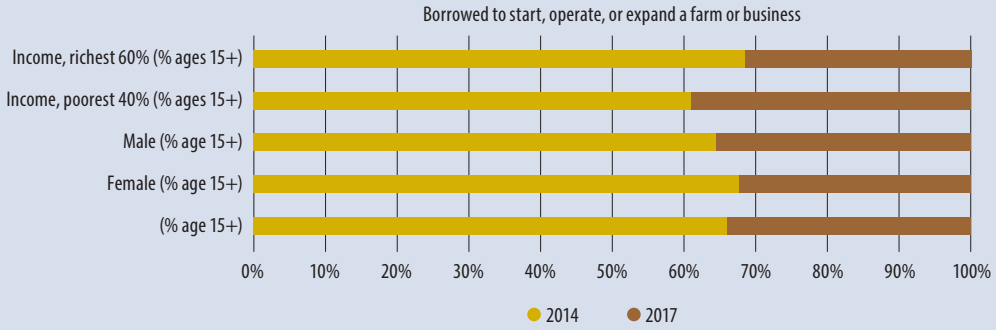


Source: World Bank (reproduced with permission of the Creative Commons Attribution 4.0 International license - https://datacatalog.worldbank.org/public-licenses#cc-by) and The Global Findex Database (https://www.worldbank.org/en/publication/globalfindex/Data) [36].

Note: Green indicates richest 40% while purple indicates the poorest 60%. Although the use of credit is slightly higher for the richer population than the poorer one, the difference is not significantly large at approximately 6%.

FIGURE 7.14

DECLINE IN BUSINESS CREDIT UTILIZATION IN MONGOLIA BETWEEN 2014–17



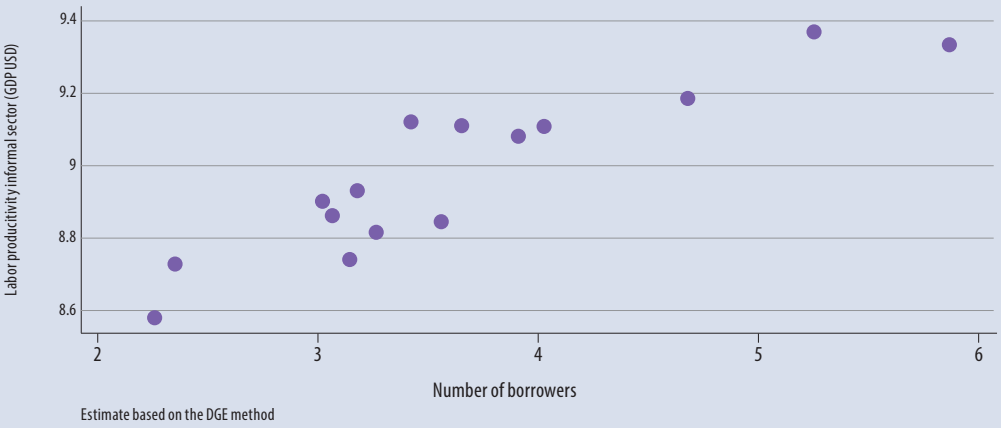
Source: World Bank (reproduced with permission of the Creative Commons Attribution 4.0 International license - https://datacatalog.worldbank.org/public-licenses#cc-by) and The Global Findex Database (https://www.worldbank.org/en/publication/globalfindex/Data) [36].

Analysis 2: Informal Sector Labor Productivity and Access to Credit

The productivity of both formal and informal sectors correlates with access to credit, as measured by the number of borrowers from credit unions and credit cooperatives per 1,000 adults - a supply-side indicator. Trends in both sectors convey a consistent message: higher access to credit corresponds to increased labor productivity. Specifically, Figures 7.15 and 7.16 illustrate the correlation between productivity and credit access within the informal sector. To provide this analysis, labor productivity of informal sector is estimated based on the informal sector's output estimates. It involves both DGE and MIMIC estimates for comparison. The unit of measure is level of output per worker expressed in USD. Moreover, the levels of labor productivity vary between these two estimates (DGE and MIMIC based), the observed trend and the pattern closely mirror each other (Figure 7.15 and Figure 7.16).

FIGURE 7.15

CORRELATION BETWEEN PER-WORKER LABOR PRODUCTIVITY AND ACCESS TO CREDIT IN INFORMAL SECTOR MONGOLIA (2006–20, DGE METHOD)

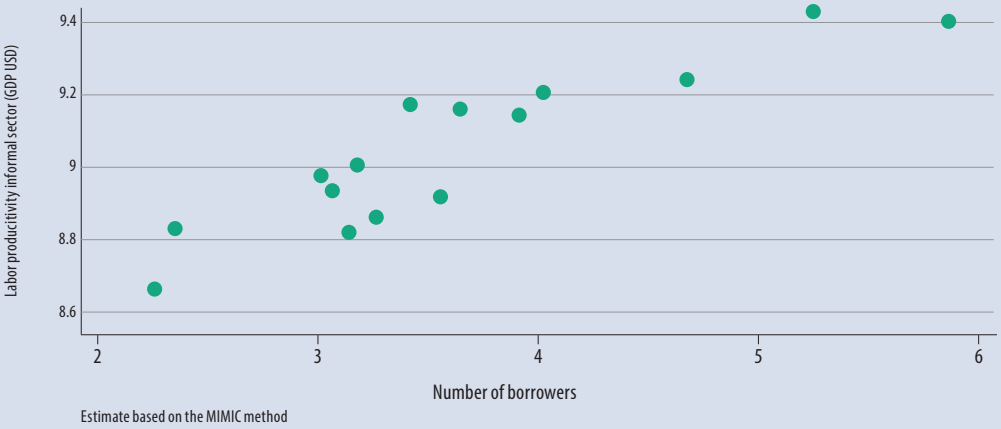


Source: Author's own estimate of Informal Sector Labor Productivity Indicator (DGE method) based on the Informal Economy Survey and World Development Indicators of World Bank; Labor Force Statistics of ILO; access to credit indicator from the Financial Accessibility Survey of IMF [1, 6, 21–22, 36].

Note: It takes logarithmic value of the number of borrowers from credit unions and credit cooperatives per 1,000 adults.

FIGURE 7.16

CORRELATION BETWEEN PER-WORKER LABOR PRODUCTIVITY AND ACCESS TO CREDIT IN INFORMAL SECTOR MONGOLIA (2006–20, MIMIC METHOD)



Source: Author's own estimate of Informal Sector Labor Productivity Indicator (DGE method) based on the Informal Economy Survey and World Development Indicators of World Bank; Labor Force Statistics of ILO; access to credit indicator from the Financial Accessibility Survey of IMF [1, 6, 21–22, 36].

Note: It takes logarithmic value of the number of borrowers from credit unions and credit cooperatives per 1,000 adults.

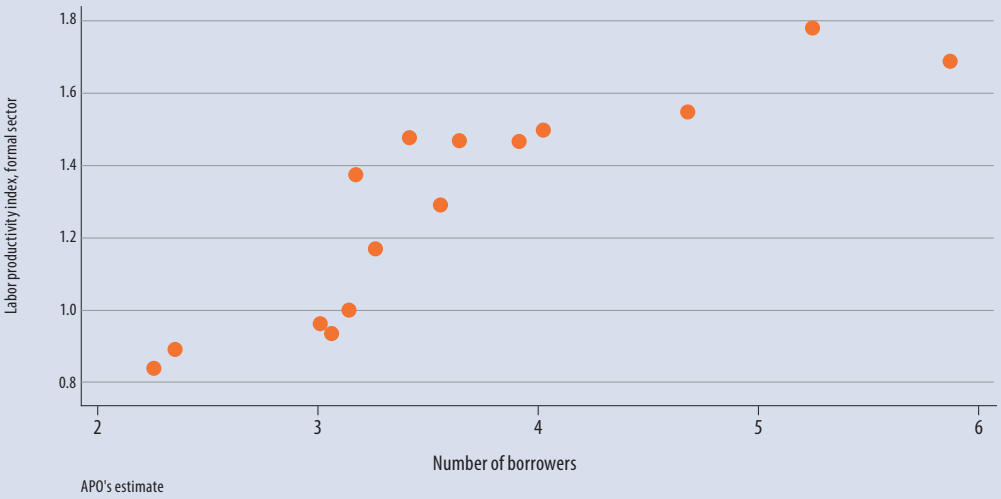
Analysis 3: Formal Sector Labor Productivity and Access to Credit

In order to compare the productivity trends in the formal and informal sectors, this section visits labor productivity of the formal sector in Mongolia. Figure 7.15 shows the association between productivity and credit access in the formal sector. The correlation analysis reveals that a very similar trend is

observed in the formal sector (Figure 7.17) in comparison to the informal sector (Figure 7.15 and Figure 7.16). The labor productivity of formal sector variable is measured by the APO's indicator - labor productivity index (based on number of employment). The unit of measure is index (2010=1.0) The longitudinal data on this indicator is sourced from the APO's Productivity Database.

FIGURE 7.17

CORRELATION BETWEEN PER-WORKER LABOR PRODUCTIVITY AND ACCESS TO CREDIT IN FORMAL SECTOR MONGOLIA (2006–20)



Source: Author's own calculation. Labor productivity indicator of formal sector is collected from APO's Productivity Database and labor productivity (based on number of employment). The unit of measure is index (2010=1.0). Access to credit indicator from the Financial Accessibility Survey of IMF. It takes logarithmic value of the number of borrowers from credit unions and credit cooperatives per 1,000 adults [37–39].

Sources of Funds and Challenges in Finance/Credit Accessibility

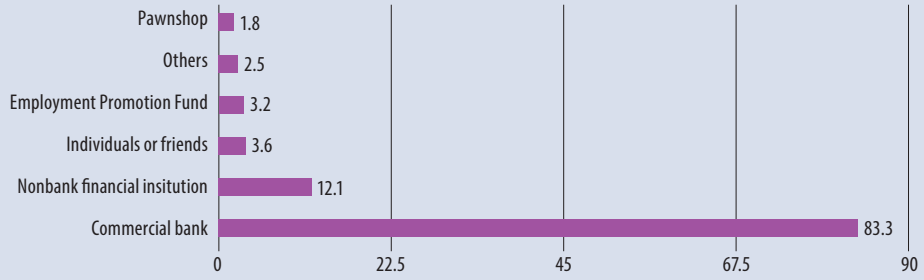
Sources of Funds for the Informal Sector

In Mongolia, as of 2022, there were 2.4 million registered bank account holders, encompassing both informal and formal employers. The main sources of funds and credit for participants in the informal sector include: (i) banks; (ii) nonbanking financial organizations; (iii) family and friends; (iv) employment promotion fund; (v) pawnshops; and (vi) other sources.

Figure 7.18 shows that for self-employed workers who did secure loans, commercial banks were the predominant source (83.3%), followed distantly by nonbanking financial institutions (12.1%), and individuals or friends (3.6%). The average loan amount was MNT25.3 million; this amount was higher for Ulaanbaatar (MNT29.8 million) compared to rural areas (MNT22 million).

FIGURE 7.18

SOURCES OF LOAN (%)



Source: The state of informal employment in Mongolia, Research Institute of Labour and Social Protection (RILSP) - ILO, 2021.

In a 2021 study by the ILO, 60% of participants mentioned that loan helped expand their business while 31.5% reported the loan helped increase sales and 20.6% cited that the loan helped them overcome financial difficulties.

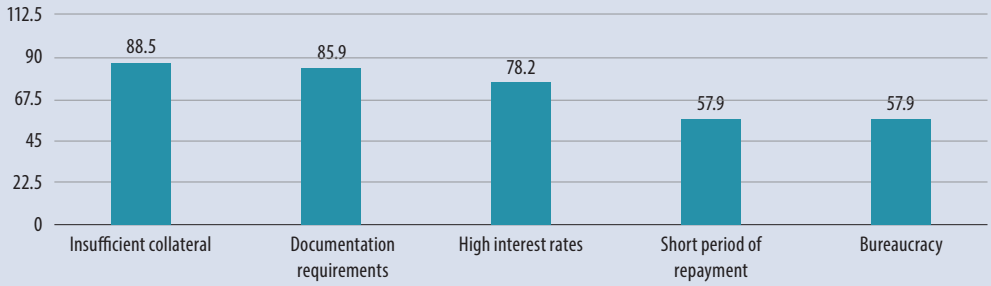
Challenges Faced by Informal Sector Firms in Financial Access

According to a study [30], among the self-employed workers, 57.9% obtained a loan to expand their business (68%) with 31% earmarking loan funds for purchase of raw materials and 15.1% for equipment. However, about 42% of participants of the study did not get loan access. Among those who did not secure loans:

- 59.4% didn't need to get loans and had adequate funds from their personal savings
- 40.6% faced difficulties accessing loans due to various reasons

FIGURE 7.19

REASONS FOR DIFFICULTIES IN OBTAINING LOANS (%)



Source: The state of informal employment in Mongolia, Research Institute of Labour and Social Protection (RILSP) - ILO, 2021.

Figure 7.19 shows the top five challenges to obtain loans from commercial banks consisting of insufficient collateral (88.5%), documentation requirements (85.9%), and high interest rates (78.2%), short period of repayment (58%), and bureaucratic hurdles (58%).

On the supply side, issues are summarized in Table 7.6.

TABLE 7.6

MAIN ISSUES IN LOAN LENDING PROCEDURES: ADVANTAGES AND DISADVANTAGES

Item	Successful Approaches	Unsuccessful Approaches
Financial management	· If credit and savings cooperatives are established to shift lending operations into a more formal mechanism · If loan program is disbursed through a professional financial institute/bank · If a revolving fund approach is applied	· Not sustainable in case of loan management without bank · If mechanism to link loan concept with environmental protection issues are not clear · If funding and scale of the approach is small
Loan repayment rate	· If experienced legal financial institutions manage the loan product and eventually approve loan applications, loan repayment should be above 95%	· Loan repayment sometimes lower than 70% if loan disbursement and repayment managed through nonbanking institutions
Capacity building	· If initial intensive capacity building (initial training, regular meetings, face-to-face support, etc.) prior to loan application takes place · If firms were assisted in their loan application · If firms assisted in establishing and enforcing loan use agreements	· If only limited capacity building is provided (e.g., one-time training approach, only in the beginning) · If there is no qualified institution/NGO available to facilitate capacity building processes at household and "soum" (the smallest administrative level in Mongolia) government level · If the professional financial institution is not included in the capacity development process

Source: Center for Policy Research (CPR), Dr. Enkh-Amgalan, study report 2019 by BACCP II/III.

In order to understand challenges faced by the informal sector participants in accessing credit, this paper's researchers analyzed Khan Bank's loan products tailored for informal business. Khan Bank has the most widespread network and experience of lending to private firms. The bank has branches in basically every soum (the smallest administrative level in Mongolia, 330 in total) across Mongolia.

At present, Khan Bank offers two loan products for individuals: (i) a loan with an annual interest rate of around 18%; and ii) a general loan with an annual interest rate of 24%–30%. The following requirements must be fulfilled, in order to obtain a loan:

- The loan applicant must be self-employed or a small business owner
- Must have experience in running a business for a certain period of time
- If loan applicant has an existing outstanding loan from Khan Bank, other banks, or nonbanking financial institutions (NBFIs), the outstanding loan must be classified as "performing" by the reference obtained from credit information bureau
- Clear project goals, implementation plans, and objectives must be outlined
- Detailed information on manpower, machinery, equipment reserves, capacity, and workplace must be clearly specified and provided in the project proposal
- Attended the business project development training organized by the district employment office
- Must have a "reference letter" confirming participation in tenders organized by the working group under the district employment office, and subsequent selection and support by them
- Possess the ability of creating and maintaining full-time jobs under the project

- Adherence to anti-corruption principles outlined in the "Fraud and Corruption Prevention and Control Policies" with agreement to apply them in their business activities
- The loan applicant's business activities are not included in the "List of activities prohibited for small loans"
- The loan applicant's business activities must not pose serious risks to environment, health, and safety

TABLE 7.7

CURRENT LOAN PRODUCTS FOR FIRMS AND INDIVIDUALS AT KHAN BANK

Item	Product 1: Informal Firm Specific Loan		Product 2: informal Firm General Loan	
Required documents	· Identification card or a notarized copy · List of collateral assets and supporting documents · Number of livestock census at year end which is under the name of loan applicant or detailed reference on number of stock/land, property, etc. · Proof of income · Stock-based Insurance documentation and insurance agreement		· Identification card - original copy or a notarized copy · Proof of income · List of collateral assets and supporting documents · Number of stock census in the end of year which is under name of loan applicant or detailed reference on number of stock	
Loan conditions	Annual interest rate	18%	Annual interest rate	24%–30%
	Maximum loan amount	MNT5–10 million	Maximum loan amount	MNT1–30 million
	Loan term in months	24	Loan term in months	24
	Loan application fee	MNT1,000	Loan application fee	MNT1,000
	Loan disbursement service commission	1% of disbursed loan or maximum MNT1.5 million	Loan disbursement service commission	1% of disbursed loan amount or max. MNT1.5 million
	Effective percentage rate/monthly	2.67%–2.17%	Effective percentage rate/monthly	2.67%–2.17%

Source: Khan Bank (www.khanbank.com).

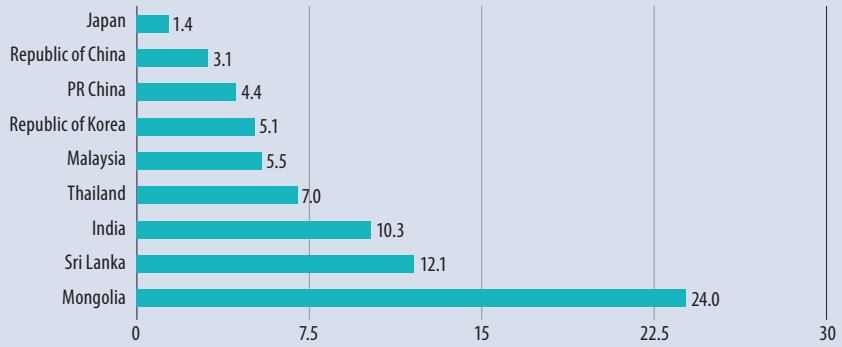
From the criteria highlighted in Table 7.7, it is evident that the bank requires the list of collateral assets and supporting documents from informal firms. This requirement was cited by 88.5% of informal sector respondents as the main reason for their loan denials.

The second major challenge identified in obtaining a loan among study respondents was the demand for documents that are difficult to obtain by informal firms. These documents include proof of income, stock-based insurance documentation, insurance agreement, project proposals, and proof of attendance at the business project development training organized by the district employment offices.

The third challenge is the high annual interest rates ranging from 18% to 30% at Khan Bank. It is comparatively steep compared to rates in other countries. A comparison analysis of interest rates in some Asian countries are presented in Figure 7.20.

FIGURE 7.20

BANK LENDING RATES IN SELECTED ASIAN COUNTRIES



Source: Trading Economics (https://tradingeconomics.com/).

Additionally, the fourth reason for difficulties in obtaining a loan is the length of repayment. On average, short-term loans typically have repayment periods of 3–18 months and long-term loans can have repayment periods of up to 25 years. However, Khan Bank's short-term loans span only up to 24 months, which may pose challengers for borrowers needing longer repayment terms.

Another significant challenge faced by informal sector firms in financial access is bureaucracy. Survey respondents emphasized the urgent need for policy measures and actions demanded to support informal sector firms. These measures are aimed at reducing government bureaucracy, creating a favorable tax regime, reducing corruption, and extending coverage of concessional lending. A notable 58% of respondents highlighted persistent bureaucratic challenges at government agencies and corruption at all levels as critical barriers in doing business.

Policy Interventions

Currently, there are no specific policies or programs in place to formalize the informal economy. However, several recent initiatives show promise in formalizing informal activities and addressing challenges in accessing credit within the informal sector.

Key policy documents, such as the Government Action Plan for 2020–24, the State Employment Policy for 2016–25, and Mongolia's long-term development policy "Vision 2050" include provisions related to informal employment. These provisions encompass aspects like the registration of workers in the informal economy and their inclusion in social insurance schemes.

To encourage formal employment, the government has mandated consistent payment of social insurance taxes as a prerequisite for accessing financial services, such as occupational loans, leasing from banks and nonbank organizations, or enrollment in the government's housing program. Flexible terms and methods for social insurance payment have led to a high enrollment of informal workers, ensuring effective social protection.

Moreover, the government provides services through small and medium enterprise (SME) and employment support special funds. These initiatives include offering soft loans, loan guarantees, financial support to self-employed individuals and SMEs, and various training programs.

In addition, there are implementation of several recent policy interventions with potential positive impacts toward formalizing informal activities and addressing challenges in accessing credit within the informal sector. These include the E-Mongolia National Program, the introduction of a simplified regime of personal income tax, and the decision by the Mayor of Ulaanbaatar to cancel the need for special permissions for certain types of trade and services in the city.

The E-Mongolia National Program is a successful effort toward digitalization, streamlining processes, such as business registration, conducting operations, handling official documentation, and meeting tax obligations. This initiative is expected to alleviate challenges related to bureaucratic requirements and documentation for financing businesses within the informal sector [44–45].

Another significant policy change is the introduction of a simplified regime for personal income tax, effective since January 2024. This policy aims to ease the complexity of the process associated with tax and financial reporting. This option allows individuals to report tax on personal income earned from business operations at 1%, instead of 10%, without deducting expenses related to that income. There is no longer a limit on the amount of income that can qualify for this option, which was previously capped at MNT50 million (approximately USD14,791) annually [46]. Although participation in this tax reporting option is voluntary, it holds potential for formalizing the informal economy due to its affordable tax rate and simplified digital processes.

Additionally, the decision by the Mayor of Ulaanbaatar to cancel the need for special permissions for 74 types of trade and services in the city, effective from January 2022, aims to facilitate hassle-free business operations. While this measure may not directly contribute to formalizing informal activities, it does improve market access for those who would like to carry out employment and small business activities [47].

Collectively, these measures may partially address some of the challenges identified in this report. In terms of addressing the issue of insufficient collateral, formalized activities can benefit from the Credit Guarantee Fund of Mongolia. Established in 2012 with funding support from ADB, this fund provides guarantees to individuals requiring collateral assistance to access credit [48–50].

Conclusions and Recommendations

The report provides an overview of Mongolia's informal economy and its productivity. Currently estimated to contribute approximately 15.1% to the country's GDP, equivalent to about USD8 billion at GDP PPP levels in 2023, the informal sector engages around half a million workers and over 57,000 enterprises, primarily in sales and services. Annual productivity per employer in the informal sector is calculated at USD11,945 as of 2020 (PPP constant 2017, DGE method), indicating a doubling since the base year of 2006.

Identified causes of the informal economy include obstacles, such as limited access to loans, a tendency to evade taxes and insurance premiums, lack of awareness about tax and fee regulations, bureaucratic hurdles, corruption, challenges in obtaining business permissions due to insufficient capital and equipment, difficulties in financial and tax reporting, weak market competitiveness, and insufficient skills and education for transitioning to formality.

Moving forward, the report also empirically examines the impact of financial accessibility on the informal sector's labor productivity. Key findings suggest that both the outreach of financial services and access to credit are associated with an increase in labor productivity in the informal and formal sectors.

Despite the important role of access to finance in the informal sector's labor productivity, Mongolia continues to face challenges in obtaining loans from commercial banks, with 88.5% citing insufficient collateral, 85.9% struggling to meet documentation requirements (especially proving formal economic engagement), and 78.2% facing high-interest rates. Additional hurdles include short repayment periods

and bureaucratic obstacles, contributing to nearly half of loan applications being rejected, underscoring a significant barrier in credit access.

In light of this, the report highlights recent key interventions partially relevant to the discussed challenges. Collectively, these measures, such as digitalization, taxation, and reducing government involvement in business formation in the capital city, may address challenges related to documentary requirements, bureaucratic hurdles in accessing finance within the informal sector, enabling access to markets, and to some extent, also promoting formalization.

Although increasing productivity is crucial, the report acknowledges that without formalizing informal activities, growing productivity in informal sector may pose a threat to both economic growth and social welfare in the future. Consequently, the following recommendations are proposed to foster formalization and boost informal labor productivity:

- Access to credit should be extended with a more inclusive design
- Improve access to the Credit Guarantee Fund to facilitate the problems related to insufficient collateral
- Reduce high interest rates for loans
- Prolong repayment period for loans
- Reduce information asymmetry
- Emphasize incentives for formalization
- Raise awareness about the relevant laws, regulations, and benefits of formalization
- Simplify procedures in financial and tax reporting through digital solutions recently enabled, such as e-Mongolia, e-tax, and e-business
- Improve access to trainings and skills development by educating informal employees and businesses on the formalization processes, digital tools, accounting, and financial reporting

These recommendations aim to bolster Mongolia's informal sector by promoting formalization, enhancing productivity, and facilitating sustainable economic growth.

CHAPTER 8

PAKISTAN

Abstract

The research "Informal Economy Productivity and Access to Credit - A Case Study of Pakistan" delves into the crucial yet often overlooked role of Pakistan's informal sector in its economy. This sector, characterized by small-scale, unregistered, and often unregulated activities, has and continues to substantially contribute to GDP growth and employment, even more so in rural areas. The paper opts for a multifaceted approach so that it may examine the sociodemographic profile typical of the informal sector employment. This reveals a clear predominance of male workers and a larger share of employment in nonagricultural related informal activities.

The study also conducts an in-depth review of the major challenges faced in the informal sector, particularly the limited access to formal credit systems, which impedes productivity growth. Using empirical exercises and case studies, the paper aims to demonstrate the complex relationship between finance accessibility, labor productivity, and economic development. Further, it empirically evaluates the impact of financial constraints on the sector's productivity.

The study also explores various policy interventions that support small-scale entrepreneurs and workers in the informal sector. Many such efforts include integrating them into the formal economy, improving access to credit, and fostering overall economic growth and development in Pakistan. The paper concludes with recommendations for policy actions that could effectively address the unique challenges faced by the informal sector, thereby enhancing its contribution to the national economy.

This comprehensive analysis sheds light on the significant role held by the informal economy in Pakistan, emphasizing the critical need for targeted policies to unlock its potential for the national development of the country.

Introduction to the Informal Economy and Productivity Growth

The informal sector is vital to Pakistan's economic landscape, contributing to GDP growth in a variety of ways. Small-scale, unregistered, and frequently unregulated economic activities define the informal sector. This sector covers a wide range of activities, including small-scale manufacturing, trade, and services while making a significant contribution to Pakistan's GDP. It employs a sizable portion of the population, particularly in rural areas with limited formal employment opportunities. The market is characterized by its adaptability, which can absorb labor during economic downturns, acting as a safety net against unemployment. This resilience contributes to the economy's overall stability, indirectly supporting GDP growth.

One of the most significant contributions of the informal sector to Pakistan's economy is job creation. A large number of people, including women and marginalized groups, rely on the informal sector for a living. The sector provides a source of income for those who would otherwise be unemployed, helping to alleviate poverty and maintain economic stability [1].

Contrary to popular belief, the informal sector can stimulate economic activity due to its adaptable nature and ability to respond swiftly to financial circumstances, as opposed to the formal sector, which

is hampered by bureaucratic procedures [2]. This emphasizes the sector's contribution to the region's overall economic development.

The term "informal sector" describes Pakistani business practices outside official regulations and oversight, as is common in many other nations. This industry is defined by its small-scale operations, lack of worker protection, and difficulty in obtaining formal credit. ILO Standard R204 in 2015 defines the term informal economy as: "(a) refers to all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements; and (b) does not cover illicit activities, in particular the provision of services or the production, sale, possession or use of goods forbidden by law, including the illicit production and trafficking of drugs, the illicit manufacturing of and trafficking in firearms, trafficking in persons, and money laundering, as defined in the relevant international treaties."

As per Pakistan's Labor Force Survey 2020–21, the informal sector (nonagriculture) comprises those employed in enterprises that are neither incorporated nor registered with authorities. Those employed in private households are regarded as being in the informal sector. Those whose economic activities are in the agricultural industries are reported separately. This definition captures the essence of the informal sector in Pakistan, where a significant portion of economic activities occurs outside the formal structures. In Pakistan, the informal sector includes various activities, such as street vending, small-scale manufacturing, and home-based work. Workers in this sector are often self-employed or work in family-based enterprises. They typically possess lower education levels and skills, and lack access to social security and health benefits.

Sociodemographic Profile of Informal Sector Employment in Pakistan

The Pakistan Bureau of Statistics (PBS) serves as the country’s official agency responsible for collecting, compiling, and disseminating reliable statistical information from primary and secondary sources. It provides comprehensive labor market data through the Labor Force Survey, which contains information about various aspects of the labor market (labor force trends, employment status, hours worked, formal and informal distribution, etc.) that are pivotal for workforce planning and human resource development. So far, 13 annual labor force surveys have been conducted since 2001.

According to the Labor Force Survey findings for 2020–21, it can be observed that out of the vast labor force of 67.25 million employed individuals, a majority of 51.91 million (77%) are male. Interestingly, the informal sector, which focuses on nonagricultural activities, dominates the employment landscape. It accounts for 72.5% of nonagricultural jobs, with higher representation in rural areas (76.2%) compared to urban centers (68.5%). In contrast, formal sector employment is more urban-centric, comprising 31.5% in urban areas versus 23.8% in rural areas (Figure 8.1).

A breakdown by gender reveals that 73.4% of men and 68.5% of women worked in nonagriculture informal employment in 2021. Another interesting factor to note is that men's participation in the informal sector has increased slightly since 2019. In females, it declined slightly from 70.5% to 65.5%, as shown on Panel B in Figure 8.1. One possible explanation for the change in trend may be due to the COVID-19 pandemic, which resulted in a significant decline in jobs in the formal sector [3].

The informal (nonagricultural) sector is most prominent in Khyber Pakhtunkhwa (KP) (51.7%), followed by Sindh (44.5%), Punjab (44.3%), and Balochistan (43.8%). However, geographical distribution by provincial level of informal workers shows that out of 30.49 million total informal sector workers, a major share is in Punjab (17.3 million), followed by Sindh (6.81 million), Khyber Pakhtunkhwa (4.86 million), and Balochistan (1.52 million).

Categorizing the formal sector and informal workers by their education level reveals that a significant majority of informal workers are either illiterate or have no formal education, constituting 84.4% of those without formal education. This low education level among informal workers is a contributing factor to the sector’s lower labor productivity. Educated workers mostly work in formal employment.

Age-specific analysis shows that the share of informal sector (nonagriculture) employment is high among the productive age groups (15–44) while lower in the early teens (10–14) and late fifties (55 and over). The majority of informal workers are categorized as self-employed (own account workers) or employees. These two categories account for 89.6% of total informal workers in Pakistan.

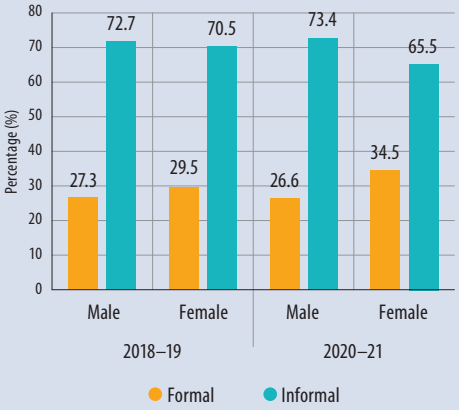
FIGURE 8.1

SOCIAL DEMOGRAPHIC PROFILE OF INFORMAL EMPLOYMENT IN PAKISTAN

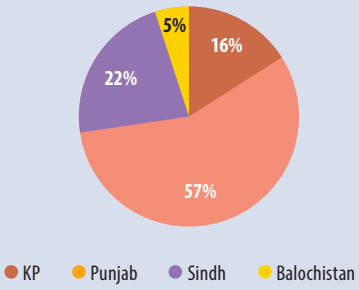
Panel A : Formal and Informal Workers - Distribution (%)

	2018–19			2020–21		
Sector	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**
Total	100	100	100	100	100	100
Formal	27.6	27.3	29.5	27.5	26.6	34.5
Informal	72.4	72.7	70.5	72.5	73.4	65.5
Rural	100	100	100	100	100	100
Formal	23.3	23.6	21.4	23.8	23	28.9
Informal	76.7	76.4	78.6	76.2	77	71.1
Urban	100	100	100	100	100	100
Formal	31.9	31	39.5	31.5	30.3	42.1
Informal	68.1	69	60.5	68.5	69.7	57.9

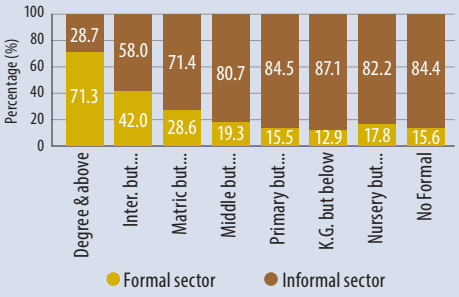
Panel B : Formal and Informal Workers by Gender



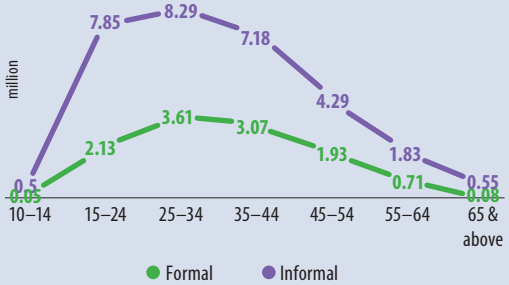
Panel C : Informal Sector Employment by Provinces (2020–21)



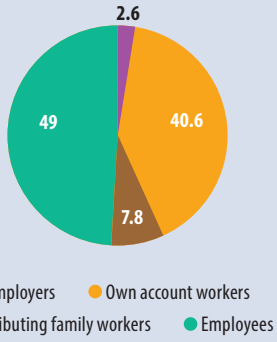
Panel D : Formal and Informal Sector Employment by Education (2020–21)



Panel E : Informal Sector Employment by Age Group (2020–21)



Panel F : Informal Workers Distribution by Employment



Source: Labor Force Survey 2020–21.

A recent study [1] found that the size of the informal economy is approximately 56% of Pakistan's total GDP. It is worth highlighting the crucial role played by the informal sector in shaping Pakistan's economy, as it significantly contributes to its overall development and progress.

Despite its substantial contributions, the informal sector faces several challenges, including limited access to production and product market resources, exclusion from technological improvement, and exploitation of informal workers, which weaken the bargaining power of formal workers. Additionally, complex licensing procedures and bureaucratic hurdles make it difficult for informal agents to obtain benefits and engage in cross-border commercial activities.

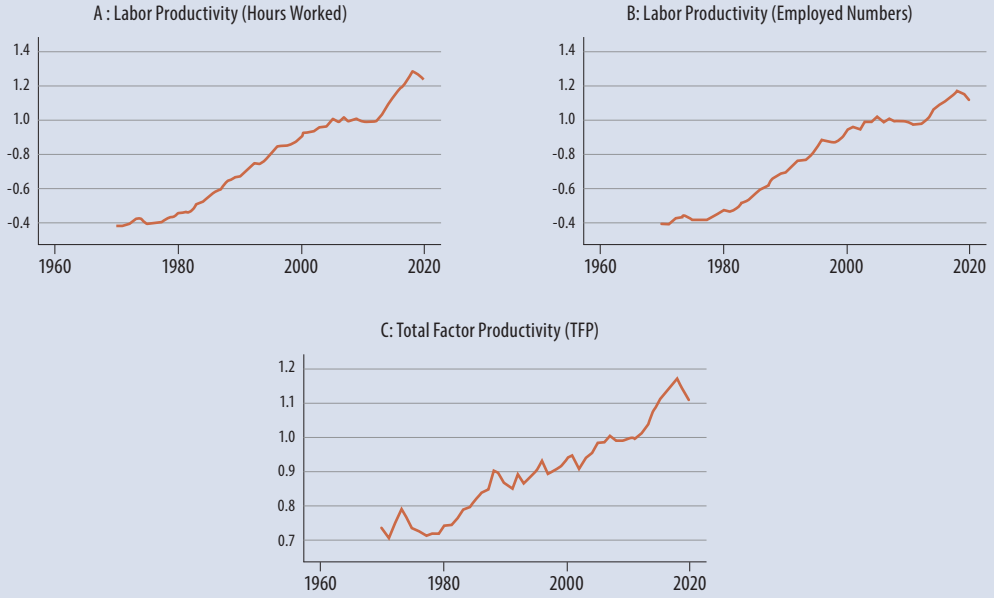
The informal sector also hinders productivity growth due to practices, such as a lack of transparency, suboptimal allocation of resources, inadequate modern management skills, and insufficient training opportunities for workers. Weak contract enforcement, ineffective tax enforcement, corruption, and bureaucratic inefficiencies exacerbate the size of the informal sector and discourage formalization [4]. These challenges create an unfavorable investment climate, limit growth potential, and narrow the tax base.

Labor productivity growth in terms of hours worked, persons employed, and total factor productivity (TFP) is presented in Figure 8.2 for 1970–2021. There is an increase in labor productivity, but this increase is modest due to various socioeconomic, cultural, and institutional factors. The dip in labor productivity in 2019–20 is due to the COVID-19 pandemic [5].

Evaluating the labor productivity difference between the formal and informal sectors is difficult as reliable data on various related variables is unavailable. A World Bank study using firm-level survey data for a large cross-section of countries, including Pakistan in sample, assesses the gap in labor productivity between formal and informal firms in developing countries. The results show that, on average, the labor productivity of informal firms is about one-fourth that of formal firms.

FIGURE 8.2

PRODUCTIVITY GROWTH IN PAKISTAN



Source: Asian Productivity Organization (APO).
Note: This figure shows the growth of productivity in Pakistan over the years. The index value was one in the base year.

Many factors influence Pakistan's informal economy, including the country's economic structure, trade policies, taxation levels, institutional quality, and entrepreneurial and business characteristics. The informal sector has grown in response to trade reforms and globalization, with a significant increase in informal employment. High levels of corruption and poor institutional settings further contribute to the size of the informal economy, underscoring the need for effective governance and robust institutions [6]. Additionally, the prevalence of informal credit markets, particularly in rural areas, and the specific characteristics of entrepreneurs and enterprises play significant roles in determining the level of informality in microenterprises. This complex interplay of factors highlights the challenges in addressing the informal economy in Pakistan and underscores the necessity for comprehensive and nuanced policy solutions.

Informal Sector Productivity and Credit Access

Access to credit has a significant impact on firms in Pakistan's informal sector, much like it does in other countries. Formal financial institutions tend to favor larger, more formalized firms, placing micro and small businesses, including those in the informal sector, at a disadvantage. The reliance on informal credit is primarily motivated by financial constraints, with factors, such as firm size, owner gender, and geographic location. Firms in the informal sector that have access to informal credit perform worse than those that do not, suggesting that informal credit may devalue them. Even if informal firms are financially opaque, a stronger legal framework and increased tax compliance can improve their access to credit.

When it comes to obtaining credit, informal firms generally face more restrictions compared to their formal counterparts. Although informal credit markets are still useful for rapidly growing businesses, they are generally less accessible to poorer households. The interaction between the formal and informal credit sectors is complex, with informal credit occasionally acting as a substitute for formal credit, especially in agrarian markets where informal network of financiers called "*Arthis*" are major providers of informal credit, particularly for investment and working capital loans. Overall, while access to credit is crucial for the growth and sustainability of firms in the informal sector, the type of credit obtained and the specific characteristics of the firm play significant roles in determining the impact of credit on firm performance.

Financial Accessibility, Informal Economy, and Productivity Growth: A Literature Review

Literature generally finds a significant yet complex relationship between credit constraints and firm productivity. It emphasizes the critical role of credit access in sustaining firm operations, supporting employment, and fostering economic recovery, particularly for SMEs and emerging firms. Studies also stress the importance of ensuring access to credit to support firms' R&D (research and development) investments, boost productivity, and enhance their competitiveness in international markets. However, the impact of credit constraints on firm productivity may vary across different contexts and regions, necessitating region-specific analyses and tailored policy interventions.

Franklin, Rostom, and Thwaites [7] delve into the profound effects of credit supply on firm productivity, wages, and survival. The paper utilizes a rich dataset and employs a robust empirical strategy to isolate the impact of credit supply from demand-side factors. It finds that contractions in credit supply lead to significant reductions in labor productivity, wages, and capital per worker within firms. Further, these credit supply shocks heighten the risk of firm failure, underscoring the critical role of credit availability in sustaining firm operations and supporting employee welfare. The study provides compelling evidence that access to credit is a vital lifeline for firms, and disruptions in this access can severely affect firm performance and labor market outcomes.

The impact of credit constraints on small and medium enterprises (SMEs) during the European sovereign debt crisis was the focus of Cornille, Rick, and Tojerow [8]. The authors find that credit constraints have markedly detrimental effects on employment within SMEs. The negative impact is particularly pronounced for firms experiencing a negative demand shock or operating in highly

competitive product markets. The study highlights the vulnerability of SMEs to credit constraints, especially in challenging economic environments. It highlights the importance of ensuring access to credit for these firms to safeguard employment and support economic recovery.

Mehrotra and Sergeyev [9] investigate the relationship between financial shocks, firm credit, and employment dynamics during the Great Recession. Using a firm dynamics model, they establish that tightening credit to firms significantly reduces employment, primarily due to decreased gross job creation. The adverse effects of credit tightening are found to be more pronounced in new, young, and middle-sized firms. This study pins the critical role of credit access in sustaining employment, particularly in younger and smaller firms. It underscores the need for policy to support credit availability during economic downturns.

Altomonte et al.[10] explore the intricate relationship between R&D investments, financing constraints, exporting, and firm productivity. They provide evidence of a mutual relationship where exporters and high-productivity firms are less likely to be credit-constrained. In contrast, better access to credit is associated with higher productivity and a greater likelihood of exporting. The study sheds light on the interconnectedness of credit access, firm innovation, and international trade, highlighting the positive feedback loop between these elements. Access to credit is crucial in supporting firms' R&D investments, boosting productivity, and enhancing their ability to compete in international markets.

Similarly, an interesting stream of literature provides a comprehensive analysis of credit rationing experienced by informal businesses and SMEs. Drakos and Giannakopoulos [11] explore the determinants of credit rationing, highlighting the vulnerability of smaller, innovative firms, and the limited extent of true credit rationing. The study delves into the factors influencing credit rationing that focuses on firms in transition countries. The authors find that credit rationing is influenced by firm size, profitability, sales growth, ownership type, legal status, sectoral heterogeneity, and the country-specific level of domestic credit. Smaller firms are particularly susceptible to credit rationing, highlighting their challenges in securing financing. The study underscores the complexity of credit access, showing that many firm-specific and macroeconomic factors shape it.

Andries, Marcu, Opera et al. [12] emphasize the challenges small firms face in emerging and European markets, pointing to the importance of collateral and the impact of banking market concentration. Exploring the relationship between financial infrastructure, firm size, and access to credit, they find that small firms face more credit rationing than larger firms, supporting the Market Power hypothesis, which suggests that higher levels of credit rationing characterize more concentrated banking markets. This study highlights the systemic factors influencing credit access, pointing to the role of market structure in shaping financing opportunities for SMEs.

Another good insight is Jin and Zhang's [13] and Yu and Fu's [14] works that provide theoretical and empirical insights into the rationality behind banks' lending decisions and the negative effects of credit rationing on innovation and productivity. The theoretical analysis of credit rationing in small and micro enterprises (SMEs) by Yu and Fu [14] argues that credit rationing is a rational choice made by banks in pursuit of profit maximization. They suggest that from the banks' perspective, rationing credit to SMEs is a strategic decision to optimize their risk-return profile. This perspective provides a banking-centric view of credit rationing, highlighting the economic rationality behind lending decisions.

The Yu and Fu team [14] also investigate the impact of credit rationing on innovation and productivity among SMEs in China. They find that credit rationing has a pronounced negative effect, particularly for firms without real estate investments or those with a lower willingness to invest. This study underscores the detrimental impact of credit constraints on firm performance, pointing to the critical role of financing in supporting innovation and productivity growth.

Collectively, these studies underscore the multifaceted nature of credit access for SMEs, highlighting the need for supportive policies and innovative financing solutions to address the challenges faced by smaller firms in accessing credit.

Access to Credit Informal Economy and Productivity: An Empirical Exercise

The exploration of how access to capital influences labor productivity in Pakistan has significant importance. It is pertinent to note that the backdrop of this exercise is set against the local economic landscape, where integrating technology into productive sectors is increasingly becoming a cornerstone of policy discussions. This empirical investigation looks into the nuanced role of capital deepening, a critical factor in productivity enhancement, and discerning its impact in two distinct forms: technology-related capital (IT) and capital provision for other resources (non-IT). This exercise is anchored in a time-series analysis spanning from 1970 to 2022, leveraging on data on productivity and capital deepening primarily sourced from the Asian Productivity Organization (APO) and complemented by other indicators from the World Bank's World Development Indicators (WDI).

TABLE 8.1

SUMMARY STATISTICS

Statistics	Mean	Standard Deviation	Minimum	Maximum	Observations
Labor productivity (hours worked)	0.78	0.26	0.40	1.18	51
Labor productivity (employed numbers)	0.78	0.28	0.38	1.30	51
Total factor productivity (TFP)	0.91	0.13	0.72	1.18	51
Capital deepening growth (IT)	0.05	0.05	-0.05	0.17	50
Capital deepening growth (non-IT)	0.83	1.18	-2.66	3.52	50
Investment in human capital	2.33	0.35	1.61	2.92	51
Technological advancement	1.18	1.00	0.15	3.23	62
Economic conditions	8.23	5.31	-0.52	26.66	63
Access to financial services	276.82	90.94	126.31	444.88	18

The methodology employed in this analysis is a simple yet robust time-series regression model, where the dependent variable is labor productivity. Summary statistics for both dependent and independent variables are presented in Table 8.1. The approach was methodically tailored to capture the relationship between labor productivity and its determinants. The specification of the model can be represented as follows:

$$LP_t = \beta_0 + \beta_1 * CDIT_t + \beta_2 * CDnonIT_t + \beta_3 * IHC_t + \beta_4 * EC_t + \beta_5 * TA_t + \varepsilon_t$$

Where:

LP_t is the dependent variable representing the Labor Productivity in year t measured as Output per hour (and in robustness analysis output per person).

$CDIT_t$ and $CDnonIT_t$ are the key independent variables measuring the Capital Deepening in technology and other sectors in year t, respectively.

IHC_t is the Investment in Human Capital proxied by Government Expenditure in Education as a percentage of GDP in year t.

TA_t denotes the country's Technological Advancement in year t and is proxied by the number of telephone subscriptions.

EC_t represents the Economic Conditions and is proxied by average annual growth in the Consumer Price Index over the current and last four years.

AF_t represents the Access to Financial Services and is proxied by the number of people having access to an account per 1,000 people.

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ are coefficients to be estimated.

ϵ_t is the error term capturing unobserved factors affecting labor productivity.

The estimation utilized bootstrapped standard errors to address potential issues of heteroskedasticity and autocorrelation common in time-series data, thereby enhancing the reliability of the findings. This approach acknowledges potential data irregularities and nonstandard distributions, and aligns with the recommendations of Levine and Renelt [15]. It also enhances the robustness of the coefficient estimates, providing a more reliable interpretation of the impacts of capital deepening on labor productivity. The bootstrap method involved repeatedly resampling of model residuals and recalculating the coefficients to generate a distribution from which the standard errors were derived. This methodology is particularly relevant in developing economies like Pakistan, where economic data can exhibit volatility and nonstandard patterns.

The econometric model offers a comprehensive and robust framework for understanding the dynamics of labor productivity concerning capital deepening both in the realm of technology and other sectors. Empirical results are presented in Table 8.2.

TABLE 8.2

EMPIRICAL RESULTS

	MODEL I	MODEL II	MODEL III	MODEL IV	MODEL V
Dependent Variable		Labor Productivity (hours worked)		Labor Productivity (employed numbers)	Total Factor Productivity (TFP)
Capital deepening growth (IT)	1.957***	1.888***	0.658***	1.611***	1.084***
	0.363	0.42	0.196	0.305	0.217
Capital deepening growth (non-IT)	-0.038*	-0.041	-0.011	-0.022	-0.025*
	0.022	0.028	0.009	0.018	0.014
Investment in human capital	0.309***	0.307***	0.073	0.260***	0.164***
	0.061	0.074	0.046	0.053	0.028
Technological advancement	0.147***	0.146***	-0.032	0.157***	0.051***
	0.025	0.031	0.023	0.023	0.013
Economic conditions		-0.003			
		0.002			
Access to financial sServices			0.001***		
			0.000		
INTERCEPT	-0.200*	-0.164	0.712***	-0.093	0.426***
	0.102	0.124	0.171	0.09	0.048
OBSERVATIONS	49	49	17	49	49
R-SQUARED	0.824	0.826	0.964	0.868	0.787
ADJUSTED R-SQUARED	0.808	0.805	0.948	0.857	0.768

Model I, serving as the main model, focuses on the direct relationship between labor productivity and capital deepening of technological and other resources. The coefficients of these variables are of particular interest, as they indicate the magnitude and direction of their impact on productivity. In interpreting these results, it becomes evident that capital deepening in the IT sector exhibits a significantly positive correlation with labor productivity. This finding is in harmony with the insights provided by Hall and Jones [16], who illustrate the profound impact of technological innovation on output per worker.

Conversely, the influence of non-IT capital deepening presents a more nuanced picture. The marginal and, in some instances, statistically insignificant impact of non-IT capital deepening suggests that the mere accumulation of physical capital, devoid of technological integration, may not be a sufficient driver of productivity enhancement. This aligns with the observations by Acemoglu and Zilibotti [17], who argue that technology shapes productivity differentials across nations. The nuanced impact of non-IT capital deepening in Pakistan, showing a less pronounced effect on labor productivity, also aligns with international trends. This indicates that while physical capital accumulation is important, its effectiveness in boosting productivity is maximized when combined with technological innovation.

These findings are crucial for Pakistan's policy framework, advocating for a reorientation of investment strategies to integrate technological components into traditional capital projects. This approach has been successful in countries, like PR China and Germany, where technological innovation has been seamlessly blended with physical capital to enhance productivity. The positive correlation between technology-related capital deepening (IT) and labor productivity in Pakistan mirrors a global pattern, where the rapid advancement of technology has been a key driver of productivity gains in both developed and emerging economies. This phenomenon, well-documented in economic literature, suggests that investments in technology can significantly improve efficiency and output. It also underscores the need to prioritize IT infrastructure and education investments for Pakistan, a country navigating its path toward technological integration. The emphasis on IT aligns with global digital transformation and resonates with the experiences of several countries that have witnessed substantial economic growth fueled by technological advancements.

The robustness of these findings is further examined through Models II to V. Model V, in particular, presents a compelling variation by substituting labor productivity with TFP. This shift in the dependent variable while yielding results that are directionally consistent with Model I, offers nuanced insights, especially in the context of broader productivity metrics. The emphasis on TFP resonates with the broader economic literature, where the comprehensive measurement of productivity, including all inputs, is often deemed more revealing [18].

Investment in human capital is widely regarded in economic literature as a critical driver of labor productivity, and the results of this research align with the literature (see, e.g., Murphy and Topel [19]) for Pakistan. Investments in human capital enhance the workforce's skills, knowledge, and overall capabilities, leading to more efficient and productive labor. Well-educated and trained workers are generally more adept at problem-solving, innovation, and adapting to new technologies, crucial for productivity growth in modern economies.

Including CPI growth as a proxy for macroeconomic stability and telephone subscriptions as a proxy for technological advancement introduces additional layers to the analysis. The positive association between CPI Growth and labor productivity potentially underscores the stabilizing effect of controlled inflation on economic output. This finding could be juxtaposed against the backdrop of Pakistan's economic landscape. Meanwhile, the burgeoning number of telephone subscriptions, a surrogate for technological advancement, further reinforces technology’s pivotal role in driving productivity growth.

Additionally, this research included Access to Financial Services in the analysis, which shows a significant positive coefficient. However, the limited data availability reduces the number of observations in the regression model to less than 20. Therefore, it was not included in the main model. However, it is interesting to note that despite a significant reduction in the observations, including this variable, does not change the main conclusions. The researchers for this paper also believe that capital deepening adequately captures the credit side of access to finance as Pakistan has a bank-based financial system [20].

In conclusion, the empirical findings from this research offer valuable insights into Pakistan's economic policy. They underscore the importance of technology integration in capital investment, the need for macroeconomic stability, and the potential of telecommunications as a foundation for technological

advancement. These conclusions align with other countries' global economic trends and experiences, offering Pakistan a roadmap that blends global best practices with its unique economic context.

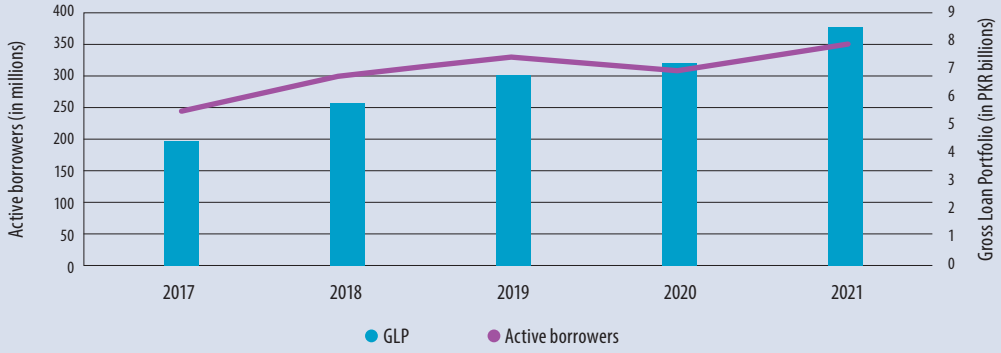
Sources of Funds and Challenges Faced in Finance/Credit Accessibility

In Pakistan's diverse financial landscape, many financial institutions play crucial roles in facilitating lending and credit services to cater to diverse needs of the population and businesses. Among the most prominent are the commercial banks, which stand as the backbone of the financial sector, offering an extensive array of services ranging from personal loans and mortgages to corporate financing. These banks operate under the stringent regulations of the State Bank of Pakistan, ensuring a stable and secure environment for both lenders and borrowers. In addition to commercial banks, Development Finance Institutions (DFIs) hold a significant position, primarily focusing on providing long-term financing solutions to foster industrial growth and economic development. These institutions are crucial in bridging the financial gaps in sectors vital for the country's progress, yet often overlooked by traditional banking channels.

Similarly, microfinance banks also play a critical role, especially in empowering the underserved and rural populations. By providing access to financial services and small loans, these institutions contribute to poverty alleviation and promote entrepreneurship at the grassroots level. Figure 8.3 highlights microcredit network outreach and gross loan portfolio. Their operations are tailored to accommodate the unique needs of low-income individuals and small businesses, facilitating financial inclusion and economic participation. Adhering to Shariah-compliant financial practices, Islamic banks offer an alternative to conventional banking, ensuring that the population's financial needs fulfill Islamic principles. These banks have gained popularity and acceptance, reflecting the country's cultural and religious values in their financial dealings.

FIGURE 8.3

MICROCREDIT OUTREACH IN PAKISTAN



Source: Pakistan Microfinance Network Report (2021).

Specialized banks in Pakistan complement the services provided by conventional banks, offering various financial products, including loans and credit facilities. Although they may not possess a full range of services, their contribution to the financial sector is noteworthy as they cater to specific niches and provide specialized services. For instance, agricultural bank, Zarai Tarqiati Bank Limited (ZTBL), focuses on the agrarian sector and provides crucial financial support to farmers and agribusinesses, ensuring credit availability for agricultural production and related activities. This sector is paramount to Pakistan's economy and such banks play a vital role in its sustenance and growth.

In summary, these financial institutions address the varied financial needs of individuals, businesses, and sectors, playing indispensable roles in fostering economic growth, financial stability, and social development. The regulatory structure of the State Bank of Pakistan ensures that these institutions operate within a framework of transparency, stability, and integrity, and simultaneously, safeguard the interests of all stakeholders and contribute to the nation's prosperity.

In Pakistan's informal credit market, *Arthis* holds a unique and pivotal position, particularly within the agricultural sector, serving as middlemen or commission agents who bridge the gap between small farmers and formal financial institutions or markets. These local agents are deeply entrenched in rural areas and agricultural markets, providing services ranging from extending credit to facilitating market access. *Arthis* are known to offer short-term loans to small farmers and rural households, aiding them in procuring essential agricultural inputs, such as seeds and fertilizers and catering to their personal and household financial needs.

In addition to their role in credit provision, *Arthis* also act as intermediaries in the market, leveraging their established networks and relationships with buyers to assist farmers in selling their agricultural produce, often providing critical market information that aids farmers in making informed decisions about when and where to sell their goods. Despite their significant role in the agricultural credit system, *Arthis* have been criticized and scrutinized primarily due to their association with high interest rates and potentially exploitative practices. The loans provided by *Arthis* are notorious for their exorbitant interest rates, which can trap small farmers and rural households in a cycle of debt, hindering their financial stability and economic progress. There have been instances of manipulative practices, including the falsification of weights and measures and the undervaluing of produce, which further exacerbate the financial vulnerabilities of the farmers. The transactions conducted by *Arthis* are predominantly informal and lack transparency, creating a veil of uncertainty around the terms of credit and the true cost of borrowing, leaving farmers in a precarious position.

The dependence of small farmers on *Arthis* for both credit and market access has raised concerns about the bargaining power of farmers as it often results in a diminished share of the final market price for their produce. Recognizing these challenges, the government of Pakistan, alongside various NGOs, has been actively working to instigate reforms within the agricultural credit system. These efforts are aimed at diminishing the reliance on *Arthis*, promoting financial literacy among farmers, enhancing access to formal financial institutions, and fostering transparent and equitable practices within agricultural markets. The overarching goal of these initiatives is to empower farmers, ensuring that they are equipped with the knowledge and resources needed to navigate the credit market independently, ultimately contributing to the sustainable development and prosperity of the agricultural sector in Pakistan.

Access to credit in Pakistan is fraught with numerous challenges stemming from a complex interplay of economic, social, and institutional factors. A significant portion of the population, particularly in rural areas, faces limited financial inclusion due to the scarcity of physical banking infrastructure and a pervasive lack of financial literacy. This rural-urban divide is exacerbated by stringent loan approval criteria imposed by formal financial institutions, including demanding collateral requirements and the necessity for a robust credit history and extensive documentation, conditions many small businesses and individuals find insurmountable. Consequently, a substantial segment of the population turns to informal lenders despite the often exorbitant interest rates and exploitative terms associated with such borrowing as these lenders do not demand stringent documentation or collateral. The informal credit market, however, is largely unregulated, posing significant risks to borrowers and potentially trapping them in cycles of debt.

Economic and political instability further complicates the credit landscape in Pakistan. Macroeconomic challenges, such as inflation, fluctuating interest rates, and economic downturns can constrict credit availability and elevate costs. Political uncertainty, manifested in frequent policy changes and instability in the financial sector, can deter financial institutions from extending credit, creating an environment of hesitancy and unpredictability. Technological barriers also play a role, as limited

access to digital financial services, particularly in remote areas, and cybersecurity concerns can impede the adoption of digital credit solutions.

Gender disparities present another formidable challenge, with cultural and social barriers significantly limiting women's access to credit and financial services, thereby perpetuating gender inequalities in financial inclusion. On the institutional front, Pakistan grapples with an inefficient legal framework for credit and financial services, leading to protracted loan processing and approval times. The lack of comprehensive credit information and underdeveloped credit bureaus hinder the accurate assessment of borrowers' creditworthiness, further complicating the credit approval process.

Digital and mobile banking has created an avenue for the increase in the use of financial services and resources by the marginalized segments of society. All leading banks are providing digital banking services in Pakistan which has increased the ease of use of banking services significantly. According to the State Bank of Pakistan's 2021 annual report, 93.4 million transactions were made by using internet banking worth (PKR5,661.3 billion). Similarly, mobile banking transactions have also increased significantly from 82.8 million in 2020 to 193.4 million in 2021.

Addressing these multifaceted challenges necessitates a holistic approach, encompassing policy reforms, financial infrastructure development, initiatives to enhance financial literacy, and promoting inclusive and sustainable financial practices. The goal is to create an enabling environment that facilitates easy access to credit, fosters economic growth, and promotes financial stability across all segments of the Pakistani population.

Access to Finance and Labor Productivity in the Informal Sector: Case Studies from Pakistan

Below are two case studies that successfully imparted microcredit to SME entrepreneurs in Pakistan.

Case Study: Kashf Foundation

Kashf Foundation was established in 1996 as Pakistan's first specialized microfinance institution. It is a nonbanking microfinance company that comes under the supervision of Pakistan's Securities and Exchange Commission. It initially modeled itself after the Grameen Bank of Bangladesh. Kashf primarily focuses on low-income households in the informal sector, offering financial and nonfinancial services aimed at positive impacts. The impact ranges from increased human capital, physical capital, and a better standard of living. Here, the focus is only on the economic implications of access to finance. Kashf offers loans ranging from PKR10,000 to PKR60,000 (approximately USD36 to USD215) under various loan schemes for small and micro entrepreneurs.

A study[1] in 2015 using ex-post interviews revealed that clients primarily used Kashf's microcredit for working capital in various enterprises. About 98% of the loans were used for productive activities while only 2% went toward consumption. This business-focused loan utilization trend was consistent among new and long-term clients. Notably, 68% of borrowers invested in existing businesses, 30% started new ones, and 2% used funds for other needs (marriages, home repairs, or business debt repayment).

The impact of these loans on the household income contributed significantly to promoting "economic capital", which enhances the household's financial standing during financial hardships.

About 96% of clients reported an increase in their income with 68% attributing their revenue growth to business expansion and 27% shared their income increased from starting new businesses. Moreover, 94% of clients reported savings in the form of committees (individuals coming together to save money

[1] Kashf Foundation (https://kashf.org/publications-2/).

collectively, a common cultural practice in Pakistan) or at home after availing the financial and nonfinancial services from Kashf. Overall, Kashf's impact through improved access to financial and nonfinancial services was high. The main drivers that contributed to this impact were the increase in income due to business expansion (in the form of new product lines or establishing new ventures), monthly savings, and improved human capital.

Case Study: Akhuwat

Akhuwat is a nonprofit organization that was founded in 2001. It has more than 800 branches in all four provinces of Pakistan with an extensive outreach to 400 cities. It provides interest-free loans to people at the grassroots level, educational and health services, and caters to the needs of the marginalized segments of society. It has disbursed over 5.4 million microcredit loans worth PKR180 billion to help 3 million families across Pakistan.

An impact assessment conducted by the Portsmouth Business School at the University of Portsmouth surveyed 500 new clients of Akhuwat and a comparison group of 100 nonclients on the microcredit program. Data was collected in May 2015, and the same clients were reinterviewed in May 2017. Findings suggest a huge economic impact on labor productivity and business expansion attributable to access to finance. The report's findings are summarized as the following:

- 77% of clients reported improved living standards
- Almost three-quarters of Akhuwat's clients (74%) reported higher sales in 2017 compared to two years earlier
- 34% reported increased business assets and 18% in orders
- Positive impact can be seen on local employment with 69% of clients reported working alone in 2015 and this proportion had fallen to 54% in 2017. The Akhuwat clients employed an additional 191 people in their businesses

These case studies illustrate the critical role of access to finance in enhancing labor productivity within the informal sector and making micro businesses more successful and sustainable.

Policy Interventions

Pakistan has implemented various initiatives to support small-scale, informal entrepreneurs, recognizing their crucial role in economic development, job creation, and poverty alleviation. The following is an overview of the measures and programs implemented:

- **National SME Policy 2021**

  Pakistan's federal government has established a comprehensive policy to support and incentivize the growth of SMEs. The SME policy includes initiatives, such as eliminating the No Objection Certificate (NOC) requirement, introducing the "Aasan Finance Scheme" for collateral-free loans (up to PKR10 million), facilitating land allocation in easy installments, and providing tax breaks to productive enterprises and women entrepreneurs. The SME agency has been allotted PKR30,000 billion over five years.

- **Access to finance**

  The government and financial institutions have introduced specialized loan and financing programs for SMEs, providing them easier access to capital. Credit guarantee schemes have been established to mitigate risks for lenders, thereby encouraging banks to extend loans to SMEs. The Prime Minister's Youth Business and Agriculture Loan Scheme is one example of a specialized loan scheme.

- **Capacity building and training**

  Several initiatives, such as Kamyab Jawan program, have been launched to enhance the skills and capacities of SMEs and informal sector entrepreneurs, helping them manage their businesses more effectively. They receive mentorship and advisory services to guide them through various aspects of business management, including financial literacy, marketing, and operations.

- **Policy reforms and regulatory support**

  Efforts are being made to simplify the regulatory procedures and reduce the bureaucratic hurdles that are often faced by SMEs. The government has introduced tax incentives and concessions for SMEs to reduce their financial burden and promote growth. SME Registration Portal (SMERP) allowed the registration of 324 SMEs, with 236 SMEs receiving SME Size Certificates.

- **Market access and promotion**

  Programs have been initiated to assist SMEs in accessing both local and international markets, helping them to expand their customer base. Efforts are being made to promote products manufactured by SMEs, including through exhibitions, trade fairs, and online platforms.

- **National Business Development Program**

  In Pakistan, SMEs can get help from SMEDA's National Business Development Program for SMEs (NBDP). These are some important features of this program:

  a. SME Business Helpline: This service helps small and medium businesses start a business, get licenses and taxes, and import and export

  b. SMEDA One Window (SOW): A platform that helps people start their businesses by letting them validate their business ideas, register their businesses, and transition to e-commerce

  c. Training support program: This is a program that helps small businesses and people who want to start businesses by giving them training in areas, like managing employees, managing finances, creating products, branding and marketing, and online shopping

  d. Stage of growth start-up grant: This grant gives money to entrepreneurs who have finished the required program for business development

- **Technology and innovation**

  Initiatives are in place to encourage SMEs to adopt modern technologies and innovative practices to enhance their competitiveness. Financial and technical support is provided for SMEs' R&D activities. With a focus on the future, the Kamyab Jawan program encourages young people to engage in technology and innovation. It particularly supports tech-driven start-ups and innovative solutions to contemporary challenges.

- **Infrastructure development**

  The government is actively developing industrial estates and special economic zones that provide SMEs with the essential infrastructure and facilities conducive to their operations.

- **Strengthening institutional support**

  Institutions and authorities dedicated to SME development have been established to provide focused support and resources. Facilitation centers have been set up to provide one-stop solutions for various business needs, including registration, licensing, and access to finance.

- **Fostering entrepreneurial culture**

  Programs and campaigns are being run to promote entrepreneurship, especially among the youth, and to create a supportive ecosystem for start-ups and SMEs.

- **Addressing gender disparities**

  Specific initiatives and programs have been introduced to bolster support for women entrepreneurs and promote gender inclusivity within the SME sector. A significant aspect of the Kamyab Jawan program is its commitment to empowering young women. It aims to provide equal opportunities for women in education, employment, and entrepreneurship.

  By implementing these measures, Pakistan aims to create a conducive environment for the growth and development of informal and SME firms, ultimately contributing to the country's economic prosperity and social development.

Conclusion and Discussion

In summarizing the critical insights gained from exploring the informal economy's productivity and access to credit, it is imperative to highlight the informal sector's vital role in the nation's economic fabric. The informal sector in Pakistan, marked by its small-scale, unregistered, and largely unregulated enterprises, has become a pivotal part of the nation's GDP. It serves as a major employment provider, particularly in rural areas. Even with its considerable contribution to the economy, the sector encounters numerous obstacles, foremost among them being restricted access to formal financial services. This deficiency not only hampers the growth potential of informal businesses but also impacts labor productivity.

The informal sector in Pakistan grapples with significant financial acquisition challenges. Stringent loan conditions imposed by formal financial institutions, compounded by prevalent financial unawareness, and a dearth of banking infrastructure in rural areas, severely limit access to credit. The sector's hallmark absence of formal registration and inadequate financial records further hinder these businesses from meeting the criteria for conventional loans. Consequently, many turn to informal lending channels, which, while more readily accessible, often impose steep interest rates, potentially leading to exploitative arrangements. Such circumstances not only impede the progress and sustainability of these informal businesses but also trap them in a persistent cycle of indebtedness and fiscal volatility.

Financial accessibility is a pivotal factor in boosting labor productivity. It equips businesses with the means to channel investments into essential areas, such as capital, cutting-edge technology, and workforce skill enhancement - all critical drivers of productivity. Specifically, within Pakistan's informal sector, improved access to financial services could lead to integrating contemporary technologies and methods, streamlining processes, diminishing expenses, and elevating the quality of products. Moreover, the availability of financial capital can empower businesses to expand and penetrate new markets, which can generate additional jobs and result in elevated earnings for the workforce.

Addressing the financial divide to enhance labor productivity in the informal sector requires a comprehensive strategy. Policy amendments should be directed at streamlining the borrowing landscape for informal entities. Simplifying business registration, moderating the prerequisites for collateral, and instituting credit guarantee frameworks could significantly lower the barriers to finance. Additionally, educational initiatives that aim to increase financial awareness among entrepreneurs in the informal economy are critical. Such programs would equip them with a better grasp of available financial instruments and services, empowering them to make well-informed choices about borrowing and investment opportunities.

The advancement of microfinance institutions and the incorporation of digital financial services present pioneering avenues to mitigate the issue of financial inaccessibility. These services can markedly dwindle financial entry barriers by issuing modest loans and capitalizing on technological platforms to engage with traditionally underserved communities. The achievements of NGOs, such as the Kashf Foundation and Akhuwat in Pakistan serve as a testament to their efficacy. Their contributions have shown measurable improvements in their clients' economic conditions, highlighting the effectiveness of financial initiatives in revolutionizing the informal sector.

In enhancing the integration and productivity of the informal sector, innovative financing solutions tailored to the unique needs of informal businesses are vital. These measures not only facilitate immediate access to financial capital but also lay the future foundation for sustainable growth and development in the country.

Empirical observations from Pakistan shed light on the significant impact of financial resource availability on labor productivity. The experiences of organizations like the Kashf Foundation and Akhuwat demonstrate that targeted financial support to informal sector ventures results in marked enhancements in operational procedures, revenue streams, and employment opportunities. Such instances emphasize the pivotal function of financial accessibility in allowing informal enterprises to channel investments into areas that boost productivity, encompassing technological upgrades, skills training, and market diversification.

To address the informal sector's financial exclusion requires an essential collaborative approach involving governmental bodies, financial entities, and developmental agencies. Implementing policies acknowledging the informal sector's role in the economic framework and initiatives to transition these businesses into the formal economy can boost their qualification for established financial services. Moreover, creating tailored financial offerings for the informal sector's unique needs, including microloans, adaptable repayment plans, and reduced interest rates, could significantly ease economic challenges faced by these enterprises.

The digital transformation in financial services heralds a substantial opportunity to enhance financial inclusivity for the informal sector. The proliferation of mobile banking and online payment systems has the potential to bring financial solutions to remote and underbanked communities, reducing reliance on unregulated credit networks. Furthermore, digital mediums to deliver financial education and entrepreneurial training can equip informal sector business owners with the requisite knowledge and competencies to handle financial affairs effectively and to make informed business decisions.

Forging strong collaborations among government bodies, the financial sector, and NGOs is fundamental in designing and executing effective financial inclusion strategies for the informal sector. Combined efforts can establish a nurturing ecosystem conducive to expanding and formalizing informal enterprises. Such an ecosystem would guarantee that these businesses have access to essential financial resources, thereby improving their productivity and fostering overall economic advancement.

In conclusion, effectively tackling the issue of financial accessibility within Pakistan's informal sector is vital for catalyzing its productivity and economic input. By executing dedicated strategies for financial inclusion, streamlining regulatory infrastructures, and capitalizing on technological advancements, Pakistan can set the stage for a more integrated and efficient informal economy. Such endeavors will enhance the living standards of countless informal sector laborers and fortify the nation's collective economic robustness and developmental course.

Appendix 1

PRODUCTIVITY GROWTH AND CAPITAL DEEPENING IN PAKISTAN

Source: APO.
Note: This figure shows the relationship between the growth of productivity and the growth of the deepening of IT capital in Pakistan.

Appendix 2

OUTREACH OF MICROFINANCE BANKS

	KBL	HBL MFB	Ubank	MMFB	NRSP-B	TMFB	FINCA	POMFB	Advans	SMFB	Subtotal MFB
Active borrowers	806,434	554,520	346,390	2,016,447	317,099	177,987	201,508	55,981	15,059	53,993	4,547,418
Active women borrowers	229,637	165,912	61,558	290,756	25,157	26,047	21,805	16,145	772	53,988	893,777
Gross loan portfolio (PKR' 000)	72,513,035	59,244,624	36,411,345	38,369,833	30,975,486	11,796,071	19,695,729	5,600,002	2,494,002	957,831	278,057,958
Annual per capita income (PKR)*	246,414	246,414	246,414	246,414	246,414	246,414	246,414	246,414	246,414	246,414	246,414
Number of loans outstanding	806,434	554,520	346,390	2,018,447	317,099	177,987	202,094	55,981	15,059	53,993	4,548,004
Depositors	2,671,838	1,765,497	2,739,578	39,829,714	1,199,807	24,624,870	1,327,315	16,597	44,005	103,106	74,322,327
Number of deposit accounts	2,990,122	1,765,497	2,739,578	39,829,747	1,240,365	24,651,620	1,706,490	16,651	44,005	103,106	75,089,181
Number of women depositors	849,197	520,627	143,512	10,987,376	224,789	5,444,178	194,026	4,657	4,491	103,105	18,475,958
Deposits outstanding (PKR' 000)	93,162,369	91,362,605	55,000,290	58,658,397	34,126,738	39,049,724	25,419,127	1,771,283	2,272,273	271,023	401,093,829

Source: SBP Annual Report - Statistical Supplement FY 21.

CHAPTER 9

SRI LANKA

Abstract

In Sri Lanka, the informal sector plays a critical role by providing livelihoods for many people and contribute significantly to economic production. Despite its importance, the informal sector's productivity falls behind that of the formal economy, posing obstacles to overall productivity development and impeding economic progress. Notably, in 2022, approximately 4.7 million individuals (57.4% of the total 8.1 million employed) were engaged in informal employment, demonstrating persisting gender discrepancies (72% male and 28% female workers). Addressing these challenges in Sri Lanka requires a targeted strategy to bridge the credit gap, which hinders job growth, investment, and innovation. Urgent actions are needed from the government, financial intermediaries, and the private sector to bolster financial access and stimulate economic growth to transition informal enterprises into formal entities. Collaboration among stakeholders is integral to overcoming financial accessibility constraints and realizing the full potential of Sri Lanka's informal sectors. Informal enterprises in Sri Lanka may become catalysts for long-term and inclusive economic advancement by concentrating on productivity enhancement, financial literacy promotion, and economic development contributions. This study aims to look at the processes of Sri Lanka's informal sector and the impact they have on productivity growth. The goal is to explore viable ways to improve the sector's performance in the national economic framework with a focus on improving financial accessibility to drive the informal economy toward a more productive and inclusive future.

Introduction

The "informal economy," as defined by the IMF, represents a significant yet unrecorded segment of an economy engaged in activities generating market value but not captured in GDP or tax frameworks due to information gaps [1]. Economic activities excluded from formal agreements, whether by law or practice, fall under the umbrella of the informal economy, as defined by the ILO [2]. Particularly prevalent in developing nations, the informal sector plays a crucial role in both the labor market and the economy. Understanding the informal sector is vital for comprehensive GDP estimates and assessing its impact on job creation, revenue generation, and overall economic output [3].

Inconsistencies between Sri Lankan statistical definitions and the international standards endorsed by the 15th International Conference of Labour Statisticians (15th ICLC) and the System of National Accounts (SNA) 1993 have been identified. These differences, including variations in data sources, survey coverage, and criteria for defining the informal sector, affect the international comparability of informal sector data. Common criteria for defining the informal sector include organization registration status, use of accounting systems, and organization size [3].

In 2013, revisions to the labor force survey questions aimed to enhance statistics on informal sector employment in Sri Lanka, ultimately leading to the finalization of a formal statistical definition for informal employment in 2017 [3].

Key aspects of identifying informal employment:

- Unpaid family workers
- Employers and own-account individuals in the informal sector
- Wage earners without permanent employers
- Wage earners whose employers do not contribute to pension schemes or provident funds on their behalf

Productivity growth in the informal economy presents unique challenges distinct from those in the formal sector. Characterized by unregistered and often small-scale economic activities, the informal economy significantly influences economic development and individual well-being. Evidence suggests a notable "productivity gap" between formal and informal ventures, with formal enterprises typically exhibiting higher productivity levels. However, this gap appears more pronounced in newly established ventures compared to well-established ones and does not seem to vary significantly on the gender of the business owners [4].

Background Statistics on Informal Economy in Sri Lanka

The informal sector in Sri Lanka constitutes a significant contribution to both the labor market and the economy. Accurate measurement of this sector is essential for comprehensive GDP estimates and understanding its impact on employment creation and income generation.

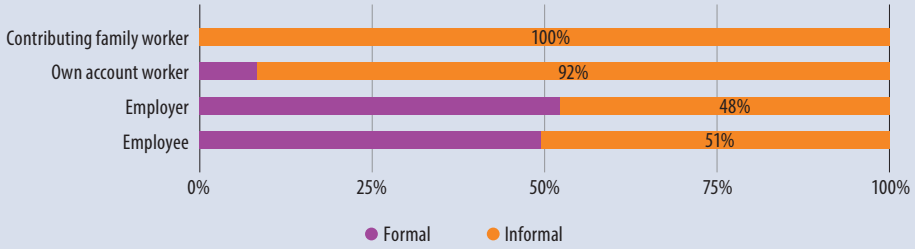
Several criteria are pivotal for identifying and highlighting the informal sector:

- **Organizational registration:** Establishments officially registered with the Department of Inland Revenue or the Employment Provident Fund are considered formal
- **Accounting procedures:** Institutions maintaining formal records are regarded as formal
- **Total number of regular employees:** Companies with 10 or more regular employees are categorized as formal

Based on these criteria, informal employment accounts for two-thirds of total employment in Sri Lanka. In 2022, approximately 4.7 million individuals (57.4% of the total 8.1 million employed) were engaged in informal employment [3]. Notably, a significant proportion of workers (800,000 individuals, comprising 9% of total employment or 22% of formal sector employment in 2019) maintain informal contractual relationships while working in formal enterprises, without contributing to social security programs [5].

FIGURE 9.1

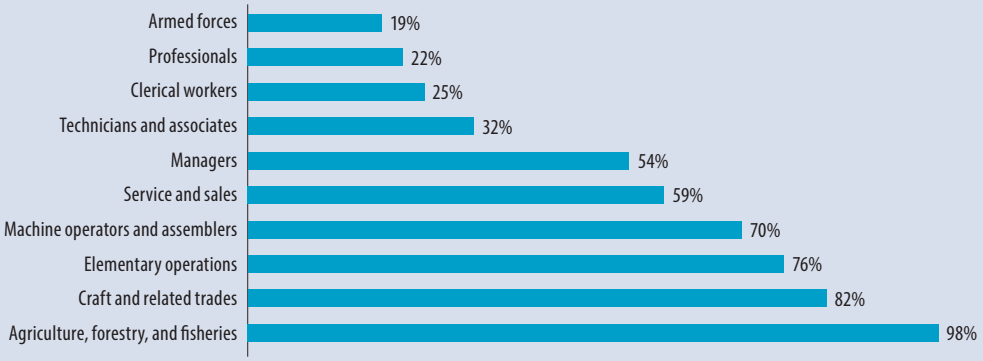
DISTRIBUTION OF INFORMAL AND FORMAL SECTOR EMPLOYMENT BY EMPLOYMENT STATUS IN 2022



Source: Sri Lanka Labour Force Survey 2022, Department of Census and Statistics [3].

FIGURE 9.2

PERCENTAGE OF INFORMAL EMPLOYMENT BY OCCUPATIONS



Source: Sri Lanka Labour Force Survey 2022, Department of Census and Statistics [3].

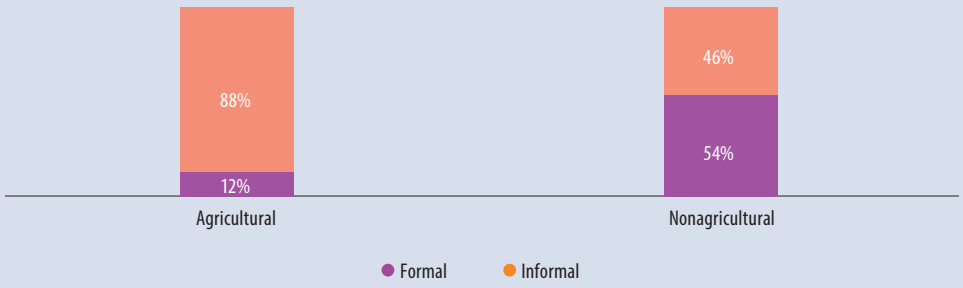
In Sri Lanka, informal employment has exhibited a pronounced concentration in the primary and trade sectors over the last two decades. The agricultural, forestry, and fisheries sectors emerge as the primary contributors to informal employment, with a significant percentage of the workforce engaged in these activities [3]. Additionally, craft and allied trade sectors, encompassing building, mining, textiles, and basic vocations, such as street vending, domestic work, and daily wage labor, also feature prominently in informal employment figures [3].

This concentration underscores the diverse nature of informal employment in Sri Lanka, spanning across various sectors and encompassing a wide range of occupations. It reflects the prevalence of informal work arrangements in both traditional sectors, like agriculture, and emerging sectors, such as craft and allied trades, highlighting the complex dynamics of the informal labor market.

Figure 9.3 illustrates that informal employment is predominant in the agriculture sector, accounting for 88% of total employment within this sector. In contrast, the nonagriculture sector also exhibits a substantial proportion of informal employment, amounting to 46% of total employment in this sector.

FIGURE 9.3

DISTRIBUTION OF INFORMAL AND FORMAL EMPLOYMENT BY ECONOMIC SECTOR IN 2022



Source: Sri Lanka Labour Force Survey 2022, Department of Census and Statistics [3].

When examining the gender distribution of informal employment, Figure 9.4 highlights that males constitute the majority of the workforce, comprising 72% of informal employment. In contrast, females represent 28% of informal employment, indicating a notable gender disparity within the informal sector.

FIGURE 9.4

DISTRIBUTION OF INFORMAL AND FORMAL EMPLOYMENT BY GENDER IN 2022

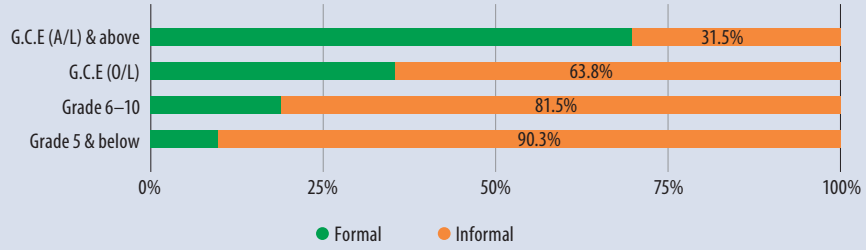
Source: Sri Lanka Labour Force Survey 2022, Department of Census and Statistics [3].

Economists and anthropologists challenge the validity of the dual economy paradigm in analyzing the informal sector. They argue that while formal and informal sector enterprises may differ in aspects, such as capitalization, organization, labor processes, and market penetration, they are often interconnected within a unified political economy [6].

This perspective emphasizes the intricate interplay between the formal and informal sectors within the broader economic context, suggesting that the boundaries between them are not as distinct as traditional models may imply. Instead, informal sector activities are deeply embedded within the overarching political and economic structures, shaping and being shaped by the broader socioeconomic dynamics.

FIGURE 9.5

DISTRIBUTION OF INFORMAL AND FORMAL EMPLOYMENT BY LEVEL OF EDUCATION IN 2022



Source: Sri Lanka Labour Force Survey 2022, Department of Census and Statistics [3].

Sri Lanka Government's Approach toward Informal Economy

Many informal workers face challenges in accessing training and support services essential for enhancing their productivity and competitiveness. This lack of access to resources can hinder their ability to develop skills and improve their economic prospects.

To address this issue, the Tertiary and Vocational Education Commission (TVEC) plays a crucial role in overseeing the provision of Recognition of Prior Learning (RPL) certification to informal workers as part of the Sri Lankan government's policy for the informal sector. Through this initiative, informal workers can receive official recognition for their qualifications and experiences, which can in turn boost their productivity and contribute to the overall expansion of the economy.

However, despite the efforts of organizations like the TVEC, financial accessibility remains a significant barrier for many informal workers seeking to access training and support services. Without adequate financial resources, these workers may struggle to afford the costs associated with training programs and certification processes. As a result, there is a need for targeted interventions and policies aimed at improving financial accessibility for informal workers, ensuring that they can fully benefit from initiatives, like the RPL certification program.

Continuing with the focus on enhancing financial accessibility for informal workers, the Sri Lankan government could implement policies aimed at curbing the challenges posed by informal lending practices. One effective approach involves tighter regulation of money lenders, a common recourse for individuals in the informal sector. Often, these lenders impose exorbitant interest rates, trapping workers in cycles of debt and exacerbating their financial vulnerability.

To mitigate this issue, the government could promote alternatives to informal lending, such as microfinance programs overseen by the Central Bank of Sri Lanka under the Microfinance Act No. 6 of 2016. By regulating and standardizing microfinance operations, these programs provide informal workers with access to more affordable and transparent financial services tailored to their specific needs. Such initiatives not only protect the rights and interests of microfinance customers but also advance broader development objectives, including financial inclusion, poverty reduction, and inclusive economic growth [7].

Main Causes of Informal Economy in Sri Lanka

Characteristics of Informal Workers

The informal economy in Sri Lanka has been instrumental in driving economic development, providing employment opportunities, and serving as a safety net for millions of individuals. Predominantly characterized by small-scale operations, lack of formal registration, and exemption from regulatory frameworks concerning social protection and occupational safety, the informal sector constitutes a vital component of the country's economic landscape. However, its low capital accumulation, minimal savings and investment rates, and subpar productivity render it vulnerable to economic fluctuations [5].

Studies, such as the one conducted by Senanayake, Wimalaratana, and Premaratna in 2015, underscore the prevalence of the informal sector in traditional industries, particularly the agriculture and related sectors, which form the cornerstone of Sri Lanka's economy [6].

The income gap between formal and informal sector workers further highlights the disparities within the economy. Research findings reveal a substantial 10% income differential between the two sectors, indicating variations in the returns on education for workers in formal versus informal employment [8].

The decision to engage in informal sector activities in Sri Lanka stems from a multitude of factors:

i) Access to education, training, and skill development

The study [9] indicates that older, educated males tend to gravitate toward public salaried jobs, whereas younger individuals with comparable education levels but fewer family obligations are more likely to be unemployed. Interestingly, those in the informal sector share similarities with public sector workers in many aspects, except for education levels. They also tend to come from rural areas with limited resources, indicating that they are often forced into informal work rather than choosing it willingly.

Furthermore, higher formal education alone doesn't guarantee desirable employment in the private sector. Professional qualifications, often requiring proficiency in English and significant financial investment, are also critical. Language skills and personal attributes are crucial for job acquisition, highlighting gaps in the education system.

Public-sector employees have superior education levels and receive more professional training while informal workers rely more on on-the-job training, given their older age demographic. This

underscores the need for education reform tailored to market demands and equitable access to training across all sectors [9].

ii) Access to innovation and technology (ICT)

The emergence of the gig economy has brought about significant transformations in the employment landscape, especially for informal workers seeking alternative income opportunities. This burgeoning sector encompasses a wide range of short-term, flexible jobs facilitated through digital platforms, connecting workers directly with consumers or businesses. In Sri Lanka, the gig economy is rapidly expanding, with an estimated 17,000–20,000 workers engaged in web-based digital economic activities, experiencing an annual growth rate of 17% [10].

This shift presents numerous advantages for informal workers. Firstly, it offers increased flexibility, allowing individuals to determine their own schedules and work locations. This flexibility is particularly beneficial for those managing multiple responsibilities or facing barriers to accessing formal employment opportunities. Additionally, participation in the gig economy enables workers to monetize various skills, fostering entrepreneurship and autonomy [11].

Despite these advantages, challenges persist within the gig economy, including job insecurity, lack of employment benefits, and potential exploitation. Informal workers may experience uncertainties regarding consistent income and may not receive the same level of legal and social protections as formal workers [11].

As policymakers and businesses navigate the evolving landscape of work, addressing these challenges becomes imperative. It is essential to strive for a balance that maximizes the advantages of gig work while safeguarding the well-being and rights of informal workers. However, it is important to note that as contractors, digital platform workers often lack access to labor protections, such as paid leave, worker's compensation, fair termination, and unemployment benefits as well as social protection offered by the state. They may also face long hours, low pay, a lack of transparency regarding ratings and work allocation, and increased risks of harassment and discrimination. Moreover, limitations on collective bargaining and access to grievance mechanisms further reduce their ability to advocate for better working conditions [11].

iii) Access to market

Agribusiness holds significant importance in Sri Lanka, particularly within the informal sector, acting as a bridge between local agricultural producers and global markets. Within this sector, home-based work is prevalent, reflecting the substantial reliance on agriculture and related activities among a large portion of the population. Home-based workers are often smallholder farmers and engaged in various agricultural tasks, particularly in out-grower schemes connecting them with buyers [12].

Nearly 90% of agribusinesses in Sri Lanka operate on a small scale and are home-based, involving entire families in production. However, women tend to undertake the most time-intensive tasks in crop production, with their involvement primarily driven by the convenience of home-based work [12].

Livestock production, another key aspect of smallholder farming, also predominantly operates within the informal sector, facing similar challenges and vulnerabilities. While women play a significant role in small-scale poultry production, their participation decreases in more technologically complex aspects of the dairy value chain, highlighting gender disparities [12].

However, home-based producers often face challenges accessing the supply chain, relying heavily on middlemen. This reliance leads to power imbalances and information gaps, hindering productivity and efficiency in the informal agricultural sector. Addressing these disparities is essential for promoting equitable and efficient agribusiness supply chains in Sri Lanka [12].

iv) Access to finance

Access to bank accounts plays a crucial role in facilitating savings among home-based workers, revealing significant disparities across South Asian countries. While Sri Lanka and India demonstrate relatively higher rates of bank account access among home-based workers, Bangladesh, Nepal, and Pakistan lag behind in this regard. In these nations, informal channels, such as neighbors, relatives, and friends often serve as the primary sources of borrowing, except in Sri Lanka, where traditional money lenders still wield considerable influence.

To address the diverse financial needs of home-based workers, various institutions, including NGOs, rural banks, and microfinance cooperatives, provide critical services, particularly in Sri Lanka. Despite the existence of informal savings groups, a significant proportion of home-based workers in the region remain unbanked, impeding their ability to save effectively and access formal credit facilities. This reliance on informal lending sources highlights the pressing need for enhanced financial inclusion initiatives, specifically tailored to the unique circumstances of home-based workers across South Asia.

Efforts to expand access to formal banking services for home-based workers can yield numerous benefits, including improved financial security, increased savings, and better access to credit for investment in livelihood activities. By providing access to formal financial services, such as savings accounts, credit facilities, and insurance products, governments and financial institutions can empower home-based workers to better manage their finances, mitigate risks, and enhance their economic resilience. Therefore, prioritizing financial inclusion initiatives targeted at home-based workers is crucial for fostering inclusive economic growth and reducing poverty in South Asia [12–13].

Informal Sector Productivity and Credit Access

Financial Accessibility, Informal Economy, and Productivity Growth

The issue of informal sector productivity and access to credit poses significant challenges in Sri Lanka. According to the 2011 World Bank Enterprise Survey on Sri Lanka [14], formalization alone may not necessarily lower the barriers to accessing formal credit. Access to finance ranks among the most pressing challenges for businesses in the country, second only to the practices of the informal sector. Traditional lending processes employed by commercial banks often involve lengthy approval stages and require substantial collateral, making lending inaccessible to many creditworthy firms, especially small and medium enterprises (SMEs). The preference for land as collateral further complicates matters, as a large portion of land belongs to the government, and SME-owned land lacks clear deeds necessary for banking as collateral [15–16].

Empirical assessments highlight the lack of access to capital as a significant constraint on the expansion of SMEs in Sri Lanka [17]. Despite a diverse financial system in Sri Lanka, including various institutions, such as the Central Bank, commercial banks, and microfinance institutions, access to formal financing remains challenging for many in the informal sector. Traditional banking institutions often cater to established individuals, leaving many low-income individuals without access to formal credit [18].

The sources of finance for the Sri Lankan informal sector include own savings or earnings, family contributions, informal financial institutions, formal financial institutions, trade credits, and informal financial intermediaries [17]. Additionally, informal sources, such as money lenders and rotating savings and credit associations (ROSCA) are prevalent in Sri Lanka [19].

Studies on Sri Lankan SMEs reveal that around 40% of enterprises have access to formal funding while approximately 30% rely on trade credits and informal financial intermediaries [20]. Moreover, research suggests that growth in gross capital formation and labor force participation rates strong

positive influence on economic growth in Sri Lanka and other South Asian Association for Regional Cooperation (SAARC) countries [20].

Addressing the challenges of informal sector productivity and credit access requires comprehensive strategies aimed at improving financial inclusion, streamlining lending processes, and expanding SMEs' access to formal credit in Sri Lanka.

Concerns Surrounding Informality: Poverty, Productivity, and Public Finance

The pervasive nature of informality raises concerns across three main dimensions: poverty, productivity, and public finance. Informality is often associated with heightened poverty and vulnerability due to the precarious nature of informal jobs and the lack of social security benefits [21]. Moreover, resource misallocation within informal firms, attributed to limited credit access and reliance on informal networks, hampers productivity and growth potential. Informal firms' tendency to remain small to evade regulations exacerbates this issue, contributing to output differentials between rich and poor countries [22]. Furthermore, informality undermines state revenue collection and fiscal sustainability by operating outside the purview of regulations, thereby impeding state revenue generation [21, 23].

Access to Credit, Informal Economy, and Productivity

The productivity levels in Sri Lanka from 2019 to 2022 showed significant fluctuations, particularly impacting informal businesses. There were declines in productivity within the industrial and service sectors, leading to an overall decrease in national productivity.

TABLE 9.1

LABOR PRODUCTIVITY TRENDS IN SRI LANKA BETWEEN 2019–22

Sector	2019 (LKR per hour worked)	2020 (LKR per hour worked)	2021 (LKR per hour worked)	2022 (LKR per hour worked)	Percentage Change (2021–22)
Agriculture	192.46	177.54	243.04	243.94	+0.4%
Industry	540.70	611.89	922.15	759.80	-17.6%
Services	624.33	764.29	945.97	839.85	-11.2%
Overall	513.17	577.17	768.08	686.57	-10.6%

Source: Annual Report 2021–22, Central Bank of Sri Lanka [7].

Improving financial accessibility for informal workers is crucial to address the challenges faced by the informal economy and to improve productivity. Limited access to financial resources poses a significant barrier and hinders investments in vital areas, such as skills development, technology adoption, and business expansion. Adequate financial resources play a crucial role in enabling informal workers to access essential training programs, embrace modern technologies, and scale their operations to meet market demands.

Moreover, targeted interventions aimed at improving financial accessibility can unlock hidden talents and foster innovation within the informal sector. However, the realization of this potential is contingent upon the availability of sufficient financial resources. Without adequate funding, many informal workers may struggle to afford the costs associated with training programs or obtain the necessary certifications. Thus implementing policies and initiatives to enhance financial accessibility is essential to empower informal workers, enabling them to fully capitalize on efforts to enhance productivity and competitiveness [7, 21].

A comparative study across five South Asian countries sheds light on Sri Lanka's relatively favorable position concerning the earnings of home-based workers. Approximately half of Sri Lankan home-based workers earn more than USD80 per month during peak seasons, a contrast to the majority of workers in other countries earning up to USD80 per month on average [13].

Financial access remains a challenge for home-based workers, with traditional money lenders playing a significant role in Sri Lanka, unlike in neighboring countries where reliance on friends, relatives, and informal networks is more common.

Insufficient housing space hampers productivity for home-based workers. Limited space in their houses prevents them from taking bulk orders, and competing household needs interrupt work continuity. Moreover, poor-quality housing leads to damage of equipment and materials, further impeding productivity. Addressing these housing challenges is essential for enhancing the productivity and financial accessibility of home-based workers [12,15].

Sample Survey and Empirical Analysis

In November and December 2023, a comprehensive national study was conducted exclusively for this report to explore the financial accessibility of individuals in the informal sector. Supported by field officers and an experienced statistician, the study utilized a standardized questionnaire to collect data across all nine provinces of Sri Lanka, ensuring representation of diverse backgrounds. Analysis of both primary and secondary data highlighted sources of funds and financial challenges within the sector.

To estimate the percentage of informal sector workers with access to finance in Sri Lanka, a minimum of 325 observations were deemed necessary. This figure ensures a 5% margin of error with 95% confidence, accounting for a 10% allowance for nonresponse. (Annex 1: Sample Size Calculation).

Given the absence of a sampling frame, traditional probability-based sampling methods were impractical. Instead, the snowball sampling method was employed to collect data from respondents. This method relies on referrals from initial participants to identify additional respondents within the target population.

Furthermore, the sampling strategy aimed to achieve sector-wise and province-wise proportional representation of respondents. Analysis of informal sector workforce distribution from 2019 to 2021 revealed that approximately 38% were engaged in the agricultural sector while 62% were in nonagricultural sectors.

The province-wise sample selection was based on this distribution, ensuring that the sample adequately represented the demographic and occupational diversity across Sri Lanka's nine provinces. By incorporating sector-wise and province-wise proportions, the sampling method aimed to capture the nuances and variations within the informal sector workforce.

TABLE 9.2

NUMBER OF RESPONDENTS BY PROVINCE

Province	No. of Respondents
Western	68
Southern	49
Central	55
Northern	43
Eastern	29
North-central	30
North-western	44
Uva	23
Sabaragamuwa	32
Total	**373**

Source: Sample survey.

The questionnaire was digitized and converted into an electronic format using Google Forms, enabling data collection in the field through mobile devices, such as smartphones or tablets. This approach facilitated efficient and convenient data collection, allowing for real-time input and streamlined organization of responses.

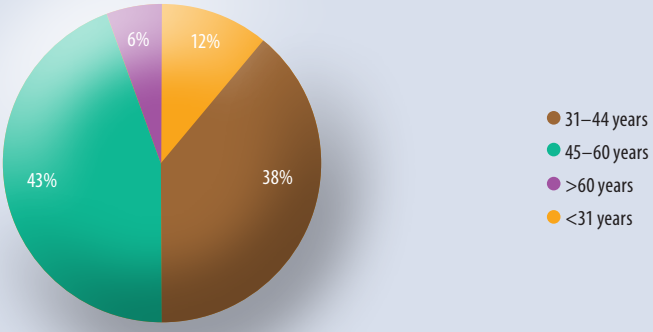
Collected data underwent rigorous analysis utilizing both descriptive and inferential statistical techniques. Descriptive analysis provided insights into the characteristics and trends within the dataset, offering a comprehensive overview of the sample population.

Inferential statistical methods were employed to derive insights beyond the sample and make inferences about the broader population of informal sector workers in Sri Lanka. By extrapolating from the sample data, national-level estimates were generated with a confidence level of at least 95%, ensuring the reliability and validity of the findings.

Figures 9.6 and 9.7 provide a statistical profile of informal sector workers in Sri Lanka.

FIGURE 9.6

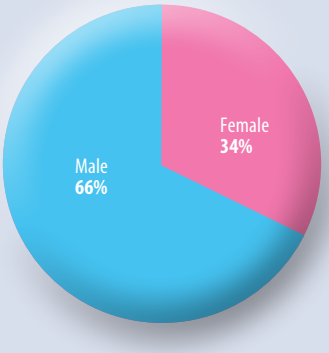
AGE CATEGORIES OF RESPONDENTS



Source: Sample survey.

FIGURE 9.7

GENDER-WISE PARTICIPATION OF RESPONDENTS

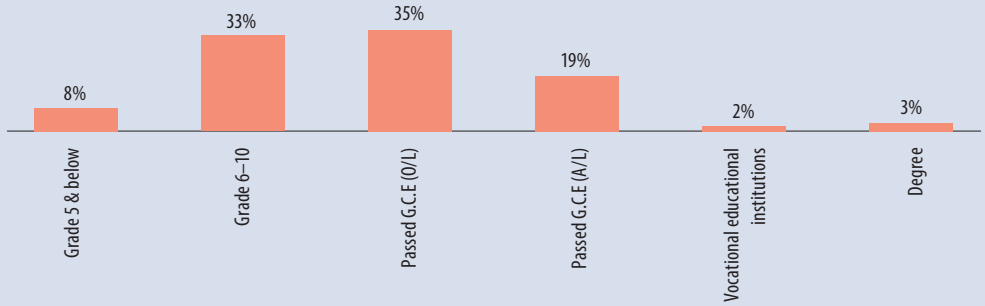


Source: Sample survey.

Statistics reveal that 81% of all employees are between the ages of 31 and 60, with only 12% being under the age of 31 years and almost two-thirds of those workers are men.

FIGURE 9.8

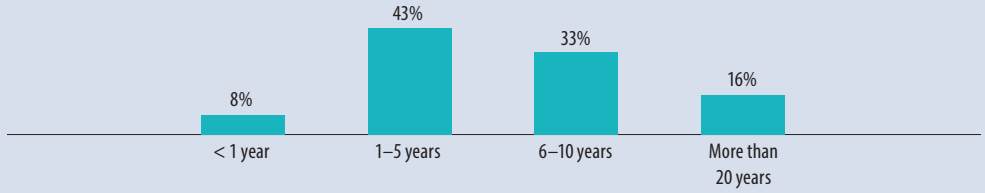
EDUCATION LEVEL OF RESPONDENTS



Source: Sample survey.

FIGURE 9.9

RESPONDENTS' BUSINESS EXPERIENCE



Source: Sample survey.

The percentage of employees who passed the GCE (O/L) and who passed grades 6–10 is 35% and 33%, respectively while only 3% are graduates. The majority of workers (43%) have worked in the informal sector for 1–5 years.

Table 9.3 shows the percentage of informal sector employees who use smartphones, motor vehicles, machinery, equipment, and internet access or computers for their business activities.

TABLE 9.3

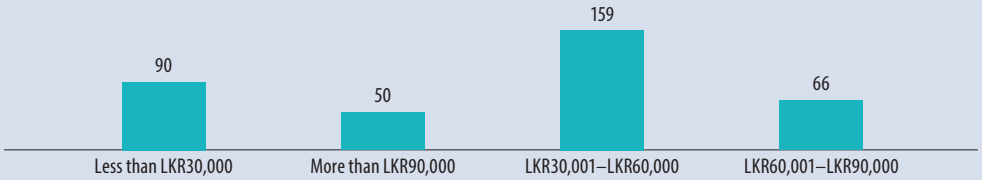
UTILIZATION OF TECHNOLOGY AND EQUIPMENT BY INFORMAL EMPLOYEES IN BUSINESS

	Smart Phone	Motor Vehicle	Machinery & Equipment	Internet Access or Computers
No	69%	70%	75%	87%
Yes	31%	30%	25%	13%

Source: Sample survey.

FIGURE 9.10

RESPONDENTS' INCOME DISTRIBUTION



Source: Sample survey.

Most employees earn between LKR30,000 and LKR60,000 per month, which equates to approximately USD92 to USD185 per month.

Informal Sector's Accessibility to Different Source of Finance

TABLE 9.4

SOURCES OF FINANCING AND ITS MEDIAN RANK

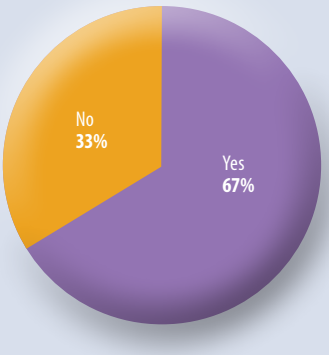
Source of Financing	Median Rank
Own finance	1
Friends and relatives	2
Pawning	2
Bank/ financial institution	3

Source: Sample survey.
Note: Rank 1 being the most used source of finance.

Rank statistics reveal that personal finance emerges as the most commonly utilized source of funding among respondents, followed by support from friends and pawning. Interestingly, despite these initial preferences, the final preference for financing often gravitates toward banks or other financial entities.

FIGURE 9.11

RESPONDENTS' FINANCIAL ACCESSIBILITY



Source: Sample survey.

Table 9.11 shows that 67% of people have received financial aid from financial institutions for their business activity, which is a positive condition.

Reasons for Not Utilizing Financial Institutions

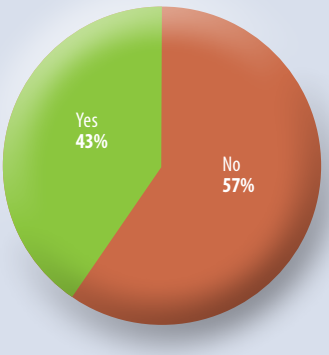
Several reasons were cited by respondents for their reluctance to obtain loans from financial institutions:

- **Sufficient personal finance:** Many individuals indicated that they have adequate personal funds to meet their financial needs, rendering external loans unnecessary
- **Lack of knowledge:** Some respondents expressed uncertainty regarding the application procedures and requirements for obtaining loans from financial institutions
- **Collateral requirements:** The necessity to provide collateral emerged as a significant barrier, particularly for individuals who may not possess tangible assets to pledge as security
- **Documentary requirements:** Difficulty in furnishing the requisite documents posed challenges for some respondents, impeding their ability to access formal financing
- **High interest rates:** Concerns about the interest rates charged by financial institutions were raised, with some individuals perceiving them as prohibitively high
- **Risk and uncertainty:** There were apprehensions regarding the ability to repay loans, stemming from perceived risks and uncertainties associated with borrowing
- **Reluctance:** A general reluctance to take on debt was observed among some respondents, reflecting cautious financial attitudes or cultural norms
- **Preference for informal sources:** Some individuals cited the ease of obtaining loans from informal sources, such as money lenders, as a reason for bypassing formal financial institutions
- **Project funding:** Certain respondents mentioned utilizing funding from specific projects to meet their financial requirements, bypassing the need for loans altogether

Interestingly, 57% of the workers do not use a bank account for their business transactions (Figure 9.13).

FIGURE 9.12

RESPONDENTS USE BANK ACCOUNT FOR BUSINESS PURPOSES



Source: Sample survey.

Relationship between Related Demographic and Occupational Characteristics and Financial Institution Access

The association was done by using univariate analysis as well as multivariate techniques. According to Table 9.5, age category and level of education were identified as significant factors associated with employee's financial accessibility ($P<0.05$).

TABLE 9.5

ASSOCIATION BETWEEN DEMOGRAPHIC AND EDUCATIONAL CHARACTERISTICS AND FINANCIAL INSTITUTION ACCESS FOR BUSINESS PURPOSES

Variable	Category / Level	Obtaining a Loan from Any Financial Institution for Business Purpose	
		Yes	No
Age category	<31	8%	19%
	31–44	43%	29%
	45–60	43%	44%
	>60	5%	8%
	Total	100%	100%
Gender	Female	32%	39%
	Male	68%	61%
	Total	100%	100%
Highest educational qualification	Grade 5 & below	2%	18%
	Grade 6–10	30%	39%
	Passed G.C.E.(O/L)	40%	27%
	Passed G.C.E.(A/L)	23%	13%
	Vocational educational institutions	2%	1%
	Degree	3%	3%
	Total	100%	100%

Source: Sample survey.

The table highlights the association of specific characteristics with financial accessibility. It indicates that smartphone ownership, motor vehicle/motorcycle ownership, sector of employment, and monthly income are significantly linked to financial accessibility.

The data suggests that individuals who own smartphones or motor vehicles/motorcycles tend to have better access to financial services. Similarly, the sector in which individuals are employed and their monthly income levels also play crucial roles in determining their financial accessibility.

TABLE 9.6

ASSOCIATION BETWEEN OCCUPATIONAL CHARACTERISTICS AND FINANCIAL INSTITUTION ACCESS FOR BUSINESS PURPOSES

Variable	Category / Level	Obtaining a Loan from Any Financial Institution for Business Purpose	
		Yes	No
Smart Phone	No	53%	69%
	Yes	47%	31%
	Total	**100%**	**100%**
Motor vehicle/Motorcycle	No	48%	70%
	Yes	52%	30%
	Total	**100%**	**100%**
Machinery & equipment	No	72%	75%
	Yes	28%	25%
	Total	**100%**	**100%**
Computers	No	88%	87%
	Yes	12%	13%
	Total	**100%**	**100%**
Sector	Agriculture	34%	45%
	Nonagriculture	66%	55%
	Total	**100%**	**100%**
Experience	< 1 year	6%	12%
	1–5 years	44%	43%
	6–10 years	33%	32%
	More than 10 years	1%	4%
	More than 20 years	16%	9%
	Total	**100%**	**100%**
Monthly income	Do not like to say	2%	2%
	Less than LKR30,000	13%	45%
	More than LKR90,000	18%	5%
	LKR30,001–LKR60,000	46%	38%
	LKR60,001–LKR90,000	22%	11%
	Total	**100%**	**100%**

Source: Sample survey.

In univariate analysis, data from the study can be analyzed using linear logistic regression modeling. As in the case of linear regression, the strength of this modeling technique lies in its ability to model many variables simultaneously. This will be referred to as "multivariate analysis". Central to the concentration of multiple logistic models will be estimation of the coefficients in the model and testing for the significance.

Based on the test results of the multivariate logistic regression model (Annexe 3: Multivariate Logistic Regression Model), age, level of education, and employees who use motor vehicles/motorcycles and computers/internet access for their business activities were identified as significant factors influencing access to their financial sources through financial institutions.

The survey findings indicate that employees in the informal sector who utilize motor vehicles/motorcycles and computers/internet access for their business activities are significantly more likely to access financial sources through financial institutions. This suggests that financial institutions are minimizing their risk by offering asset-backed financing.

Moreover, the possession of vehicles and computers equipped with internet access significantly enhances business productivity that pave the way for innovative business models. Vehicles play a crucial role in logistic-related improvements, facilitating efficient transportation and delivery processes. On the other hand, computers with internet facilities bolster marketing efforts and enable technical and educational transformations. This combination of resources not only streamlines operational processes but also expands opportunities for growth and development in various aspects of the business [10, 21, 24].

Sources of Funds and Challenges Faced in Finance/Credit Accessibility

Both primary and secondary data were employed to examine the funding sources and financial obstacles encountered within the informal sector. The research utilized in-depth interviews conducted with individuals experienced in informal sector activities, representatives from financial institutions, and government organizations involved in developmental efforts aimed at boosting productivity in this sector. The Key Informant Interviews (KII) qualitative research method was employed to gather insights and perspectives from these stakeholders (Annex 2: List of interviewed persons).

Entrepreneurs can leverage the existing financial system alongside the funding sources described above. The financial landscape in Sri Lanka encompasses the Central Bank of Sri Lanka, major financial institutions focusing on the SME sector, and commercial banks, development banks, and microfinance institutions as key players in financing [7].

The enhanced Credit Information Bureau (CRIB) report provides a reliable assessment of an applicant's repayment capacity within the Sri Lankan context, shedding light on their credit histories. These informal financiers navigate uncharted territories much like modern-day explorers, relying on intuition, judgment, and occasionally, a favourable CRIB report.

A sample survey unequivocally revealed that the majority of entrepreneurs prefer to fund their businesses using personal savings. Alternatively, they turn to relatives and friends for financial assistance, with banks and financial institutions serving as a last resort. The underlying reluctance to approach financial institutions stems from apprehensions surrounding collateral-based loans, high interest rates, hidden charges, and cumbersome documentation processes, deterring many from seeking credit. The barriers to accessing finance hinder efforts to boost productivity within the informal sector. Entrepreneurs often face a shortage of funds, preventing them from investing in essential resources, technology, and innovation necessary for improving productivity.

Another significant discovery is that individuals with lower educational backgrounds often hesitate to seek loans from financial institutions. This reluctance could stem from a lack of awareness or fear of borrowing, leading them to operate their businesses at a microlevel instead of leveraging loans for growth opportunities. This cautious approach may limit their ability to scale up and hinder their progress toward reaching the small business level, ultimately impacting their productivity potential.

As per survey findings, individuals aged 31 to 60 in the informal sector commonly obtain loans from financial institutions. This age group is often targeted by financial institutions due to their stable employment history and perceived creditworthiness, making them eligible for loans. Such access to financial resources can potentially enhance productivity among this demographic, as they can invest in business expansion, equipment upgrades, or other initiatives aimed at improving efficiency and competitiveness within their respective sectors [21].

Furthermore, individuals in the informal sector, particularly those owning vehicles, frequently seek loans from financial institutions. These loans are often used to settle leases or purchase vehicles, with the vehicles themselves serving as valuable collateral. This strategic investment aims to enhance business productivity and efficiency, thereby augmenting revenue generation potential, making such loans less risky for financial institutions.

Micro and Small Enterprises (MSEs) and Financial Accessibility

The Advocata Institute's 2020 survey identified several challenges faced by micro and small businesses, both formal and informal, in their operations. Notably, 42% of respondents cited difficulty in sourcing financing as a major obstacle while 10% highlighted issues, such as inadequate space for operations and poor sales of goods or services as significant barriers to growth.

TABLE 9.7

PROBLEMS FACED BY MSEs

Problem Faced	%
Sourcing finance	42%
Low/dull sales	10%
Finding place/space issues	10%
Higher competition	6%
Sourcing raw material	6%
Registering/licensing procedure	5%
Bad weather condition	3%
Do not have a problem	10%

Source: Advocata Institute Barriers to Micro and Small Enterprises (MSEs) in Sri Lanka 2020 [25].

In Sri Lanka, many microbusiness owners hesitate to seek loans due to deep-seated fears of bankruptcy and property loss, often influenced more by hearsay than direct experiences. Despite their desire for growth, they prefer to rely on existing funds to avoid perceived risks linked with borrowing, which limits their potential for expansion into the small business sector.

The research conducted by the Advocata Institute in 2020 highlights the crucial role of perceptions and narratives in shaping financial accessibility within the informal sector. It is vital to address this fearfulness to foster sustainable growth. Initiatives, such as educational programs, support services, and tailored financial solutions are necessary to empower microbusiness owners to make informed decisions about external financing.

This survey, involving 1,511 participants, provides significant insights. It shows that 80% of microenterprises are formally registered, indicating the prevalence of formal microbusinesses within the study [25].

Efforts to alleviate fears around borrowing and promote financial inclusion should be prioritized, as they directly impact productivity within microbusinesses. By dispelling misconceptions and offering financial education, policymakers and stakeholders can empower microbusiness owners to utilize external financing effectively, thereby enhancing their productivity. Additionally, tailored support programs providing guidance on loan management and risk mitigation strategies contribute to creating an environment conducive to entrepreneurial growth and economic development.

Collaboration between government agencies, financial institutions, and advocacy groups is essential for implementing these initiatives effectively and ensuring their impact on productivity. Through collective efforts, stakeholders can overcome barriers to financial accessibility, fostering an environment where microbusinesses can thrive, innovate, and significantly contribute to Sri Lanka's economic advancement [12, 15, 21].

Policy Intervention

The policy framework for the informal sector aims to strengthen existing businesses, support new ventures, and facilitate their transition into formal establishments for sustainable operation in the business environment. However, while the Ministry of Industry and Commerce of Sri Lanka has established the National Policy Framework for Small and Medium Enterprise (SME) development, there is currently no equivalent framework specifically tailored to the informal sector [24].

TABLE 9.8

POLICY INTERVENTION AREAS AND THEIR DEVELOPMENT

Focused Area by the Government	Initiated Policy or Regulation	Developments
Access to Finance	The Microfinance Act No. 6 of 2016	The Microfinance Act No. 6 of 2016, while safeguarding the rights and interests of microfinance customers, plays a crucial role in the development and sustainability of the microfinance industry in Sri Lanka. The legislation promotes financial inclusion, poverty reduction, and inclusive economic growth by establishing explicit regulatory criteria and supervisory procedures [7].
Formalization of the Informal Sector	"Garu Saru" Dignity of Labor for the Informal Sector (Effective from 1 November 2023)	The declaration by the Ministry of Labor and Foreign Employment of Sri Lanka affirming the "dignity of labor for the informal sector" marks a significant policy decision with far-reaching implications. Recognizing the dignity of work in the informal sector validates its substantial contributions to the economy and underscores the fundamental rights and respect owed to those engaged in informal labor. This policy promotes inclusivity, acknowledging the diverse skills and efforts within the informal economy, and aims to address longstanding challenges, such as limited access to credit, education, and social protection.
Gender Equality	Women Participation in the Informal Sector	Sri Lanka has made significant strides in promoting gender equality, supported by conducive legal and policy frameworks, including those related to labor and employment in both the public and private sectors. The adoption of the Women's Charter in 1993, preceding the Beijing Declaration and Platform for Action, underscores Sri Lanka's commitment to advancing women's rights. However, existing legal frameworks and acts primarily focus on the formal sector, highlighting the need for greater inclusion and gender equality measures within the informal sector [26].
Capacity Building	National Policy on Technical and Vocational Education - 2018	Access to Technical and Vocational Education and Training (TVET) for various client segments can be enhanced by introducing flexibility in training delivery. Qualified and experienced trainers from the industry can be engaged to supplement in-house instructors, particularly during non-office hours [27].

These policy interventions reflect the government's commitment to addressing key challenges and promoting the sustainable development of the informal sector in Sri Lanka. By focusing on capacity building, formalization, access to finance, and gender equality, policymakers aim to create an enabling environment that fosters the growth and prosperity of informal businesses, thereby contributing to inclusive economic growth and social development.

Conclusions

The informal economy stands as a cornerstone of Sri Lanka's economic fabric, significantly bolstering employment opportunities and income generation. However, persistent challenges, particularly concerning productivity growth and financial accessibility, confront informal workers.

The multivariate logistic regression analysis underscores the importance of factors, such as age, education level, and the use of technology in accessing financial sources through formal institutions

for informal workers. This emphasizes the need for tailored interventions to address these barriers and promote inclusive economic growth.

Labor productivity trends underscore the necessity for targeted interventions to bolster efficiency and competitiveness within the informal sector. Furthermore, survey findings on financial accessibility unveil entrenched apprehensions among microbusiness owners, impeding their pursuit of external financing.

Tackling these challenges necessitates a holistic approach encompassing educational endeavors, support initiatives, and tailored financial solutions. Empowering informal workers through skills training, facilitating credit access, and advocating inclusive employment practices emerge as pivotal steps toward fostering sustainable growth and economic development.

Policymakers must prioritize regulatory reforms to foster an enabling environment for informal sector expansion, ensuring adequate protection and support for workers. By harnessing the potential of the informal economy and addressing its constraints, Sri Lanka can unlock new avenues for inclusive growth and prosperity.

In essence, recognizing the significance of the informal sector, addressing its challenges, and fostering productivity growth are imperative for advancing Sri Lanka's economic development agenda and realizing long-term prosperity for all segments of society.

Recommendations

As Sri Lanka endeavors to transition into a developed nation by 2048, nurturing entrepreneurship is paramount, with the labor force playing a pivotal role. Given its substantial contribution to job creation, manufacturing production, and GDP, the formalization of the informal sector, predominantly comprising microenterprises, becomes imperative.

To tackle these challenges effectively, policymakers should:

i) **Facilitate access to formal financing:** Develop initiatives to simplify loan application processes and reduce collateral requirements for microentrepreneurs. Establish dedicated support centers or hotlines to guide informal sector workers through the loan application process.

ii) **Collaborate with financial institutions:** Foster partnerships between financial institutions and informal sector organizations to tailor financial products and services to microentrepreneurs' needs. Encourage flexible repayment options and lower interest rates for informal sector loans.

iii) **Enhance financial literacy:** Implement comprehensive financial education programs targeting microentrepreneurs to improve their understanding of financial concepts and formal financial services.

iv) **Strengthen support networks:** Establish peer support groups or networks for sharing experiences, knowledge, and best practices among informal sector workers. These networks can also disseminate information about financial resources and training opportunities.

v) **Promote formal registration:** Encourage informal businesses to formalize operations by providing incentives, like tax breaks or access to government support programs. Streamline registration processes for affordability and accessibility.

vi) **Invest in skill development:** Offer training programs and workshops to enhance the skills and capabilities of informal sector workers. Focus on areas, such as entrepreneurship, financial management, and technology adoption to improve productivity and competitiveness. Additionally, the government should provide financial assistance in the form of accessible loans tailored to the needs of informal sector workers. These loans can support investments in skill development

initiatives, helping workers acquire the necessary knowledge and resources to thrive in their businesses and contribute effectively to the economy's growth and resilience.

vii) **Monitor and evaluate impact:** Establish mechanisms for monitoring the effectiveness of interventions aimed at supporting the informal sector. Regular evaluations should assess programs' impact on financial inclusion, productivity, and overall economic development.

By implementing these recommendations, Sri Lanka can create an enabling environment for informal sector workers to thrive, contributing to sustainable economic growth and poverty reduction.

Annexe 1

Sample Size Calculation

The minimum sample calculation for selection of respondents would be as follows:

$$n_o = \frac{Z_{(1-\frac{\alpha}{2})}^2 p(1-p)}{e^2}$$

where n_o = Sample size

$Z_{(1-\alpha/2)}$ = Zscore (at 5% significant level) = 1.96

p = the percentage of access to finance in informal sector = 74% (Access to banks and bank accounts in home-based workers of Sri Lanka = 74%, [13].

e = Margin of error = 5%

$$n_o = \frac{1.96^2 \times 0.74 \times (1-0.74)}{0.05^2}$$

$$n_o = 296$$

Annexe 2

Key Informant Interview (KII)

Interviewed Designative from Organization	Key Points Discussed
Director, Small Enterprise Development Division	To identify government intervention to informal sector
Divisional secretary (Divisional secretariats are the third-level administrative divisions of the country)	To identify government intervention to informal sector at divisional level
Assistant director from the Department of Cooperative Development	To identify intervention of cooperative societies to informal sector
Senior manager representing commercial bank	To identify commercial banks perception on informal sector
Senior manager representing development bank	To identify financial accessibility for informal sector
Senior manager representing leasing company	To identify financial accessibility for informal sector
Senior manager representing microfinance company	To identify financial accessibility for informal sector
Chairman from the Thrift and Credit Society	To identify financial accessibility for informal sector

Annexe 3

Multivariate Logistic Regression Model

$$\frac{P}{1-P}\ Logit\{p_j(X_{ij})\} = \alpha_j + \beta_1 X_{1j} + \beta_2 X_{2j} + \beta_k X_{3j}$$

where, $Logit\{p_j(X_{ij})\} = log(\quad)$

P = *proportion of workers who have taken any loan from a financial institution*)

$$\alpha_j = constant$$

$\beta_1, \beta_2, \beta_3,$ *and* β_4 *are coefficents*

X_{1j} *: the value of the jth level of age*

X_{2j} *: the value of the jth level of education level*

X_{3j} *: the value of the jth level of motor vehicle usage*

X_{4j} *: the value of the jth level of computer or internet access usage*

Annexe 4

Output of the Model

R output of the full model:

Coefficients:				
	Estimate Std.	Error	z value	Pr(>|z|)
(Intercept)	-0.88656	1.61731	-0.548	0.583574
Age Category (>60)	1.22419	0.76429	1.602	0.109215
Age Category (31–44)	1.66573	0.46093	3.614	0.000302***
Age Category (45–60)	1.38374	0.47491	2.914	0.003572**
Gender Male	-0.07768	0.32878	-0.236	0.813234
Education Grade (5 & below)	-2.63329	1.07187	-2.457	0.014021*
Education Grade (6–10)	-1.05267	0.85316	-1.234	0.217263
Education Passed G.C.E.(A/L)	-0.20017	0.83287	-0.240	0.810068
Education Passed G.C.E.(O/L)	-0.14067	0.84323	-0.167	0.867506
Education Vocational Educational Institutions	-0.87904	1.22886	-0.715	0.474404
Sector Nonagriculture	0.17955	0.32517	0.552	0.580821
Experience in Years (1–5 years)	0.49733	0.54897	0.906	0.364973
Experience in Years (6–10 years)	0.39592	0.59788	0.662	0.507835
Experience in Years (More than 10 years)	14.82024	831.43299	0.018	0.985779
Experience in Years (More than 20 years)	0.99269	0.72294	1.373	0.169711
Business Bank Acc (Yes)	0.21150	0.36037	0.587	0.557284
Smart Phone (Yes)	0.44978	0.38091	1.181	0.237678
Motor Vehicle (Yes)	0.80694	0.33294	2.424	0.015363*
Machinary & Equipments (Yes)	-0.36993	0.34148	-1.083	0.278666
Computers (Yes)	-1.30817	0.52277	-2.502	0.012337*
Monthly Income (Less than INR30,000)	-1.06758	1.24565	-0.857	0.391419
Monthly Income (More than INR90,000)	0.85663	1.27557	0.672	0.501859
Monthly Income (INR30,001–INR60,000)	0.17658	1.21462	0.145	0.884412
Monthly Income (INR60001–INR90,000)	1.18118	1.24732	0.947	0.343651

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 421.15 on 327 degrees of freedom
Residual deviance: 308.66 on 304 degrees of freedom
(45 observations deleted due to missingness)
AIC: 356.66

Number of Fisher Scoring iterations: 14

Coefficients:				
	Estimate Std.	Error	z value	Pr(>|z|)
(Intercept)	0.1913	0.8213	0.233	0.815828
Age Category (>60)	1.0324	0.6314	1.635	0.102030
Age Category (31–44)	1.3121	0.3893	3.370	0.000751***
Age Category (45–60)	1.2665	0.3896	3.251	0.001151**
Education (Grade 5 & below)	-3.2374	0.9806	-3.301	0.000962***
Education (Grade 6–10)	-1.3103	0.8093	-1.619	0.105446
Education Passed G.C.E.(A/L)	-0.3765	0.7869	-0.478	0.632327
Education Passed G.C.E.(O/L)	-0.5481	0.7947	-0.690	0.490425
Education Vocational Educational Institutions	-0.7708	1.1172	-0.690	0.490238
Motor Vehicle (Yes)	1.1062	0.2755	4.015	5.95e-05***
Computers (Yes)	-0.9434	0.4279	-2.205	0.027483*

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 444.53 on 344 degrees of freedom
Residual deviance: 377.19 on 334 degrees of freedom
(28 observations deleted due to missingness)
AIC: 399.19

Number of Fisher Scoring iterations: 4

CHAPTER 10

TURKIYE

Introduction

The term "shadow", "underground", "uncovered", and "unrecorded" are usually used interchangeably with "informal", encompassing a wide range of activities that include illegal activities. In a narrower sense, the informal economy refers to legal economic activities that operate beyond the knowledge and control of public authorities. However, this definition is misleading in terms of its causes and consequences as the informal economy involves complexities beyond tax collection and income generation.

First of all, the informal economy creates an area of labor relations that is unregulated by the state where employers can disregard or ignore employee rights, thus employees become open to potential exploitation. Although some employees may prefer to be employed informally, many are compelled into it due to circumstances. The bigger the share of the informal economy, the higher the risk of being employed informally, especially for disadvantaged groups in society. Furthermore, the existence of this unsafe and unfair working environment becomes an attractive alternative for employers and employees during economic downturns. This situation erodes trust between citizens and the state.

Another critical dimension is the effect of the informal economy on the overall productivity within a country. Research has shown that the productivity levels in the informal sector is typically lower compared to the formal economy. In other words, the existence of the informal economy has a negative impact on the general productivity level. As known, productivity measures how efficiently a society utilizes its resources, mainly labor and capital. It also determines a society's affluence by creating value using a certain amount of labor and capital.

Bearing in mind the socioeconomic consequences of the issue and its broader influence beyond fiscal matters, this study focuses on the relationship between informality and productivity in Turkiye. For this objective, the study also explores various aspects of informality and analyzes its impact on productivity using firm-level and individual-level data. Finally, the study is concluded with recommendations deducted from the analysis.

Informal Economy and Productivity in Turkiye

For a better understanding of the "informal economy" in Turkiye, it is essential to differentiate between the "informal sector" and "informal employment". This distinction is crucial as it is significant to emphasize that "informal employment" encompasses workers in the "informal sector" as well as informal workers in the formal sector [1]. Similarly, the ILO [2] distinguishes between these two concepts with specific boundaries. Explicitly, the first concept "emphasizes the dualistic and segmented nature of the labor market, and defines "informality" in terms of the characteristics of enterprises and working conditions" whereas the second "refers to the legal status of employment but not legally recorded/registered" [3].

This distinction mainly depends on the fact that Turkiye strongly enforces registration. Businesses in Turkiye must register with tax authorities to get a working permit from the municipality; business entities without formal registration face immediate closure, and the enforcement is carried out by the

municipalities that have sufficient staff [4]. Moreover, permits are issued with relatively minimal bureaucracy; registration procedures are streamlined, can be completed within a week and with a one-time small cost [4]. As registration is strongly enforced, informality generally appears in the case of "unregistered employment" and "wage underreporting[1]" in Turkiye [5][2]. From a similar perspective, Kan and Tansel [6] put forward that "the social security registration criterion is found to be a better measure of informality in the Turkish labor market given its ability to capture the key relationships between several individual and employment characteristics and the likelihood of informality" instead of focusing solely on enterprise definitions, namely firms operating in the informal sector.

Depending on this main structure of informality in Turkiye, the analyses in this study are designed in accordance to the definition by Chen et al. [7] with some modifications. Accordingly, "the informal economy are categorized by employment status into two broad groups: (i) self-employed individuals who work in small unregistered enterprises; and (ii) wage workers who work in insecure and unprotected jobs". Both groups share a common characteristic: the lack of economic security and legal protections [7].

Regarding productivity, numerous studies explore the productivity gap between the formal and informal sectors in Turkiye. To begin with, Ateşağaoğlu et al. [8] suggest that "over the course of 1950–2014, the total factor productivity (TFP) generated by the benchmark model generally underestimates the productivity of the formal sector and the substitution between formal and informal labor significantly affects this underestimation." In other words, the labor contribution is overestimated as the number of registered workers is less than the real labor force, thus resulting in higher levels of labor productivity. In addition, Taymaz's [3] work suggests significant productivity gaps between informal and formal firms, alongside wage differentials between informal and formal workers. Looking at the dynamics behind this wage gap, Aydın et al. [9] investigated the trend in wage differentials and found that it doubled during the 1988–2007 period. Moreover, the sources of the wage differences have shifted from human capital endowment differences in 1988 to differences in occupational and industrial distribution. This is a good example of the situation that the sources of productivity difference can vary depending on the period in question.

To continue, one of the critical barriers to rapid productivity growth has been the level of informality in the economy, as asserted by McKinsey Global Institute [4]. Accordingly, Turkiye should enforce and encourage adherence to existing legal obligations[3]. This study found that the productivity gap between formal and informal businesses is around 30%–40% [4]. From a different perspective, Ohnsorge and Yu [10] emphasized a specific characteristic of the informal sector in Turkiye: it provides opportunities to develop human capital that can be helpful for eventual formal employment or self-employment.

Taking these two issues together, the following subheadings will first elaborate on the informal sector by providing brief information about self-employment and firms operating in the formal/informal sector in Turkiye. Second, informal employment will be discussed as a characteristic of Turkiye, and the main dynamics behind informal employment will be analyzed. And finally, credit access and productivity levels in formal and informal sectors will be analyzed.

The Informal Sector in Turkiye

Self-Employment in Turkiye

Social Insurance and Universal Health Insurance Law No: 5510 (2006: Article-4/b) defines self-employed individuals as those who are income taxpayers due to commercial earnings, such as traders and artisans, associates of companies, and individuals engaged in agricultural activities. Öztepe and

1 Wage underreporting means that even among formally employed individuals, there is a gap between wages earned and wages declared to Social Security Institution. Yet, as the authors asserted "this discrepancy between officially declared wages and actual wages has diminished during the past few years. This is partially because of the relatively high minimum wage policy." [5] Notably, the level of minimum wage increased beyond the past trend due to high inflation rates in Turkiye in recent years.

2 Bağır et al. [5] decomposed the change in the informality rate into its components using the Oaxaca-Blinder methodology. They found that the workforce composition changes in gender, age, education, occupation, and industries explained half of the decline in the informality rate from 2004 to 2018.

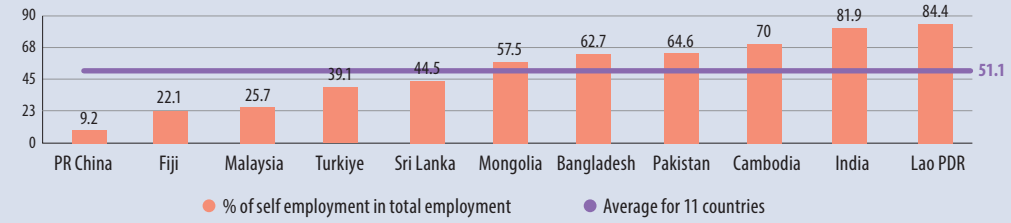
3 The other policy recommendations enhancing productivity are said to be liberalization and macroeconomic/political stability [4].

Akbaş [11] define self-employment as atypical and argue that it has been promoted to combat high levels of unemployment in recent years despite its problematic situation, where social insurance is limited and the financial burden of social protection falls on their shoulders.

Taken as a major source of informality [1–2], the share of self-employment[4] in total employment has consistently decreased from 61% to 32% over the period between 1990 and 2018 in Turkiye [1]. Compared to other APO member economies in this study, Turkiye ranks among those with the lowest rates. Specifically, in 2010, when data from all participating economies was available, Turkiye ranked as the fourth country with 39.1% among 11 economies, which had an average value of 51.06% (Figure 10.1).

FIGURE 10.1

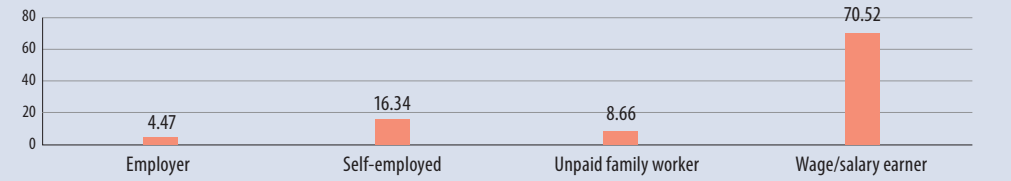
SHARE OF SELF-EMPLOYMENT IN TOTAL EMPLOYMENT (2010, %)



Source: Reproduced with permission from Elgin et al. [1].

FIGURE 10.2

SEGMENTATION OF TYPES OF EMPLOYMENT (%)[5]



Source: Reproduced with permission from Turkish Statistical Institute [12].

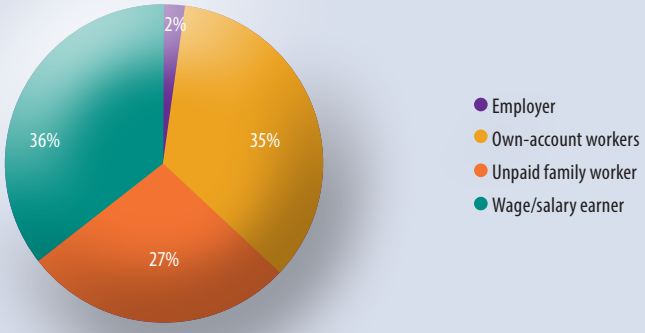
Figure 10.2 summarizes the share of self-employed people in total employment in Turkiye according to 2022 Household Labor Force Survey (HLFS), including all employment (people working in firms of all sizes) and all sectors (including agriculture). As shown in Figure 10.2, self-employment (the sum of employers, own-account workers, and contributing family workers) is 29.47% of total employment in 2022, which is close to the value of 32% in 2018.

4 It is important to note that self-employed workers include four subcategories of jobs: employers, own-account workers, members of producers' cooperatives, and contributing family workers.

5 The figures obtained from HLFS data set are using the "weighted" numbers so they can be interpreted as figures that apply to the whole employed population.

FIGURE 10.3

DISTRIBUTION OF INFORMALITY BY EMPLOYMENT STATUS (%)



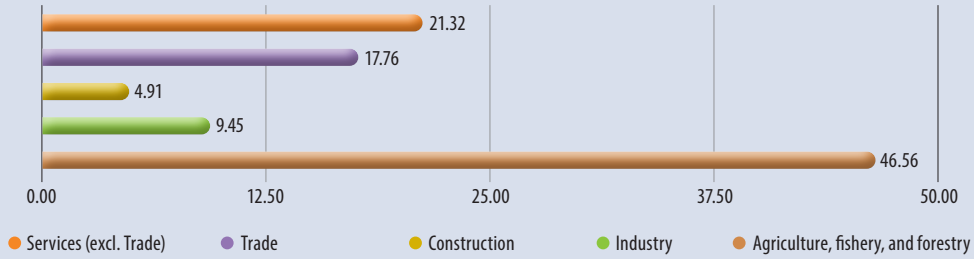
Source: Reproduced with permission from Turkish Statistical Institute [12].

Notably, the dominant labor relation in Turkiye is characterized by wage/salary earners, accounting for 70.52% (Figure 10.2). This reflects the capitalized structure of the Turkish economy that distinguishes between the owners of capital and labor. Furthermore, the distribution of informality by employment status shows that self-employment, at 64%, is still a significant indicator (Figure 10.3). On the other hand, although the first three groups constitute the major part of informality, it is noteworthy that 36% of informality belongs to wage/salary earners. This points out the fact that informal employment is a significant issue in Turkiye for the formal sector as well as the informal sector.

The distribution of self-employed people in the labor market is shown in Figure 10.4. As expected, the largest share belongs to agriculture due to unpaid family workers, followed by services and trade, respectively. Industry comes fourth with 9.45% as production in many subsectors and the economies of scale motivate firms to grow to a certain extent.

FIGURE 10.4

DISTRIBUTION OF SELF-EMPLOYMENT AMONG SECTORS (%)



Source: Reproduced with permission from Turkish Statistical Institute [12].

The Turkish Statistical Institute (TurkStat), the statistics authority in Turkiye, investigated informal employment in HLSF by asking, "Are you registered to Social Security Institution because of the job you are employed within the reference week?" Table 10.1 presents the distribution of the answers to this question by sector and gender.

TABLE 10.1

INFORMAL EMPLOYMENT AS A PERCENTAGE OF AGRICULTURE AND NONAGRICULTURAL EMPLOYMENT BY GENDER, 2014–22

	Agriculture			Nonagriculture		
Year	Total	Male	Female	Total	Male	Female
2014	82.3	71.8	94.4	22.3	21.1	25.9
2015	81.2	70.2	94.0	21.2	20.2	24.1
2016	82.1	72.2	94.3	21.7	20.8	24.2
2017	83.3	74.4	94.2	22.1	21.0	24.9
2018	82.7	76.2	90.9	22.3	21.2	24.9
2019	86.6	79.5	95.7	23.0	22.4	24.2
2020	83.5	76.2	94.3	19.3	18.9	20.2
2021*	84.6	77.7	94.2	17.5	17.0	18.7
2022	80.0	72.6	90.1	16.8	15.7	19.2

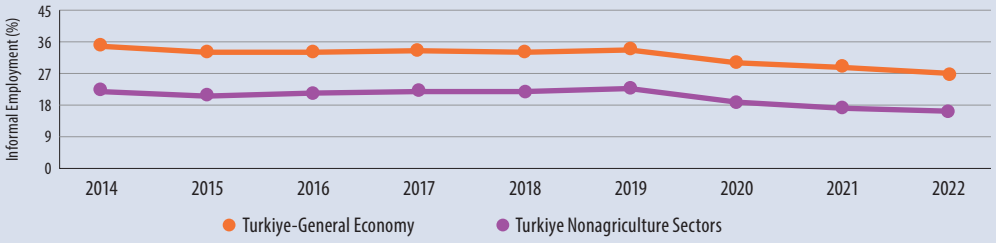
Source: Reproduced with permission from TurkStat, HLSF, 2014–22.

Note: *The series is not comparable to previous years due to the adjustments in definition, scope, and design of the survey since 2021. The decrease in all rates after 2021 seems to be sourced from the adjustments in the survey.

Similarly, Figure 10.5 shows the difference between agriculture and the general economy in terms of informality rates. The graph shows that only 27% of total employment was informal in 2022, which means that both self-employed people and wage/salary owners work formally and informally. It should be noted that not all informality stems from self-employment; 35% of the total belongs to wage/salary owners.

FIGURE 10.5

SHARE OF INFORMAL EMPLOYMENT IN TOTAL EMPLOYMENT (%)



Source: Reproduced with permission from TurkStat, HLFS, 2014–22.

Looking at Table 10.1[6], the rates of informal employment are higher than 80% in agriculture in general[7] whereas these rates for nonagricultural sectors are lower than 23%. Interpreting both Figure 10.5 and

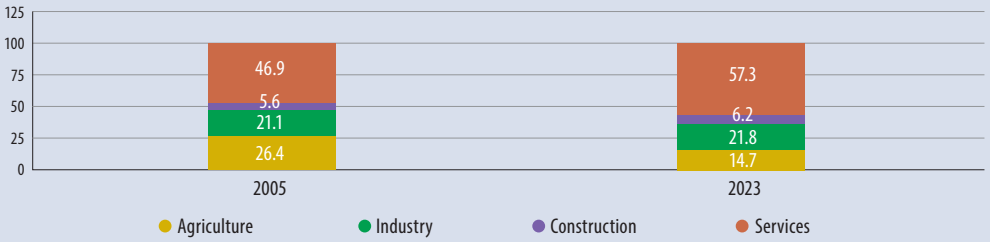
6 It is evident that women are more likely to be employed informally compared to men in all sectors. Başlevent and Acar [13] explained the gender difference in the rate of informality in Turkiye with the fact that many women have indirect access to social security benefits as the insured person's wife or daughter.

7 Although it is beyond the scope of this study, it is important to note that besides differences in sectors, firm, and worker characteristics, informality in Turkiye is also heterogeneous across regions [5].

Table 10.1, it is clear that the nonagriculture sectors play a critical role in determining the overall informal employment share. This is related to the sectoral composition of production. As shown in Figure 10.6, the share of agriculture decreases over time, from 2005 to 2023, parallel to the tendency of informality. It is worth noting that Bağır et al. [5] demonstrated that the decrease in informality from 2004 to 2018 is partially explained by the compositional change in employment, or structural transformation in economic activity. Similarly, Salem et al. [14] found that the decline in informal employment in 2006 compared to 2000 "was linked more to a sectoral evolution than to a decline in the phenomenon of informality".

FIGURE 10.6

SEASONALLY ADJUSTED EMPLOYMENT BY SECTOR (15+ AGE)



Source: Reproduced with permission from TurkStat, HLFS (2005 and 2023).

On the other hand, the nonagricultural sector is the key determinant of Turkiye's overall economic performance, and the contribution of the agriculture sector to the GDP in Turkiye is low (Figure 10.7). Therefore, for the sake of simplicity and consistency, this study will focus on nonagricultural sectors.

FIGURE 10.7

SHARE OF MAIN SECTORS IN GDP (CALCULATED AT CURRENT PRICES BY KIND OF ECONOMIC ACTIVITY A21 LEVEL)

Source: Reproduced with permission from Turkish Statistical Institute [15].

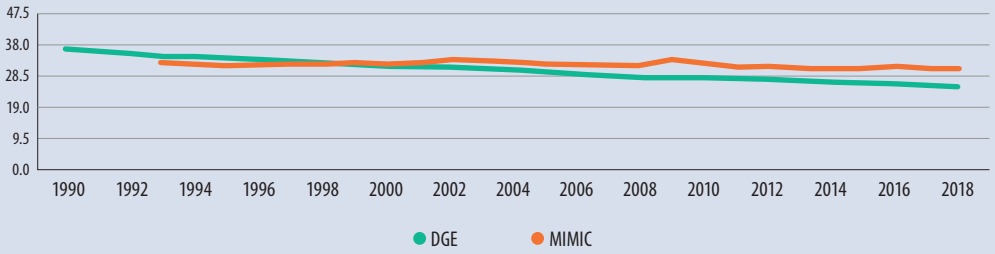
Relationship between Firms in Formal and Informal Sector

The informal sector is linked to the formal sector. In other words, the informal sector does not exist separately from the formal sector; rather "it produces for, trades with, distributes for, and provides services to the formal sector" [7]. This means that besides the value produced in the informal sector, it also catalyzes the value creation in the formal sector. To put it another way, "the informal sector is important not just as a source of employment but also for the production of goods and services. In many countries, the contribution of informal enterprises to gross value added (GVA) is substantial" [2].

Figure 10.8 shows two different estimates of informal output as a percentage share of GDP between 1990 and 2018 in Turkiye. The first estimate, namely the Multiple Indicators Multiple Causes (MIMIC) model captures "multiple outcome indicators, including the effects of the informal sector in various markets" [1]. On the other hand, the Dynamic General Equilibrium (DGE) model "captures the essence of labor allocation between the formal and informal sectors and provides a mapping between the formal and informal economies in a dynamic setting" [1]. Average values in these years are realized at around 32% and 30.7%, respectively.

FIGURE 10.8

ESTIMATES OF INFORMAL OUTPUT (% OF OFFICIAL GDP)



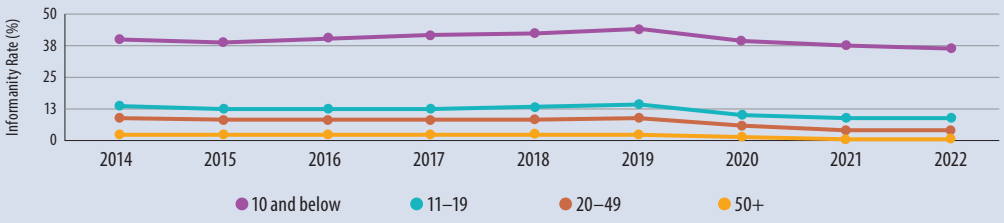
Source: Reproduced with permission from Elgin et al. [1].

As observed above, the trend of the MIMIC model is more stable but decreases from 35% to 30%, whereas the DGE trend moves within a broader interval, starting from above 35% in 1990 and dropping to 25% in 2018. Elgin et al. [1] have explained this situation as follows: "MIMIC is based on slow-moving variables, such as those relating to institutional quality, whereas DGE is based on more volatile variables, such as employment, investment, and productivity".

Despite its contribution to GDP, the informal economy remains a problem that deteriorates labor relations and the productivity level of the economy. As expected, informal employment in nonagricultural sectors is also concentrated in small businesses, as shown in Figure 10.9. Accordingly, the share of informal employment in firms with 10 or fewer employees is quite above those in other scale groups. Based on this fact, even if the firm operates in the formal sector, the probability of having informal employment is assumed to be higher in small businesses.

FIGURE 10.9

SHARE OF INFORMAL EMPLOYMENT IN DIFFERENT BUSINESS SCALES (NONAGRICULTURE SECTORS, %)

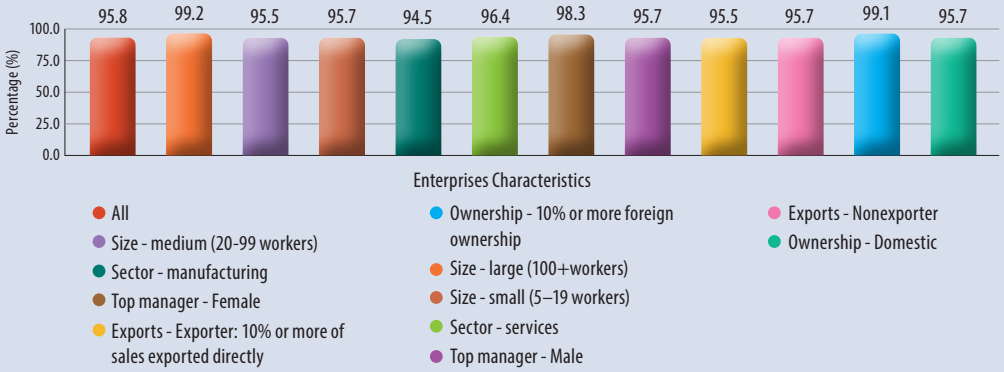


Source: Reproduced with permission from TurkStat, HLSF, 2014–22.

Elgin et al. [1] have identified three different dimensions of informality: output, employment, and perception. The first dimension is subject to firm-level analysis, and compared to data on informal employment, data on the informal sector and firms is quite limited. World Bank Enterprise Surveys are a major source for firm-level data that enables international comparisons within its boundaries. It is a standard establishment-level survey that is representative of the nonagricultural, nonextractive private sector, covering registered establishments with five or more employees [16]. The population is made up of formal firms assumed to have five or more employees. This aligns with the assumption that smaller firms (those with less than five employees) are more likely to operate informally. Keeping this sampling detail in mind, the survey provides data for the perception of informality.

FIGURE 10.10

PERCENTAGE OF FIRMS WITH FORMAL REGISTRATION AT START-UPS IN 2019



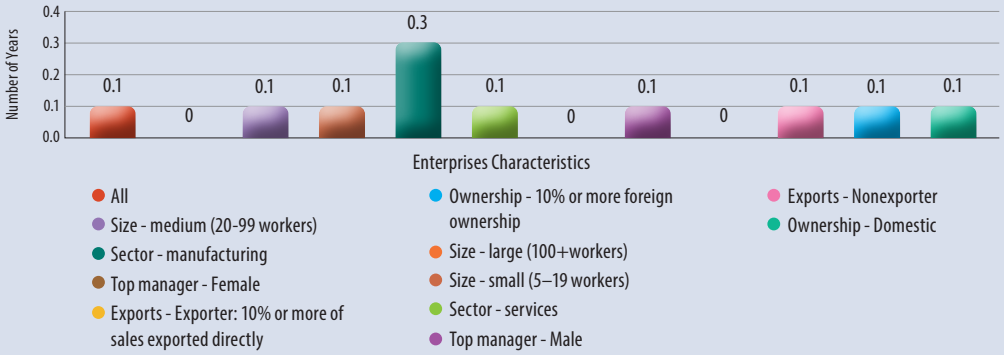
Source: Reproduced with permission from The World Bank Enterprise Surveys [16].

According to the data, firms[8] in Turkiye were formally registered with a rate of 95.8% when they started operations (Figure 10.10). The group with the highest registration rate includes firms employing 100 or more employees, whereas the lowest rate belongs to firms operating in the manufacturing sector. Figure 10.11 also summarizes the situation for the formally registered firms at the beginning of their establishment. Accordingly, large firms, firms with female top managers, and exporting firms started their business directly in the formal sector. On the other hand, the longest duration for informality at the start belongs to firms in manufacturing. These numbers show that formal firms in the manufacturing sector need special attention in this respect.

8 These firms are small (with five and more employees), medium, and large companies in the nonagricultural formal private economy, including the entire manufacturing sector, the services sector as well as the transportation and construction sectors.

FIGURE 10.11

NUMBER OF YEARS, FIRMS OPERATED WITHOUT FORMAL REGISTRATION (2019)

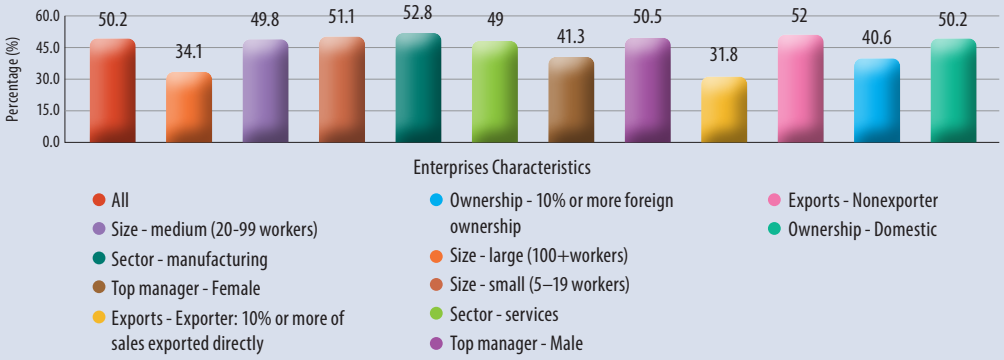


Source: Reproduced with permission from The World Bank Enterprise Surveys [16].

The following figures pertain to the perception of informality. On average, 50.2% of formally registered firms believe that they compete against unregistered or informal firms (Figure 10.12). The share of firms is lower for those with over 100 employees and exporters as they operate within a more isolated and regulated environment. Moreover, the share of firms that identify practices of competitors in the informal sector as a major constraint rises to 99.2%, even among for firms with over 100 employees (Figure 10.13).

FIGURE 10.12

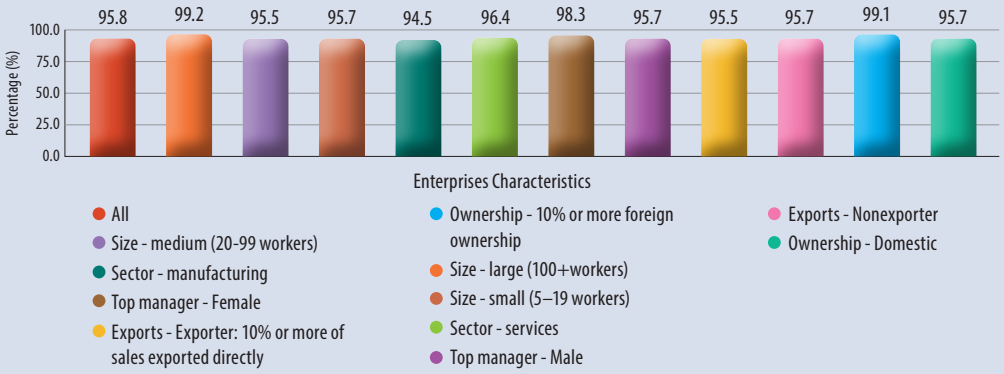
FIRMS COMPETING AGAINST UNREGISTERED OR INFORMAL FIRMS (%, 2019)



Source: Reproduced with permission from The World Bank Enterprise Surveys [16].

FIGURE 10.13

FIRMS IDENTIFYING PRACTICES OF COMPETITORS IN THE INFORMAL SECTOR AS A MAJOR CONSTRAINT (%, 2019)



Source: Reproduced with permission from The World Bank Enterprise Surveys [16].

In summary, larger and exporting firms with female top managers are less likely to operate informally or compete against informal firms.

Informal Employment in Turkiye

As mentioned above, in Turkiye, the phenomenon of informality generally occurs in the form of hiring employees without social security records or underreporting wages to reduce the financial burden[9] of hired employment. In this respect, the HLFS provides convenient data for analyzing informality. Specifically, the research unit is a randomly selected household, and it includes questions on labor market status for each individual in the household surveyed. Questions encompass on wage income (or monthly earnings for the self-employed) and social security protection.

Informal/Formal Employment and Productivity

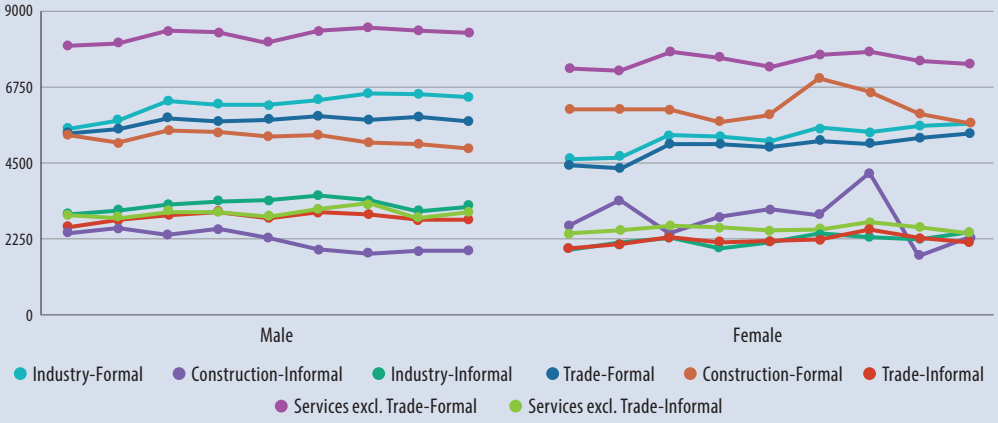
Using HLFS, individual-level data enables analysis of the extent of productivity differences between informal and formal employment through wages, which are expected to be positively correlated with labor productivity. If the labor market is competitive, the wage rate would be equal to the marginal product of labor. Thus the difference between informal and formal workers' wages could be used as an indicator of productivity differences. Even if the labor market is not competitive, the wage rate should still be positively correlated with productivity.

In this study, informal employment is defined as employment without social security. The main aim of the analysis in this section is to identify the main determinants of informal employment and wage (as a proxy for productivity levels) in Turkiye. Before that, data for the period 2014–22 is used to tabulate the wage/earning levels regarding formal/informal employment with sectoral division (Figure 10.14). As discussed above, the scope of the analysis includes only the nonagricultural sectors. Since the dynamics behind wage determination can differ in terms of gender, the wage levels are tabulated separately for males and females.

[9] Gürcihan Yüncüler and Yüncüler [17] investigated the minimum wage impact on wages, informality, working hours, and employment in Turkiye using the sizable minimum wage increase in 2004. As a result, they found that "Higher minimum wage was accompanied by an increase in the likelihood of informal employment" [17].

FIGURE 10.14

WAGE/EARNING LEVELS IN TERMS OF FORMAL/INFORMAL EMPLOYMENT WITH SECTORAL DIVISION

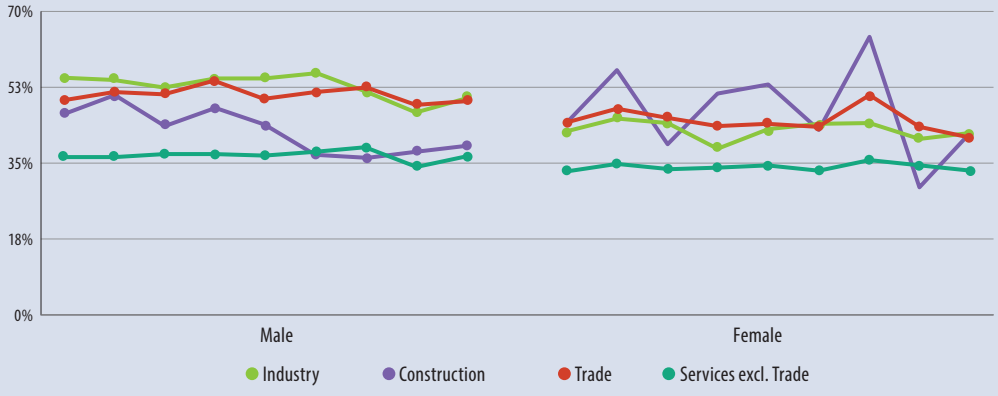


Source: Reproduced with permission from TurkStat, HLFS, 2014–22 (2022 Prices, TL).

Figure 10.14 shows that the labor market produces different results in terms of gender and sector. In this respect, the wage gap between formal and informal workers is obvious. Accordingly, the highest-paying formal sector is services (excluding trade) for both genders. However, female workers receive lower wages compared to men in all formal sectors except construction[10]. It can be seen that, in contrast to female workers, male workers' wage levels have been quite stable over the years, regardless of being formal or informal. Moreover, for both genders, formal wage levels in different sectors vary, whereas informal wage levels in different sectors move in tandem.

FIGURE 10.15

WAGE DIFFERENCE BETWEEN FORMAL AND INFORMAL WORKERS, 2014–2022



Source: Reproduced with permission from TurkStat, HLFS, 2014–2022.

10 This may be surmised from the fact that construction is dominated by men as it mostly depends on physical strength. Thus female workers are employed in the upper stages of production and receive higher pay on average.

Given that wage levels are representative of productivity levels, it can be deduced that in formal employment, productivity levels of labor can vary according to sector characteristics. On the other hand, productivity levels are limited to a certain lower extent for informal labor and do not change from sector to sector. In Figure 10.15, the wage differences and productivity gaps between formal and informal workers are shown.

The largest wage gap between informal and formal workers exists in services (excluding trade), which seems to be stable over time. This sector is the highest-paying sector for formal workers, but since informal workers' wage levels are consistently low across all sectors, there are larger wage gaps for services (excluding trade). In terms of percentages, the average wage of informal workers is 36.7% of the average wage of formal workers for males and the ratio is 34.1% for females, indicating that the gap is larger for females.

In industry and trade, male informal workers earn half of the male formal workers. To reiterate, wage levels are positively correlated with productivity levels, and these wage gaps indicate significant productivity differences between formal and informal employment. Moreover, the levels do not seem to converge over time, suggesting a persistent productivity gap existing in the economy. However, the wage gaps should be analyzed while controlling for other possible factors that may affect the result.

A multinomial logit model is estimated to understand the determinants of employment dynamics. The main logic here is that "productivity differentials could arise not because of intrinsic characteristics of informal and formal firms, but because of self-selection of more productive (more educated) workers and entrepreneurs into the formal sector" [3]. The regressions shown in Table 10.2 use the 2022 HLFS data. The estimation scope is limited to people aged over 15 and nonagricultural sectors. Four outcomes (self-employed, formal workers, informal workers, and unemployed/non-employed people who are unwilling to work) are defined and the base outcome is chosen as the last group. The determinants of employment decisions will be elaborated by considering certain variables, such as age, education, migrant status, and head of the household, following the methodology implemented by Taymaz [3]. Then, the relation between sectoral wages (as a representative of productivity) and several variables (informal employment, age, education, and working time) will be tested in gender segregation.

As for the independent variables, the age of a person is assumed to have an impact on the employment decision. Age 15–19 is chosen as the base outcome, and for simplicity, one dummy variable for each age group has been used. Similarly, the effect of education endowment is captured by four dummy variables: "No Education" for illiterates, "Primary" for primary school graduates, "Secondary" for secondary, vocational, or high school graduates, and "Tertiary" for college or university graduates. The education level dummy variables measure the effects of levels of education concerning illiteracy.

Besides, there has been a significant immigration influx in Turkiye in recent years, which has notable effects on the labor market. To capture this, the model includes information on being an immigrant or a native. The immigrant dummy variable takes the value of "1" if the individual was born abroad and arrived in Turkiye within the last five years.

The last variable is a control variable that takes the value of "1" if the household head is unemployed. The household head is the person who earns the main income for the household regardless of age and gender. If the household head is unemployed, the spouse or the children may find themselves in marginal employment situations, which is why the variable equals "1" for this group. Consequently, this variable for the household head, even if he/she is unemployed, is assumed to be "0". Given that it is a selection process and the outcome includes more than two options, a multinomial logit model is used.

Recognizing the limitations of interpreting the multinomial logit model's coefficient estimates quantitatively, the marginal effects associated with each variable's influence on labor market outcomes are calculated. For yes/no factors, it is observed how the job choice probability changes when that factor goes from "no" to "yes."

TABLE 10.2

DETERMINANTS OF EMPLOYMENT DECISION (MULTINOMIAL REGRESSION MODEL AND MARGINAL EFFECTS)

		Male				Female			
		Self-employed	Formal	Informal	Unemployed & Non-employed	Self-employed	Formal	Informal	Unemployed & Non-employed
Age	20–34	0.0813	0.368	0.00651	-0.456	0.0274	0.102	0.0178	-0.147
	35-49	0.155	0.438	-0.0130	-0.580	0.0597	0.157	0.0278	-0.245
	50–64	0.135	0.126	-0.0129	-0.248	0.0336	0.0182	0.0162	-0.0680
	65+	0.0219	-0.158	-0.0440	0.180	0.00238	-0.0595	-0.00659	0.0637
Education	Primary	0.0630	0.189	-0.0237	-0.228	0.0141	0.0540	-0.0123	-0.0558
	Secondary	0.0531	0.261	-0.0630	-0.251	0.0214	0.125	-0.0220	-0.124
	Tertiary	0.0337	0.397	-0.0905	-0.340	0.0282	0.344	-0.0365	-0.336
Immigrant	Immigrant	0.00687	-0.308	0.187	0.114	-0.00967	-0.0714	0.0338	0.0473
HH Head	Unemployed	-0.0969	-0.0668	0.00469	0.159	-0.0117	-0.00919	0.00480	0.0161
	Pseudo r-squared	0.169				0.180			
	Observations	204,835				231,365			

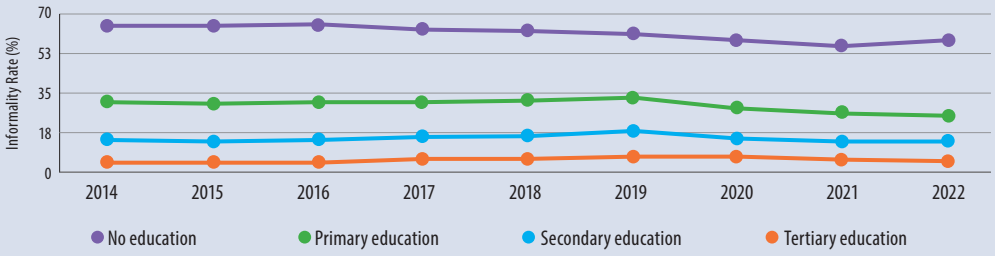
Source: Reproduced with permission from Turkish Statistical Institute [12]; calculations by the author.

The marginal effects on the labor market decision process are presented in Table 10.2. The main findings[11] are as follows:

- More educated individuals are more likely to find jobs easily, whereas less educated individuals are more likely to be out of employment, unemployed, or find informal jobs. Education is the primary tool for upgrading employment position. More educated individuals are less likely to be employed in the informal sector, as shown in Figure 10.16
- As people get older, both males and females have difficulties in staying in formal jobs

FIGURE 10.16

INFORMALITY RATE BASED ON EDUCATION LEVELS



Source: Reproduced with permission from TurkStat, HLFS, 2014–22.

[11] It is important to note that all the findings are interpreted with respect to the base outcome of the relevant independent variable group.

- In Turkiye's labor market, being an immigrant raises the probability of being employed in informal jobs or being unemployed
- Living in a household where the household head has an unemployment problem can increase the probability of an individual working in informal jobs

To understand the dynamics of wage determination for formal and informal workers, Mincerian wage equations[12] are estimated. A multinomial logit sample selection model is used while estimating the wage equations to eliminate the selection bias. To ensure consistency, the multinomial logit model is first estimated, followed by calculating the selection correction terms as suggested by Dubin and McFadden [18]. To control for selection bias, the wage equation is modeled for four wage employment categories (formal/informal and manufacturing/services) disaggregated by gender.

TABLE 10.3

DETERMINANTS OF WAGE (MULTINOMIAL PARTICIPATION DECISION CORRECTED WAGE EQUATION ESTIMATES)

	Male				Female			
	Industry		Services		Industry		Services	
	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal
Age 20–34	0.351***	0.395***	0.382***	0.423***	0.099***	0.101	0.674***	0.177***
Age 35–49	0.483***	0.496***	0.513***	0.557***	0.193***	0.246**	0.934***	0.257***
Age 50–64	0.494***	0.510***	0.610***	0.538***	0.180***	0.275**	1.024***	0.264***
Age 65+	0.513***	0.371***	0.405***	0.307***	0.343***	-0.579	0.820***	0.160
Primary education	0.032*	0.064	-0.105	0.149***	-0.013	0.087	0.132**	0.158*
Secondary education	0.149***	0.130**	0.100	0.218***	0.067**	0.111	0.328***	0.272**
Tertiary education	0.379***	0.131	0.442***	0.419***	0.264***	0.242	0.738***	0.388**
Dummy (full time)	0.779***	0.387***	0.578***	0.374***	0.524***	0.328**	0.342***	0.376***
Log working hour	0.117***	0.438***	0.048	0.387***	0.017	0.676***	0.045	0.382***
Selection variables								
m1, Self-employed	0.279***	0.620***	0.563	0.539***	0.125	0.311	3.841***	0.554***
m2, Formal	0.052***	0.425***	0.249	-0.068	0.018	-0.315	0.010	0.067
m3, Informal	0.082**	0.038*	0.545*	-0.035	0.191*	-0.045	-0.506*	-0.011
Constant	6.908***	6.167***	7.546***	5.969***	7.751***	4.827***	7.018***	5.866***
Observation	15,141	1,366	34,632	5,389	5,526	42	18,480	5,692
R2	0.302	0.309	0.499	0.268	0.189	0.449	0.370	0.435
F-stat	545.98 ***	50.59 ***	2878.7 ***	163.73 ***	107.5 ***	27.6 ***	903.65 ***	244.9 ***

Source: Reproduced with permission from Turkish Statistical Institute [12]; calculations by the author.

Note: Robust standard errors - *** p<0.01, ** p<0.05, * p<0.1.

12 While Mincer's [19] simple wage equation includes only "education", his later work [20] includes "education", "experience", and "experience-squared". This study includes only "experience" and ignores "experience-squared".

The logarithm of the monthly earnings of the relevant group is used as the dependent variable in each estimation. Dummy variables for age and education are used. In addition, the sample selection correction terms and two control variables are used: the full-time dummy, which takes the value "1" if the individual is a full-time worker; and the continuous variable of the logarithm of weekly working time. The 15–19 age group dummy and the "No Education" group dummy are omitted dummy variables. The estimation results are presented in Table 10.3.

Findings indicate that there are significant wage differentials among informal and formal workers even after controlling for selection and individual characteristics. Differences in the productivity of workers in the informal and formal sectors are a potential explanation for the observed wage differentials.

The constants represent the wage level of people between 15 and 19 with no education. Regardless of sector and gender, it is clear that the wage levels in the informal sectors are lower than in the formal ones. Moreover, the wage gap between the formal and informal sectors is wider for women working in the industry than for men working in the same area.

Each column has its own regression. For male and female workers in the formal industry, the wage level increases with age and education. This is generally valid except for people over 65 years old and other groups, such as male and female workers working in the formal/informal service sector. Thus education level positively affects wages and productivity, regardless of employment type.

Informal Sector Productivity and Credit Access

Credit access is a key factor in enhancing productivity growth for both formal and informal firms. Capasso et al. [21], in their research, provided substantial evidence of the negative relationship between financial development and the size of the informal economy. Their research also documented that, consistent with previous studies, less pervasive informality is associated with greater financial development. Moreover, the negative impact of financial development (particularly banking sector development) on informality is causal. Looking at the situation in Turkiye, among a sample of firms with fewer than five workers, less than 10% of all bank lending was attributed to formal credit [18]. According to Duman's [22] work[13], controlling for firm, entrepreneur, and sector characteristics, it has been found that being formal implies higher access to the formal credit market. Moreover, "formal credit enhances higher average capital productivity in terms of higher monetary returns in comparison to the informal credit borrowers" [22].

Taymaz [3] pointed out the lack of access to credit as one of the main factors that contribute to productivity gaps between formal and informal firms for two reasons:

"First, capital-constrained informal firms will scale down their capacity, and operate below the efficient scale of production. Second, a high cost of capital or limited outside financing will force informal firms to substitute (low-skill) labor for physical capital. Hence, informal firms are likely to have lower capital intensity and lower labor productivity."

Despite his insights, the findings of Taymaz's study[14], which included firms with less than 50 employees, "reveal that formal firms are more likely to cooperate with formal financial institutions, but these relationships do not lead to a significant advantage in terms of using credit. Here, the variable was "1" if bank credit>0. And the difference in the proportions of informal and formal firms that use credit in the last year is not statistically different from zero." [3].

13 Based on the data collected by TurkStat, "Urban Areas Small and Unincorporated Enterprise Survey" (2000).

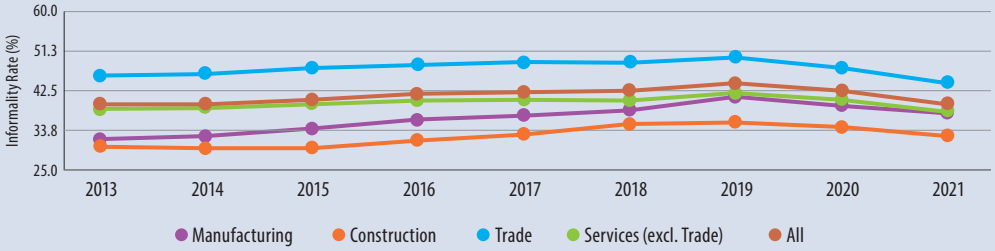
14 The research team identified 9,280 eligible firms for the survey in selected Primary Sampling Units (PSUs), and 7,335 of these firms were randomly chosen, respecting proportions by subcategories of gender, size, and location. A total of 5,000 interviews were carried out. The study was conducted from June to September 2001.

On the other hand, Mutluer Kurul and Tiryaki [23] concluded that the likelihood of having access to credit increases with the firm size. In their study, they used the data derived from the Business Environment and Enterprise Performance Survey (BEEPS), conducted jointly by the European Bank for Reconstruction and Development (EBRD) and the World Bank in 2008.

To analyze the relationship between credit access and productivity levels based on firm-level data, this study utilizes the Entrepreneur Information System (EIS) database. The EIS is housed within the Ministry of Industry and Technology (MoIT) and it contains firm-level data encompassing financial records as well as records of business demographics. However, as the data collection process is based on administrative records (tax and social security registration), the database excludes information outside the tax or social security system. Here, following the classification used in World Bank Enterprise Surveys, firms with less than five employees are assumed to operate informally[15] while firms with five or more employees are considered formal. Figure 10.17 presents the distribution of firms assumed to represent informal operations across different sectors between 2013 and 2021. Due to the discussion above, agriculture is excluded. Manufacturing, mining and quarrying are also excluded.

FIGURE 10.17

INFORMALITY RATE ACROSS SECTORS BETWEEN 2013–21



Source: Reproduced with permission from the EIS [24].

As seen in Figure 10.17, from year 2013 to 2019 the share of firms with five or less employees had a rising trend in all sectors with different speeds. After the shock of the COVID-19 pandemic, the share of the informal group of firms began to decline. This may be explained by the severe impact of the pandemic on small businesses, including their closure.

The rate of access to bank credit is defined as the ratio of the sum of short-term and long-term bank credit to net sales in year t, for each firm. This definition is imitated from the OECD report [25] elaborating on "outstanding stock of loan volumes of SMEs as a percent of GDP". To test whether there is a difference between informal and formal firms in this respect, panel linear regressions were conducted. Fixed effects, sector, and year dummies were used to capture the effect of years and firm-specific effects. Moreover, to overcome selection bias, the logarithm of total assets has been used in regressions. The results are presented in Table 10.4.

15 Parallelly, according to HLFS classification, the firms with "10 and below" employees have the highest average rate of informal employment (40.4% compared to 12.1% for the nearest group having 11–19 employees) in 2014–22 period.

TABLE 10.4

EFFECT OF INFORMALITY ON ACCESS TO FINANCE

Access to Bank Credit	Coefficient	Std. err.	t	P>|t|
Dummy Informal Firm	-0,03960	9,28E-05	-426,96	0,000
Ln(Assets)	-0,00305	1,63E-05	-187,73	0,000
Year				
2014	0,011744	0,000135	87,15	0,000
2015	0,022568	0,000136	166,49	0,000
2016	0,023724	0,000136	174,93	0,000
2017	0,035721	0,000136	262,36	0,000
2018	0,020261	0,000135	150,1	0,000
2019	0,015314	0,000135	113,1	0,000
2020	0,037070	0,000136	273,61	0,000
2021	0,012859	0,000138	93,52	0,000
Sector				
Dummy Construction	0,004425	0,000483	9,17	0,000
Dummy Trade	-0,000940	0,00035	-2,67	0,008
Dummy Nontrade Services	0,000891	0,000418	2,13	0,033
Constant	0,131464	0,000413	318,06	0,000
F test that all u_i=0: F(2337043, 8788861) = 5.30 Prob > F = 0.0000				
Number of obs = 11,125,918				
Number of groups = 2,337,044				
F (13, 8788861) = 27606.79		Prob > F = 0.0000		

Source: Reproduced with permission from the EIS [24]; calculations by the author.

Note: As all p values are below 0.05, coefficients are statistically significant.

Regression Results

The regression results indicate that, with other factors being constant, the average access to bank credit ratio for formal firms is 13.1%. The coefficient of the informal firm dummy is -0.039, which indicates the average access to bank credit ratio for informal firms is 3.9% lower than that of formal firms, equating to 9.2%. Both the constant term and the informal dummy coefficient are statistically significant. The regression results also indicate that, when controlling for firm fixed effect, sectoral differences have a negligible impact on access to bank credit. To sum up, based on data from 2013 to 2021, informal firms have significantly lower access to bank credit compared to formal firms.

Labor Productivity

On the other hand, labor productivity levels for formal and informal firms can be calculated and compared using data from the EIS. However, since the number of people employed may be inaccurately reported due to informal employment, calculating labor productivity and comparing categories based on this metric could be misleading, potentially leading to an overestimation of labor productivity in informal firms. To mitigate this issue, a production function was estimated using Levinsohn and Petrin [26] method, and total factor productivity (TFP) levels for each firm were obtained. This allowed for testing the hypothesis that "there is a significant difference between formal and informal firms in terms of their TFP levels." Table 10.5 presents the results of the t-test, which indicate a significant difference between the TFP levels of formal and informal firms. When converted from logarithmic form to levels, it is calculated that informal firms' TFP levels are 74% of those of formal ones.

TABLE 10.5

TFP MEAN DIFFERENCE BETWEEN FORMAL AND INFORMAL FIRMS

	Formal	Informal	Difference	p-value
ln (TFP)	13.8412	13.5402	0.301061	0.000
Observations	968,482	623,913		

Source: Reproduced with permission from the EIS [24]; calculations by the author.

Note: As all p values are below 0.05, coefficients are statistically significant.

TABLE 10.6

REGRESSION RESULTS OF TFP

TFP	Coefficient	P>|t|	[95% conf. interval]	
Informality (Base level: Informal Enterprises)				
Formal Enterprises	0.030	0.000	0.022	0.038
Informality # Access to Finance				
Formal Enterprises	0.706	0.000	0.615	0.796
Informal Enterprises	0.430	0.000	0.337	0.522
Square of Access to Finance	-13.027	0.000	-13.294	-12.760
ln (Actives)	0.125	0.000	0.122	0.127
Year (Base level: 2013)				
2014	0.055	0.000	0.046	0.063
2015	0.105	0.000	0.096	0.113
2016	0.152	0.000	0.143	0.160
2017	0.347	0.000	0.338	0.355
2018	0.334	0.000	0.325	0.342
2019	0.399	0.000	0.390	0.408
2020	0.395	0.000	0.386	0.405
2021	0.591	0.000	0.581	0.600
Sector (Base level: Nontrade Services)				
Manufacturing	0.032	0.010	0.008	0.056
Construction	-0.018	0.231	-0.046	0.011
Trade	0.027	0.031	0.003	0.052
Constant	11.133	0.000	11.086	11.180
Number of obs				1,592,395
R-squared				0,115
F(16, 1175596)				8740.48
Prob > F				0.0000

Source: Reproduced with permission from the EIS [24]; calculations by the author.

Note: As all p values are below 0.05, coefficients are statistically significant.

Credit Access and Productivity

By combining the two issues discussed above, the relationship between credit access and productivity is analyzed with informality taken into account. Table 10.6 shows the results of the panel fixed effects regression in this context. In the regression, TFP is used as the dependent variable whereas the informal enterprise dummy (same definition as in Table 10.6, informal=1 and formal=0), the interaction of the

informal enterprise dummy with the access to finance (A2F) indicator (as described in Table 10.6), the square of A2F, the natural logarithm of the enterprise's total assets, and control variables, including years and sectors, are used as independent variables.

The total asset variable is included to capture the size of the enterprises. The coefficient is significant and positive, indicating that larger enterprises have higher levels of TFP. The time and sector control variables are used to capture the effects of trends and the sectoral nature of productivity, respectively. The coefficient of the formal enterprise dummy is statistically significant and positive, indicating that the average TFP of formal enterprises is higher. Access to finance is theoretically positively correlated with TFP. Therefore, the informal enterprise dummy and A2F were included in the regression in interaction form.

The positive and significant results indicate that, consistent with theory, access to finance is positively correlated with TFP. Moreover, formal firms can increase their TFP with a marginal increase in access to finance compared to informal firms. The square of access to finance is added to the regression to demonstrate the crowding-out effect, meaning that beyond a certain point, access to finance reduces TFP due to high levels of credit and the resulting repayment bottleneck. As expected, the coefficient of the square of access to finance is negative and significant.

In summary, the regression results of TFP show that informal enterprises have lower levels of TFP. Access to finance can increase TFP to some extent, and formal enterprises would benefit from higher levels of TFP due to higher levels of credit compared to informal ones. This result highlights the barrier of informality. An informal enterprise has a lower level of TFP and a reduced contribution from credit, and increased access to finance can raise TFP to a limited extent compared to formal counterparts.

Policy Intervention

Informal employment has attracted significant attention, especially since the 1990s. The first development plan to address the issue was the 7th Development Plan (1996–2000), which stated, "The prevalence of informal work has the effect of narrowing the base of industrial relations and increasing labor problems." [27]. The 8th Development Plan (2001–05) further expanded on the problem and included a "Report of the Special Committee on Informal Economy" as an attachment. This report examined the issue in terms of taxation, employment, and illegal activities. Further, it also highlighted the importance of creating an informal employment database [28]. More recently, the 12th Development Plan of the Republic of Turkiye (2024–28) also includes measures against informal employment and informal wage. It suggests expanding contributions to the system by increasing awareness and auditing activities as solutions. In addition, the plan promotes improvements in regulations and technical infrastructure to facilitate the transition to formal employment [29].

An earlier initiative in this area was the "Combat Against Informal Employment (KADIM) Project", part of the EU accession and harmonization process launched in 2006 [30]. This project addressed the leading causes of the informal economy and raised public awareness to minimize it as much as possible [30]. However, the approach adopted in this document has been criticized by Saraçoğlu [31] for relying on "stricter enforcement of existing labor market laws and deterrence through fines, without any appropriate adjustments in formal labor costs," including minimum wage and payroll taxes.

Following a conservative approach, the Ministry of Treasury and Finance led the preparation of the action plan for combating the informal economy for 2023–25[16]. In this action plan, the informal economy was defined as "all economic operations and activities out of official procedures, not based on official documents, not controlled within the legal regulations and excluded from national

[16] The first version of this action plan covered the period 2008–10.

accounting" [32]. Depending on the context and the responsible institution, this perspective has again focused on the aim of tax collection and government income creation.

The action plan elaborated on five dimensions. Within the scope of measurement and analysis, a "Taxpayer Information Survey" was planned to determine the extent of the informal economy and tax evasion. Additional steps included: (i) increasing public awareness of the subject; (ii) improving data sharing and collaboration between institutions; (iii) strengthening legal, administrative, and technical precautions; and (iv) enhancing audit capacity [32]. Similar to the development plans, this action plan emphasized audits, with the primary goal of accumulating sufficient taxes and securing necessary revenue for the government.

Başlevent and Acar [14] summarized the deficiencies in policies concerning informal employment in Turkiye as follows:

"In addition to the insufficiency of inspection mechanisms and penal sanctions, the persistence of informality is mainly believed to be due to (...) high rates of income taxes, social welfare programs which the formally employed are ineligible for, and frequent tax amnesties granted to employers (...). Dissatisfaction with the quality of services provided by the social security system and the ability of workers to engage in collusive practices with employers to receive higher wages in exchange for unpaid social security premiums are also cited among factors that contribute to the high incidence of informality."

Conclusion

In 2014, Mehmet Şimşek, then Turkiye's Minister of Finance, highlighted that the biggest losers of the informal economy are ordinary citizens. According to Şimşek, "Informality inhibits long-term economic growth and productivity gains; creates unfair competition; hinders the growth of small and medium-size enterprises (the main sources of employment); and leaves millions of workers without basic rights, such as health insurance and pensions. It also leads to significant tax-revenue losses, reducing both the quality and quantity of public services. Income inequality and social injustice invariably increase as well", as cited in Vaslevent and Acar [14].

Given these severe impacts on the economy and society, governments are motivated to combat the informal economy. At this point, research done to determine the factors driving informality is crucial, it sheds light on these policy recommendations. As asserted, informality in Turkiye has manifested itself as unregistered employment rather than a high share of firms operating in the informal sector. In addition, wage underreporting is a notable feature of the Turkish labor market [5]. According to Kanbur's classification, firms in Turkiye are characterized as "evaders", those "are covered by regulations but do not comply". This definition is important as Kanbur [33] shared that "These are the ones that have altered their behavior in response to the regulation". This classification suggests that, with the implementation of appropriate policies, behaviors change toward compliance. However, Turkiye's current policies against informality largely rely on inspection mechanisms and penalties.

Given the significant wage and productivity gaps between formal and informal employment, which do not seem to converge over time, increasing overall productivity necessitates reducing the share of informal economy. The forthcoming policy areas should focus on variables with significant impacts as revealed by the analyses. Therefore, a key policy recommendation is "employment upgrading". Higher education levels are linked to higher wages and productivity, with tertiary education showing the greatest marginal benefits. This recommendation is supported by various studies. For instance, Kahyalar et al. [34] identified education and experience as key determinants of earnings, suggesting policies should be directed toward developing approaches with a focus on education and experience. From a broader perspective, Bağır et al. [5] stated, "The rise in education level and firm size, and the shift from agriculture to service sector suppressed Turkiye's informality rate.

Gender disparities are evident in this study and across many other literature. The results stress on the need for policies to address the disadvantages faced by female workers. This issue is not limited to formal and informal employment as the labor force participation rate for females in 2022 was 35.1%, compared to 71.4% for males. These findings indicate that the female labor force is still perceived as a secondary and inferior source of labor. Policymakers should consider the social and economic reasons behind this attitude when designing new policies.

Similarly, immigrants are among the disadvantaged group in informal employment, as migrants are more likely to be employed informally or unemployed than local workers. Additionally, young workers require special attention in this regard. The analysis showed that all age groups, except in a few situations, are more likely to be employed formally compared to individuals aged 15–19. Policies targeting the 15–34 age group would help people to develop the necessary skills to be employed formally. To sum up, keeping in mind that "unregistered employment is more widespread among less educated, young, and female workers" [5], special active employment policies should be implemented targeting disadvantaged groups, like younger, less educated individuals and immigrants.

Both analyses at the firm and individual levels have shown that informality leads to lower productivity levels. The analysis at the firm level showed that a significant difference between formal and informal firms is credit access. Moreover, informal and formal firms differ significantly in their TFP levels. Further analysis show that for informal firms, access to finance can increase TFP to some extent while formal enterprises benefit from higher levels of TFP due to greater credit access compared to informal ones. This result highlights the barrier of informality. An informal enterprise has lower TFP and lower credit contributions, and increasing access to finance could improve TFP only to a limited extent compared to formal counterparts. In this regard, creating attractive credit possibilities for small firms would encourage informal firms to operate formally. This process would contribute to a fairer investment environment for formal firms that fulfill their responsibilities.

Lastly, the size of the firms should be a focus area for policy as micro and small enterprises tend to operate more informally than larger ones. While maintaining the ease of establishing a new business, the obligations firms must obey should be distributed fairly among all scales of production rather than overburdening larger firms.

CHAPTER 11

BRIDGING GAPS: REFLECTIONS ON INFORMALITY, PRODUCTIVITY, AND FINANCIAL INACCESSIBILITY ISSUES

Summary of Member Economy Reports and Policy Recommendations

The present study delves deeper into informality, productivity, and financial inaccessibility issues in 10 APO member economies. Each chapter (from Chapters 1 to 10) addresses the same defined objectives despite the prevailing member-specific differences in magnitude and nature of informality, and the set of policies for dealing with both labor productivity and credit gap issues.

This summarizes the reports of the distinct economies first, followed by the policy initiatives recommended by the respective national experts from each member who participated in this project study.

Bangladesh

The report from Bangladesh highlights that the informal economy mainly comprises micro and small enterprises. The informal sector contributes 43% to the country's GDP. It constitutes the dominant economic activity in terms of their contribution to GDP and employment. The report indicates that informal sector workers are less productive than formal sector workers, but productivity issues drew little attention until the 1980s. The challenges related to informal sectors include low productivity, limited access to capital, inadequate skills and training, and infrastructure and technology gaps. The report explores the intricate relationship between the informal economy, financial accessibility, and productivity growth in Bangladesh through a case study method. A case study of CARE highlights that innovative solutions, like the A-CARD program, play an important role in integrating smallholder farmers into the formal banking system through provision of low-interest, collateral-free loans with flexible repayment terms. By offering crop insurance to farmers (now being offered as part of the microfinance programme package), BRAC (Building Resources Across Communities) has contributed to increased food security at both the national and household levels, making farmers resilient against shocks. BRAC's example shows that if schemes related to smallholder farmers are better financed and better implemented, agricultural productivity can improve.

The report recommends that collaborative efforts involving the government, private sector, and development organizations are essential to create an enabling environment for financial resources to help informal businesses/economies thrive. Understanding the dynamics of the informal economy is also crucial for shaping policies that promote inclusive growth, enhance productivity, and contribute to Bangladesh's sustainable economic development. Bangladesh can harness the full potential of this dynamic economic segment to drive overall productivity growth and contribute to its long-term economic prosperity.

Cambodia

In Cambodia, roughly 77.4% of the employed population is reported to be in the informal sector. A significant amount of informal employment is concentrated in leading sectors, such as wholesale and retail trade, accommodation and food service, construction, and agriculture. In the manufacturing sector, formal employment accounts for a considerable proportion, roughly 30% of the total employment in this sector. It is reported that the labor productivity of informal firms is about one-fourth that of formal firms. The regression analysis carried out in the study using the Ordinary Least Square (OLS) shows that financing improves labor productivity and total factor productivity (TFP). A percentage increase in credits is associated with increments of 0.48% in labor productivity and 0.38% in TFP. The financing gap for MSMEs is found to be as big as 21% of GDP in Cambodia. The report recognizes that in Cambodia, insufficient financial accessibility has hindered domestic firms (especially small and medium enterprises with a large proportion of them located in the informal sector) from investing in research, development, and innovation, making them less competitive compared to foreign counterparts. This has led Cambodia to rely intensively on imports to support domestic consumption and production.

The Cambodian government has implemented several supporting policies, such as creating entrepreneurship promotion funds, skills development fund, and credit guarantee schemes as well as establishing Agricultural and Rural Development Bank (ARDB) and SME banks to improve access to finance and promote investment opportunities, along with securing improvements in productivity through technological innovation. The report suggests that a public-private forum will serve as a platform to communicate, overcome challenges, and help firms scale up capital to invest in upgrading labor productivity and TFP.

Fiji

The report on Fiji recognized the importance of capital/credit for starting a new business and managing existing ones, particularly for informal firms. The study used a mixed data collection method to capture the Fijian credit experience and the perceptions of selected local business executives. The report tries to establish the link between productivity and access to credit by constructing models that point toward a significant impact on productivity and output growth due to credit/capital accessibility. Also highlighted are the numerous challenges faced by Fijian MSMEs in terms of limited financial resources, including limited access to formal banking services, high cost of borrowing from formal institutions, lack of financial literacy, absence of insurance cover, and the lack of legal recognition.

The report from Fiji recommends that addressing access to credit in the informal sector requires a multifaceted approach that combines policy interventions, socioeconomic initiatives, and institutional and regulatory reforms. The study also suggests that policy reforms aiming to accelerate financial sector development should be broad-based and focused on private sector involvement, improve governance and regulatory frameworks, enhance access to MSME financing, business start-ups and expansion, reduce tax burdens, technological improvement, create new innovative systems, boost labor productivity growth, market competitiveness, and increase scholarships and grants for education, skills training, and output growth.

India

The report from India concludes that the unorganized or informal sector occupies a substantial share in the Indian economy. Close to half of the country's economic activity happens in the informal sector, albeit in low-productivity scenarios. Among the various bottlenecks that contribute to low productivity for these informal enterprises, access to credit is a significant factor. Generally, higher credit growth leading to higher gross value added remains a stylized fact. While a large majority of enterprises suffer from a credit demand problem, relying exclusively on noninstitutional sources of credit for their short-term requirements, a deeper exploration reveals the underlying structural and policy malaise that they face.

The report from India recognizes that addressing the credit inadequacy problem of the informal sector, and thus low productivity, needs a multipronged approach that focuses on adapted solutions for the specific problems of enterprises in their various growth trajectories. The explosion of fintech firms in the country aims to address some of the credit requirements gaps for these enterprises. However, the

solution remains in a healthy mix of both public as well as private credit access for this sector. It is acknowledged in this report that the nature of regulatory and policy framework, which looked at the informal sector as a residual sector, has undergone considerable overhaul with the formulation of four labor codes (i.e., the Code on Wages, 2019, the Industrial Relations Code, 2020, the Code on Social Security, 2020, and the Occupational Safety, Health, and Working Conditions Code, 2020). There is also a greater focus on financial inclusion, growth of private credit, market access, and delivery of various government services to rural entrepreneurs, among many more. The study emphasizes that continuously raising awareness through various means regarding several initiatives toward productivity enhancements of informal enterprises must be the cornerstone in these efforts. Therefore, rather than focusing on singular features of access to credit problems faced by the informal sector, a multipronged approach to the problem would yield greater dividends in the long run.

Lao PDR

The report from Lao PDR examined informal sector productivity and access to finance issues. Lao PDR possesses an informal economy comprising diverse sectors where economic operations are carried out clandestinely or without government regulation. The research utilized World Bank Enterprise Surveys (WBES) data and supplemented the study by in-depth interviews with key informants actively involved in the informal economy. The main reasons which dissuade small firms/units from registering are reported to be lack of incentives and insufficient information. Small informal enterprises often encounter challenges in the form of difficulty in meeting requirements for formal documentation processes, a scarcity of assets to offer as collateral, and a deficiency in financial literacy.

Due to the limited data at the WBES, the Management Practice Index (MPI) was calculated, which the report considers to be the most effective way to assess management and productivity. In the context of Lao PDR, the management scores were found to be higher in the service sector compared to the manufacturing sector. The report emphasizes that with the intangible nature of the services sector's output, proactive and responsive management techniques become necessary to directly affect customer satisfaction. Interview sessions carried out with key informants recognized the benefits that registered firms can avail to in the form of government assistance programs, incentives (like tax breaks and grants), and support and services (in regulatory compliance), all of which can promote economic growth. Further, the report acknowledges the importance of access to finance, which could be used for human resource development, capital investment, and raising productivity.

The study suggests that a development plan could be formulated for enhancing the service economy, TVET, labor market adjustment, and balanced economic diversification. In particular, a better skill level in services management might encourage a structural shift in the economy from manufacturing to services. This could lead to policies promoting education, training, and investment in sectors, such as finance, tourism, and information technology. The study also recommends development of microfinance initiatives and credit facilities that are tailored exclusively to the needs of informal enterprises, offering competitive interest rates as well as credit guarantee schemes to informal firms. Moreover, the Lao PDR government needs to offer business development assistance and capacity-building programs to informal business operators, which may help in the enhancement of their operations, management, and competencies.

Malaysia

By utilizing primary (survey) and secondary data, along with qualitative policy assessments through stakeholder engagement, the study highlights that informal employment potentially drags down overall productivity while formal employment contributes positively. This implies that the longer informal sector businesses operate in the market, the more their economic growth diminishes. This underscores the importance of interventions to encourage informal businesses to transition into the formal sector, as it represents a viable strategy to mitigate the adverse effects of the informal economy on both the overall economy and worker productivity. From a financial perspective, the results show that financial loans demonstrate a positive impact, but a lack of financial accessibility remains a major constraint in transforming the informal sector.

The report acknowledges that financial accessibility for the informal sector remains a major constraint. The government's policies and initiatives addressing financial accessibility for the informal sector suffer from fragmentation and a lack of coordination at higher levels. Currently, only microcredit facilities with limited loan amounts are accessible for the informal sector and provided by a handful of agencies, such as the Economic Fund for National Entrepreneurs Group (TEKUN) and Amanah Ikhtiar Malaysia (AIM). The assessment of the report unequivocally indicates the absence of financial assistance provided to the informal sectors by commercial banks. It emphasizes the importance of interventions to encourage informal businesses to transition into the formal sector, as it represents a viable strategy to mitigate the adverse effects of the informal economy on both the overall economy and worker productivity. For a holistic policy intervention, the proposed strategies for formalization in Malaysia extend beyond financial accessibility and encompass regulatory reforms, institutional changes, and interventions within supply chains.

Mongolia

The report on Mongolia claims that informal entrepreneurship and informal employment were forbidden by law during the socialist era, therefore it a relatively new phenomenon in Mongolia. The informal sector includes nonagricultural enterprises that are owned and operated by households, with few regular paid employees. The size of Mongolia's informal economy is estimated to be 15.1%, which represents approximately USD8 billion at GDP PPP levels in 2023. The informal economy faces obstacles, such as limited access to loans, a tendency to evade taxes and insurance premiums, lack of awareness about tax and fee regulations, bureaucratic hurdles, corruption, challenges in obtaining business permissions due to insufficient capital and equipment, difficulties in financial and tax reporting, weak market competitiveness, and insufficient skills and education for transitioning to formality. The report empirically examines the impact of financial accessibility on the informal sector's labor productivity and suggests that both the outreach of financial services and access to credit are associated with an increase in labor productivity in the informal and formal sectors.

Although increasing productivity is crucial, the report acknowledges that without formalizing informal activities, growing productivity in informal sector may pose a threat to both economic growth and social welfare in the future. The study proposes to boost informal labor productivity through measures, like: (i) improved credit accessibility with a more inclusive design; (ii) access to the Credit Guarantee Fund (to facilitate the problems related to insufficient collateral; (iii) reduction in high-interest rates for loan; (iv) extending repayment periods for loans; (v) reducing information asymmetry; (vi) giving incentives for formalization; (vii) raising awareness about the relevant laws and regulations, benefits of formalizing informalities, simplified procedures in financial and tax reporting, and using the digital solutions recently enabled, such as e-Mongolia, e-tax, e-business, etc.; and (viii) improving access to training and skills development by educating informal employees and businesses about the necessary activities.

Pakistan

The report from Pakistan delves into the overlooked role of the informal sector in the country’s economy. This sector, characterized by small-scale, unregistered, and often unregulated activities, has and continues to contribute substantially to GDP growth and employment, particularly in rural areas. A multifaceted approach has been adopted in the study to examine the sociodemographic profile typical of informal sector employment, revealing a clear predominance of male workers and a larger share of employment in nonagricultural related to informal activities. The study also contains an in-depth review of the major challenges faced in the informal sector, particularly the limited access to formal credit systems, which impedes productivity growth. Using empirical exercises and case studies, the paper aims to demonstrate the complex relationship between finance accessibility, labor productivity, and economic development. Further, it empirically evaluates the impact of financial constraints on the sector's productivity. Empirical observations from Pakistan shed light on the profound effect financial resource availability can have on labor productivity. The experiences of entities, like the Kashf Foundation and Akhuwat, reveal that purposeful financial aid to informal sector ventures results in marked enhancements in operational procedures, revenue streams, and employment opportunities. Such instances emphasize the pivotal function of financial accessibility in

allowing informal enterprises to channel investments into areas that boost productivity, such as technological upgrades, skills training, and market diversification.

The report recognizes that to remedy the informal sector's financial exclusion in Pakistan, a collaborative approach involving governmental bodies, financial entities, and developmental agencies is essential. Moreover, creating bespoke financial offerings tailored to the informal sector's unique needs, including microloans, adaptable repayment plans, and reduced interest rates, could significantly ease these enterprises' economic challenges. The digital transformation of financial services and the use of mobile banking and online payment systems has the potential to bring financial solutions to remote and underbanked communities, diminishing dependence on unregulated credit networks. Furthermore, digital mediums to deliver financial education and entrepreneurial training can equip informal sector business owners with the requisite knowledge and competencies to handle financial affairs and make judicious investments in their operations.

The paper stresses the creation of an ecosystem conducive to formalizing informal enterprises by forging strong collaborations among government bodies, the financial sector, and NGOs. Such an ecosystem would guarantee that these businesses have access to essential financial resources, thereby improving their productivity and fostering overall economic advancement. By executing dedicated strategies for financial inclusion, streamlining regulatory infrastructures, and capitalizing on technological advancements, Pakistan can set the stage for a more integrated and efficient informal economy. The endeavors will enhance the living standards of countless informal sector laborers and fortify the nation's collective economic robustness and developmental course.

Sri Lanka

In Sri Lanka, the informal sector is critical, providing livelihoods for many people and contributing considerably to economic production. Despite its importance, the informal sector's productivity falls behind that of the formal economy, However, persistent challenges, particularly concerning productivity growth and financial accessibility, confront informal workers. The multivariate logistic regression analysis underscores the importance of factors, such as age, education level, and the use of technology in accessing financial sources through formal institutions for informal workers.

The report from Sri Lanka emphasizes the need for tailored interventions to address these barriers and promote inclusive economic growth. Labor productivity trends underscore the necessity for targeted interventions to bolster efficiency and competitiveness within the informal sector. Furthermore, survey findings on financial accessibility reveal entrenched apprehensions among microbusiness owners, impeding their pursuit of external financing. Tackling these challenges necessitates a holistic approach encompassing educational endeavors, support initiatives, and tailored financial solutions. Empowering informal workers through skills training, facilitating credit access, and advocating inclusive employment practices emerge as pivotal steps toward fostering sustainable growth and economic development. The report recommends that the policymakers must prioritize regulatory reforms to foster an enabling environment for informal sector expansion, ensuring adequate protection and support for workers. By harnessing the potential of the informal economy and addressing its constraints, Sri Lanka can unlock new avenues for inclusive growth and prosperity.

Turkiye

In Turkiye, the informal economy is defined as economic activities that operate beyond the knowledge and control of public authorities. Informality in Turkiye has manifested itself as unregistered employment with a high share of firms operating in the informal sector. Wage underreporting is a diverse characteristic for Turkish labor market as per this report. The analyses carried out at the firm level show that informality causes lower productivity. To analyze the relationship between credit access and productivity level based on firm-level data, the Entrepreneur Information System (EIS) database is utilized in this study. Relying on the data from 2013–21, the study finds that informal firms' access to bank credit is significantly lower than that of formal firms. The results of the study also indicate that there is a significant difference between the TFP levels of formal and informal firms. It is also pointed out in this study that for informal firms, access to finance would increase TFP to

some extent, but formal enterprises would be able to reap greater benefit in TFP sourced from higher levels of credit compared to informal ones.

The report from Turkiye suggests that attractive credit possibilities for small firms would have a promotive effect on informal firms to operate formally. In addition, the study highlights the role of education in bridging wage gaps, which are further reflected in productivity differences. An important policy recommendation of the study is "employment upgrading". Regardless of being employed formally or informally, the higher the education level of a person, the higher the wage and productivity level should be. The report also calls for the introduction of relevant policies to empower woman, migrants, and young laborers, who, in its opinion, are currently in a disadvantageous position.

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AESA	Agriculture Extension Support Activity
AIM	Amanah Ikhtiar Malaysia (Malaysia's largest microcredit organization)
ANOVA	analysis of variance
APO	Asian Productivity Organization
ARDB	Agricultural and Rural Development Bank
BAF	Business Assistance Fiji
BBS	Bangladesh Bureau of Statistics
BDT	Bangladesh's currency "Taka"
BNM	Bank Negara Malaysia (Malaysia Central Bank)
BRAC	Building Resources Across Communities
CARE	Cooperative for Assistance and Relief Everywhere
CBED	Community-Based Enterprise Development
CCM	Companies Commission of Malaysia
CLMV	Cambodia, Laos, Myanmar, and Vietnam
COE	Compensation of Employees
CPI	Consumer Price Index
CRIB	Credit Information Bureau
DGE	dynamic general equilibrium
DOSM	Department of Statistics Malaysia
DSS	Demand Services Survey
DW	Durbin-Watson
EES	Energy Efficiency Services Limited
EIS	Entrepreneur Information System
EU	European Union
FDB	Fiji Development Bank
FJD	Fiji's currency "Fiji Dollar"
FNU	Fiji National University
FRCA	Fiji Revenue and Customs Authority
GDP	gross domestic product
GNP	gross national product
GST	Goods and Services Tax
GVA	gross value added
HBW	home-based work

HLFS	Household Labor Force Survey
ICT	information and communication technologies
IHRDEP	Integrated Human Resources Development and Empowerment Program
IIC	Institute for Industry and Commerce
IITB	Indian Institute of Technology Bombay
ILO	International Labour Organization
IMF	International Monetary Fund
INR	India's currency "Rupee"
I.R. Iran	Islamic Republic of Iran
ISEFF	Import Substitution and Export Finance Facility
JILAF	Japan International Labor Foundation
JWiRES	Jeevika Women Initiative Renewable Energy and Solution
KHR	Cambodia's currency "Riel"
KP	Khyber Pakhtunkhwa
LAK	Lao PDR's currency "Kip"
LFS	Labor Force Survey
LKR	Sri Lanka's currency "Rupee"
LMAs	local market actors
LP	labor production
MFIs	microfinance institutions
MIMIC	multiple indicators multiple causes model
MNT	Mongolia's currency "Tugrik"
MoC	Ministry of Commerce
MPI	Management Practice Index
MSEs	micro and small enterprises
MSMEs	micro, small, and medium enterprises
MYR	Malaysia's currency "Ringgit"
NBC	National Bank of Cambodia
NBFCs	nonbanking financial companies
NDP	Northern Development Program
NGO	nongovernmental organization
NIP	National Industrial Policy (NIP):
NSO	National Statistics Office
NTC	new-to-credit
OAEs	own account establishments
OECD	Organization for Economic Cooperation and Development

OLS	Ordinary Least Square
OSS	one-stop service
P&P	proprietary or partnership
R&D	research and development
PBS	Pakistan Bureau of Statistics
PKR	Pakistan's currency "Rupee"
PLFS	periodic labor force survey
PPP	purchasing power parity
RBF	Reserve Bank of Fiji
RPL	Recognition of Prior Learning
SEE	standard error of the estimate
SFYP	Sixth Five Year Plan
SMEDA	Small and Medium Enterprise Development Authority
SMEs	small and medium enterprises
SPBD	South Pacific Business Development
SSI	small-scale industry
TEKUN	Economic Fund for National Entrepreneurs Group
TFP	total factor productivity
TurkStat	Turkish Statistical Institute
TVEC	Tertiary and Vocational Education Commission
TVET	technical and vocational education and training
UNDP	United Nations Development Programme
USD	United States of America's currency "Dollar"
VAT	value-added tax
WBES	World Bank Enterprise Surveys

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