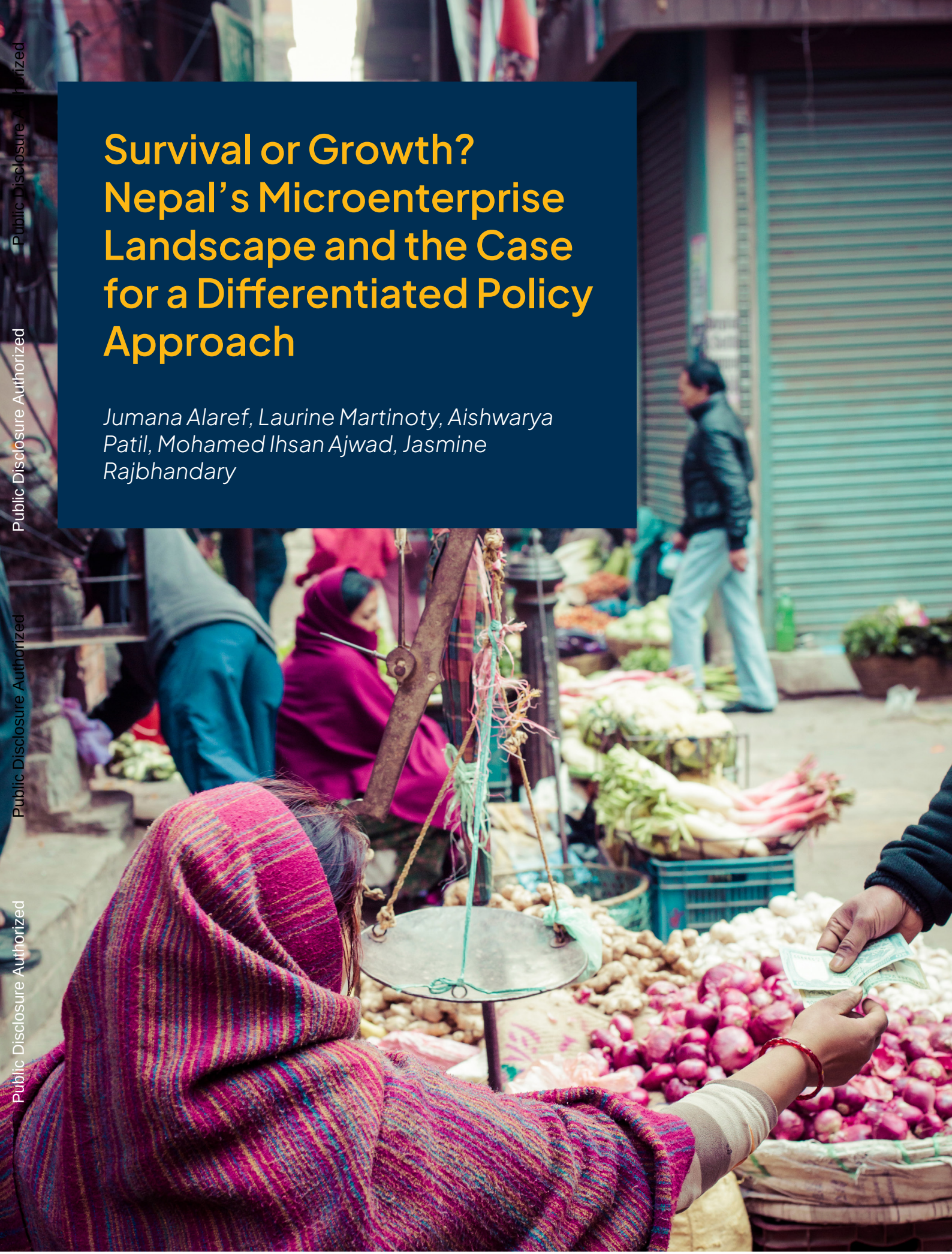


Survival or Growth? Nepal's Microenterprise Landscape and the Case for a Differentiated Policy Approach

Jumana Alaref, Laurine Martinoty, Aishwarya Patil, Mohamed Ihsan Ajwad, Jasmine Rajbhandary

WORLD BANK GROUP

1818 H Street NW, Washington DC 20433
Telephone: 202–473–1000; Internet: www.worldbank.org

Attribution

Please cite the work as follows: Alaref, Jumana; Martinoty, Laurine; Patil, Aishwarya; Ajwad, Mohamed Ihsan; and Rajbhandary, Jasmine. 2026. Survival or Growth? Nepal's Microenterprise Landscape and the Case for a Differentiated Policy Approach. Washington, DC: World Bank.

Any queries on rights and licenses, including subsidiary rights, should be addressed to World Bank Publications, The World Bank, 1818 H Street NW, Washington, DC 20433, USA; fax: 202–522–2625; e-mail: pubrights@worldbank.org.

Cover photo: © Curioso.Photography / Adobe Stock. Used under license from Adobe Stock. Cover design: Nicholas Martin

Section 1 photo: © Mint_Images / Envato. Used under license from Evato.

Section 2 photo: © Marco.Photography / Adobe Stock. Used under license from Adobe Stock.

Section 3 photo: © NaturesCharm / Envato. Used under license from Envato.

Contents

Figures

Tables

Abbreviations and Acronyms

B-READY	business ready (index)
GDP	gross domestic product
IRD	Inland Revenue Department
ISES	Informal Sector Enterprise Survey
M-ES	Micro-Formal Enterprise Survey
MSMEs	micro, small, and medium enterprises
NPR	Nepali Rupees
PP	percentage points
SMEs	small and medium enterprises

Acknowledgments

This report was prepared by a team led by Jumana Alaref and including Laurine Martinoty, Aishwarya Patil, Mohamed Ihsan Ajwad, and Jasmine Rajbhandary. Suravi Bhandary provided research assistance. Robert Zimmermann edited the report, and Nicholas Martin served as graphic designer.

The team would like to thank the following World Bank colleagues for their support. Cem Mete, David Sislen, Aparnaa Somanathan, Anna O'Donnell, and S. Amer Ahmed provided feedback, guidance, and management support. Zoe Leiyu Xie, Carole Chartouni, and Sailesh Tiwari served as peer reviewers at the decision review stage of the report. The team also benefited from helpful comments and suggestions received during internal consultations with Arvind Nair, Natasha Kapil, Prashant Raj Pandey, Ojashwi Samser J. B. Rana, Jaya Sharma, Audrey Sacks, Jyoti Maya Pandey, Benedicte De La Briere, Dalal Moosa, Alvin Etang Ndip, Lokendra Phadera, Maha Ahmed, Sabina Khatri Karki, Ayesha Vawda, Juni Singh, Rachel Slater, Baburam Niraula, and Ashim Nepal.

From the government of Nepal, the team appreciates the engagement of the Ministry of Industry, Commerce, and Supply (MoICS). The team is also thankful for the insights and collaboration from development partners and academic institutions, including Sujit Pandey of Sakshyam Research Institute; Dharma Swarnakar of the United Nations Development Programme; Basanta Kumar Kariki of the International Labour Organization; and Chandra Jung Bhandari of Governance Lab.

The report benefited from the generous support of the Korea World Bank Partnership Facility and the Rapid Social Response Trust Funds, which are gratefully acknowledged.

The team apologizes to any individuals or organizations inadvertently omitted from this list and remains deeply appreciative of all who contributed their guidance and assistance to this report.

Executive Summary

Informal microenterprises constitute a major share of Nepal's landscape of urban firms. They absorb a large segment of the labor force, acting both as a safety net and as a critical source of livelihoods in a context in which wage employment opportunities are scarce and often of low quality. Yet, the vast majority of microenterprises operate at subsistence levels, with limited prospects for productivity growth or structural transformation. Understanding the characteristics, performance, and constraints of these firms is therefore central to designing policy measures that are realistic and impactful.

Drawing on novel data from two new enterprise surveys, the 2024–25 Informal Sector Enterprise Survey (ISES) and the 2025 Micro-Formal Enterprise Survey (M-ES), this report provides the first systematic comparison between informal and formal microenterprises in Nepal.[1] These datasets make it possible to (1) profile informal microenterprises and benchmark them against formal microenterprises; (2) identify which informal firms, if any, resemble formal microenterprises in capability and performance; (3) assess which could benefit from formalization; and (4) distill policy implications for a differentiated, evidence based approach to microenterprise support.

The findings of the report show profound structural differences between the informal and formal microenterprise sectors. They also underscore that only a small proportion of informal firms have the capacity to benefit from a transition to the formal sector. These insights point strongly toward the need for a segmented policy approach that supports most informal firms through livelihood and social protection measures, while providing targeted productivity and formalization support to the small subset of firms with growth potential.

Informal Microenterprises are Mainly Subsistence Firms at Low Productivity

Informal microenterprises in Nepal function largely as survivalist or necessity driven businesses. Their owners typically possess low levels of human capital, limited sectoral experience, and few opportunities in the wage labor market. The majority of business owners report that they launched their enterprises because they were unable to find any other source of income. Many operate their businesses as a secondary source of income because of the low quality of the available wage work. Their average monthly profits remain below both the minimum wage and the average urban wage. Given this narrow margin, time is the main owner input, and reported profits largely reflect the labor of the owner rather than a return to capital or entrepreneurial capability.

Structurally, the overwhelming majority of informal microenterprises are small, young, single person operations. Only 8 percent reported that they had at least one paid worker in the month prior to the survey, and the average enterprise employs only 1.5 workers, including unpaid household members. These firms are disproportionately concentrated in the food retail sector. A sizable share of the firms operate from the homes of the owners or from temporary structures.

These findings stand in sharp contrast to the characteristics of formal microenterprises. Formal microenterprises tend to be older, larger in workforce size, and more well equipped. Their owners have higher educational attainment and more sectoral experience. They are less likely to cite necessity as the main reason for starting their businesses and are more likely to express a desire to grow their businesses. In addition, their businesses use more technology, better infrastructure, and more highly formal business practices, such as maintaining written records, separating household and business finances, and working under supplier or customer contracts. Formal microenterprises also exhibit much stronger performance. On average, their labor productivity is almost six times that of informal microenterprises. This productivity gap is wide across all sectors and is particularly large in the more productive nonfood retail and manufacturing sectors. Older cohorts of formal microenterprises show stronger productivity compared with their younger counterparts, whereas informal firms show relatively limited differences across age cohorts.

Although overall performance is low, the informal sector is not homogeneous. There are considerable differences, particularly across cities and sectors. Firms in cities, such as Janakpur, Kathmandu, and

1 For the ISES, refer to World Bank (2025b). The M-ES focuses on the same cities and uses the same business listings constructed during the ISES data collection, but the survey interviews are conducted across businesses registered with the Inland Revenue Department (IRD).

Pokhara, tend to enjoy higher sales and greater productivity, and some nonfood sectors show better performance potential.

Only a Small Subset of Informal Firms Would Benefit from Formalization

A central question explored in the report is whether formalization would raise productivity and earnings among microenterprises, and, if so, which ones. The evidence suggests that only a small share of informal firms are positioned to gain from formalization. One group that would benefit would be informal microenterprises that are already highly productive. However, in the case of Nepal, a mere 2.3 percent of informal businesses achieve productivity comparable with the productivity of the top segment of formal microenterprises.

A linear discriminant analysis found that 20.5 percent of informal firms share a substantial, close, or striking similarity with formal microenterprises in key characteristics, such as the education of the owners, the use of more advanced business practices, and the skills of employees. These firms are usually not subsistence or survivalist firms, though they more typically suffer from much lower productivity relative to formal microenterprises. This suggests that formalization among this segment of high-resemblance, more capable informal enterprises may be productivity enhancing because it could help them access better technology, more credit, and a larger market base.

For the vast majority of informal microenterprises, roughly 78 percent, the structural impediments are too deep, however. The low human capital, low productivity, limited use of technology, and minimal growth aspirations of these enterprises mean that formalization would not yield sufficient benefits to justify the fixed and recurrent costs associated with formal registry and entry into the formal tax and regulatory system. Far from being parasites, these firms function as an informal safety net and simply lack the fundamental characteristics that would allow them to benefit from formal status. These findings are consistent with broader evidence in the development literature demonstrating that productivity does not follow from formality, but formality tends to follow productivity. Indeed, the analysis shows that the firms most likely to benefit from formalization usually self-select into formality early, often at the start of their operations. In the case of Nepal, 68 percent of formal microenterprises and 85 percent of formal nonmicro firms begin formally.

Among the upper tail of productivity, some informal microenterprises face entry barriers that may explain why they remain informal. These barriers may include costly registration processes involving much red tape and many fees. Based on a back-of-the-envelope estimate, the analysis finds that the time and direct costs of registration can be sizable relative to firm scale. The upper-bound estimate is about 5 percent--10 percent of average annual sales. Other costs associated with operating in the formal sector that span the full business cycle, such as complex business closure procedures, may dissuade some capable informal businesses. The report finds that informal firms often do not view access to credit, fewer bribes, or better customer reach as meaningful gains, whereas formal microenterprises report that these are substantial advantages of registration. The small subset of capable informal firms may thus be held back not only by procedural barriers, but also by their systematic underestimates and other misperceptions about the benefits of formalization.

Policy Must Distinguish Between Subsistence and Potentially Productive Informal Firms

The clear heterogeneity across Nepal's informal microenterprises implies that a one size fits all policy approach would be both costly and ineffective. Instead, a differentiated strategy is needed, one that aligns policy objectives with the capabilities and aspirations across the many diverse firms.

First, accelerating growth among formal micro-, small, and medium enterprises (MSMEs) and in good-quality job creation is the most critical way to reduce subsistence informality.

The prevalence of informal subsistence enterprises reflects weak growth in formal wage employment and limited opportunities for upward mobility. Economy wide reforms that improve the business environment by reducing uncertainty and operating costs, strengthening access to critical inputs, such as infrastructure, land, and finance, improving regulatory and tax administration, and addressing governance constraints are essential to unlocking investment, stimulating MSME growth, and creating alternative, higher-quality wage jobs. Without better performance among formal MSMEs, policies aimed at informal firms alone are unlikely to deliver sustained reductions in informality.

Second, a targeted group of informal microenterprises showing productive potential (around 22 percent of microenterprises) could benefit from productivity enhancing support and formalization.

For the upper tail of informal microenterprises, that is, microenterprises exhibiting characteristics or performance closer to formal enterprises, policy should focus on enabling the transition to formalization. Priorities would include the following:

- Lowering the barriers to formalization by simplifying and digitalizing the steps in registration; improving transparency and guidance; and reducing the time, cost, and uncertainty associated with multiagency processes
- Strengthening the incentives for formalization and undertaking information campaigns on the value of formalization

Informal microenterprises that aspire to grow and that exhibit low productivity, but substantial capabilities resembling the capabilities of formal microenterprises—the high-resemblance informal enterprises—could benefit from well-targeted productivity-enhancing measures that might support eventual formalization. Such measures include expanding access to formal credit, digital payment systems, and e commerce platforms; fostering technology adoption and access to infrastructure; offering targeted training, coaching, or consulting tailored to high capability entrepreneurs; strengthening market links; and providing gender responsive support to female entrepreneurs, including childcare and mechanisms promoting financial autonomy and safe, appropriate workspaces.

Third, for the large majority of informal microenterprises operating at or near subsistence (around 78 percent of all microenterprises), policy priorities reside in livelihood enhancement, not formalization.

Roughly four in five informal firms lack the capabilities or productivity needed to benefit meaningfully from formality. Formalization among these firms would likely impose additional costs without generating proportionate gains. The policy priority should therefore be livelihood enhancement, income stabilization, and risk mitigation. Appropriate measures include the following:

- Consumption smoothing support, such as small transfers in cash or in kind
- Training in basic business practices that focus on simple heuristics rather than complex management modules
- Childcare and care related support, particularly among female owners
- Basic risk protection, such as health coverage, maternity benefits, and disability support
- Labor intermediation and job search support to facilitate the transition to wage employment as opportunities arise

These interventions reflect a recognition that most informal microenterprises operate primarily as livelihood support initiatives and safety nets, often temporary. Policy should thus aim at reducing vulnerability, supporting resilience, and improving the livelihoods of the households that depend on these firms.

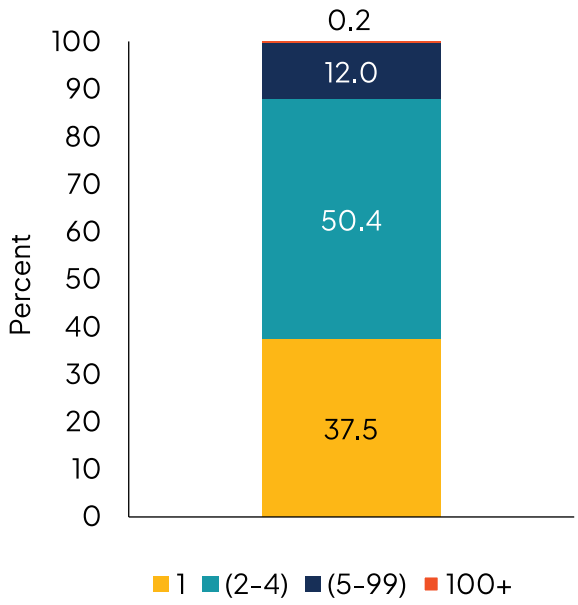
Introduction

Motivation

The growth model in Nepal has not generated sufficient high-quality domestic jobs to absorb the expanding working-age population. Growth in real gross domestic product (GDP) averaged around 4 percent–5 percent in the decade prior to the COVID-19 pandemic, with significant volatility driven by external shocks and natural disasters. Growth was heavily supported by remittances, which accounted for roughly a quarter of GDP, and by domestic consumption, rather than sustained productivity growth in tradables. As highlighted in the Nepal Country Economic Memorandum 2025 (World Bank 2025c), job creation in the formal private sector was modest relative to the pace of labor force expansion. A large share of the workforce was employed in agriculture.[2] Labor productivity in industry and services was low. According to the fourth Nepal Living Standards Survey, only 34 percent of the working-age population (ages 15–64) were employed (NSO 2024). The shares were even lower among female and youth (both at 23 percent). In search of better jobs, more than 7 percent of the population had migrated abroad by 2023 (World Bank 2025c).

The landscape of firms in Nepal is dominated by microenterprises that each employ fewer than five workers. Among firms captured in the 2018 Economic Census, 88 percent are microenterprises, defined as firms with fewer than five employees (refer to figure I.1). Of these, 37 percent are single-person enterprises without any employees. With 5–99 workers, small and medium enterprises (SMEs) are a major contributor to employment growth in low- and middle-income countries (Ayyagari et al. 2011). They represent a small share of the landscape of enterprises in Nepal, at 12 percent. With more than 100 employees, large firms are key drivers of aggregate productivity growth (Dieppe 2021). They account for an even smaller share of the landscape in Nepal, at 0.2 percent.

Figure I.1 Share of firms in the economy, by number of employees

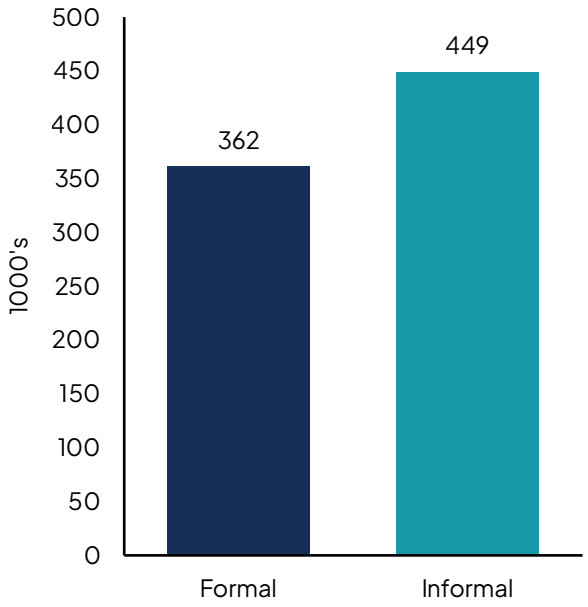


Source: Original figure for this publication based on NSO 2023.

More than half of all microenterprises are unregistered or informal. Microenterprises are characterized by high levels of informality. Among all microenterprises, 449,315 (55 percent) are informal, which is defined by the Economic Census as enterprises not registered with any government entity (refer to figure I.2). The remainder of microenterprises (361,741 firms) are registered with at least one government entity.

2 The average share of agriculture in real GDP has declined in Nepal over the years, but was still more important in Nepal than in peer countries, at 27 percent in 2015–23 (World Bank 2025c).

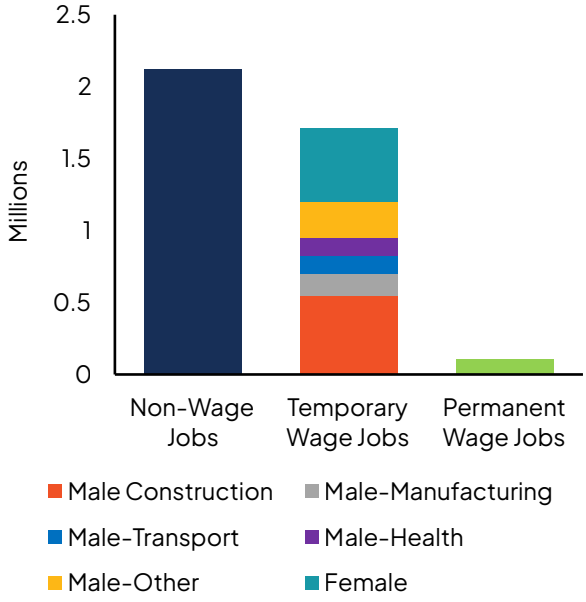
Figure I.2 Number of informal and formal microenterprises



Source: Original figure for this publication based on NSO 2023.
Note: Unregistered agricultural, forestry, and fishery activities; public administration; activities of households as employers of domestic workers and other workers; activities of extraterritorial organizations; and mobile establishments that do not have a fixed place of business are excluded from the scope of the business census.

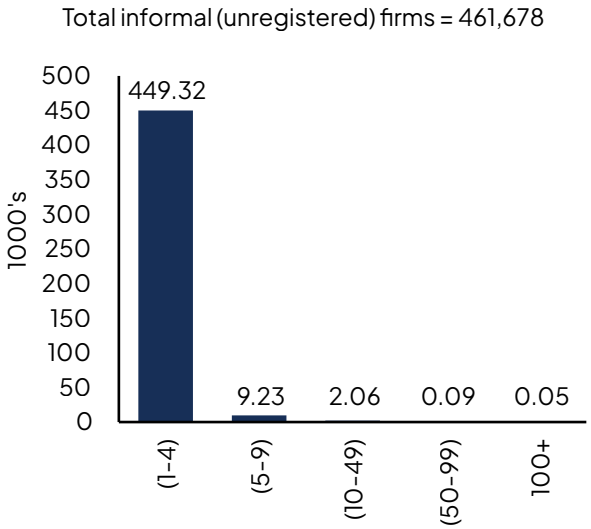
Informal microenterprises are a major source of employment for many urban Nepalis considering the weak growth in wage employment. According to the 2018 Economic Census, almost 1.50 million Nepalis are working in microenterprises, compared with 1.27 million in SMEs (NSO 2023). Outside agriculture, a majority of workers in private sector employment are salaried (59 percent), but a sizable share are self-employed, at 23 percent (NSO 2024), and an additional 7 percent of workers are employers. Many Nepalis self-select into self-employment because of the shortage of wage jobs to absorb job-seekers. In 2008–18, the labor market added close to 4 million jobs. Nearly half were wage jobs. Most of this growth in wage employment was in services (transport, health care, and education); some in manufacturing. Construction also expanded substantially. Yet, many of these jobs are informal or temporary. Females benefited far less. Most females were in unpaid work (refer to figure I.3).

Figure I.3 Net jobs added, 2008–18



Source: Original figure for this publication based on Ruppert Bulmer et al. 2020.

Figure I.4 Number of informal firms, by firm size



Source: Original figure for this publication based on NSO 2023.

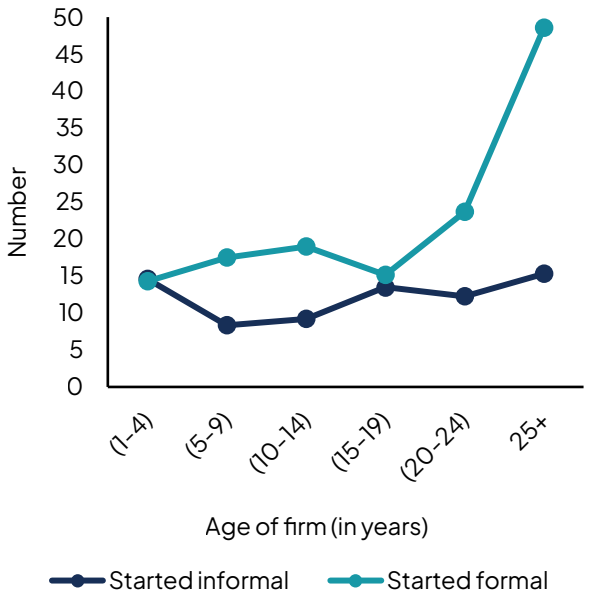
Despite their importance to livelihoods, informal enterprises are a major development challenge globally. In developing countries, these firms consistently show lower labor productivity and restricted access to capital and modern technologies, limiting their ability to grow or upgrade (Deléchat and Medina 2021; La Porta and Shleifer 2014; Ohnsorge and Yu 2021). Informal enterprises are associated with vulnerable employment conditions because they are typically operated without social security,

pensions, or labor protections. The prevalence of informal firms reduces the tax base because a large share of economic activity remains outside the tax net, undermining fiscal sustainability and the state's capacity to finance essential public services (Ohnsorge and Yu 2021).

In Nepal, informal firms show limited productivity growth and poor upward mobility. Urban informality absorbs surplus labor and acts as a safety net, but does not lift people out of persistent vulnerability. Most informal firms operate with limited assets and irregular earnings and without legal or financial protections. They offer few opportunities for skill accumulation, enterprise upgrading, and upward economic mobility (Adhikari 2018). They rarely grow beyond a few workers (refer to figure I.4). This is well documented in the literature (La Porta and Shleifer 2014; Ulyssea 2018).

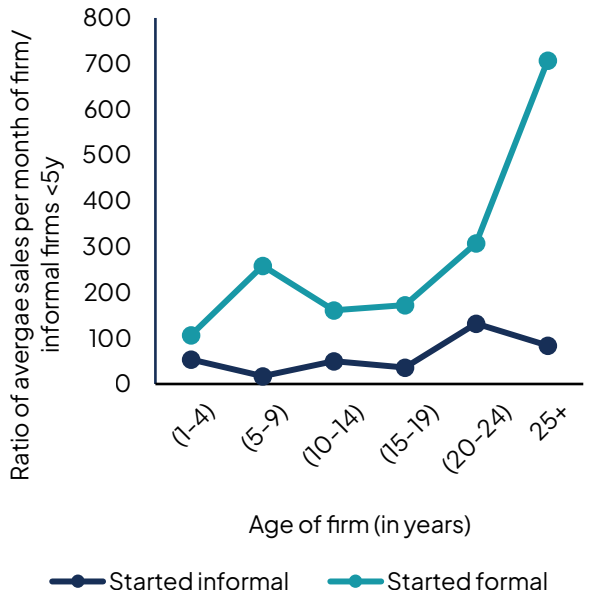
Informality is also associated with a growth penalty among firms in Nepal. Age cohort comparisons of non microfirms based on the 2023 Enterprise Survey show that, conditional on survival, firms that start informally and later formalize exhibit lower average employment and sales growth than firms that start formally (World Bank 2023). Firms that start informally display limited employment expansion across age cohorts. Comparisons between older and younger cohorts demonstrate that workforce size increases only modestly. Firms that start formally, by contrast, are substantially larger in older cohorts, reaching higher average employment (refer to figure I.5). Relative to young informal microenterprises, sales among non microfirms that start formally are more than 100 times higher among early cohorts and over 700 times higher among the oldest cohorts (refer to figure I.6). In contrast, firms that start informally record sales of 16–54 times the baseline, rising to around 130 times the baseline among some older cohorts. These patterns should be interpreted as cross sectional comparisons across surviving firm cohorts rather than evidence of within firm growth trajectories because longitudinal data are not available. Nonetheless, the observed differences are consistent with cross country evidence suggesting that firms that start informally accumulate fewer productive capabilities early, such as access to credit, technology, and managerial routines, placing them on persistently lower growth paths even after formalization (Adom 2026; Rand and Torm 2012).

Figure I.5 Average number of employees, by firm age



Source: Original figure for this publication based on World Bank 2023.

Figure I.6 Average monthly sales relative to young informal microfirms, by firm age



Source: Original figure for this publication based on World Bank 2023.
Note: The peak of firms ages 25+ shows that surviving firms may simply be better firms. About 32 percent of the sample formal firms are ages 25+.

Objectives and Structure of the Report

Because of their central role in the economy and the livelihoods of Nepalis, this report focuses on informal microbusinesses in urban Nepal, with the objective of understanding their characteristics, performance, and constraints.[3] The report examines five key aspects, as follows.

First, the report profiles informal microenterprises. The report examines owner characteristics in terms of education, sectoral experience, gender, household arrangements, history of employment, and reasons for opening the business. The characteristics of informal businesses in terms of economic sector, workforce size, average age, and productivity are also explored. In addition, this section probes the degree of heterogeneity in the sector.

Second, the report compares informal and formal microenterprises to uncover structural differences and key barriers facing informal microenterprises. The analysis examines differences in owner and firm characteristics, operational practices, and performance outcomes, including labor productivity, profitability, and the number of months firms operate. Understanding how informal microenterprises diverge from their formal counterparts helps reveal the challenges shaping informal sector behavior and points to policies that can address these challenges.

Third, the report explores the potential for formalization among informal microenterprises. The literature emphasizes that, because of barriers in entrepreneurial ability, capital intensity, and productivity, not all informal firms would benefit from becoming formal (de Mel et al. 2013; La Porta and Shleifer 2014). The report attempts to identify the segment of informal microenterprises that overlaps with formal microenterprises in productivity and profiles and might thus benefit from formalization.

Fourth, the report proposes reasons why informal microenterprises remain informal. The development literature offers many nonmutually exclusive explanations, including voluntary choice, burdensome regulations, weak institutional capacity, high compliance costs, and low perceived benefits in access to finance, markets, or public services. The report analyzes explanations in Nepal's case by drawing on the profile of informal firms and self-reported barriers to registration.

Fifth, the report examines the relationship between formalization and growth. The overall business environment is important to the growth prospects of informal microenterprises that stand to benefit from formalization. The analysis investigates some of the binding growth constraints facing micro-, small, and medium enterprises (MSMEs) in the formal sector in Nepal.

The report is organized into three sections. Section 1 discusses the enterprise data used in the analysis and the definition of formalization used in the study. Section 2 presents findings on each of the five key aspects noted above. Section 3 presents policy recommendations.

3 Informal activity is not exclusive to informal businesses. A substantial share of workers in Nepal's formal sector are also employed informally, that is, without legal or social protections, such as written contracts, social security coverage, or paid leave. Nationwide, informal employment accounts for 84.6 percent of the workforce (CBS 2019), highlighting the pervasive nature of informality across all types of enterprises. Informal employment among formal firms is beyond the scope of this report.

Section 1
Description of the Data and Definition of Formalization

The analysis relies on two World Bank novel enterprise surveys: the Informal Sector Enterprise Survey (ISES) and the Micro-Formal Enterprise Survey (M-ES).[4] The ISES and M-ES were collected in late 2024–early 2025 and at the end of 2025, respectively. Both surveys are novel because microenterprises are not typically observed in enterprise surveys. For example, the World Bank Enterprise Survey database includes formal firms that employ five or more workers.[5] It therefore does not cover formal microenterprises. Meanwhile, informal microenterprises tend to be invisible to enumerators and researchers because of the absence of a business registry from which to sample and because many of these enterprises operate from nonfixed locations, such as street hawking.

The definition of firm formalization that the surveys employ is registration with the Inland Revenue Department (IRD) of Nepal. A firm is formal if it is registered with the IRD. IRD registration allows a firm to obtain a permanent account number, a mandatory nine-digit tax identification number used to ensure tax compliance. The IRD operates under the Ministry of Finance. Its federal headquarters are in Kathmandu. It manages a network of 84 operational offices nationwide. While the registration is free and applies to all business entities, the process is associated with obligatory preapprovals and registrations. Approval is required from the Office of the Company Registrar under the Ministry of Industry, Commerce, and Supplies to establish a legal business entity and obtain a company registration number and an incorporation certificate under the Companies Act 2006.[6] A second process involves registration at the federal level with the Department of Industry or the Department of Small and Cottage Industries, both under the Ministry of Industry, Commerce, and Supplies, or with provincial governments to establish formal operations and obtain an industry registration certificate.[7] IRD registration is followed by a final step, which includes local registration, typically with the relevant ward office where the business will be physically located.

The ISES employs adaptive cluster sampling, an innovative area-based sampling methodology. Because there are no official listings for informal businesses from which to sample, the methodology illustrated in this report divides urban areas into squares of equal sizes. Each square consists of a primary sampling unit. A subset of squares within each block is randomly chosen to undergo full enumeration whereby basic information is collected, such as registration status, sector, and size. Once informal businesses are discovered through this procedure, a subset of these businesses is randomly selected to respond to the questionnaire. Given that informal businesses often operate near each other in clusters, an expansion threshold is determined based on the number of businesses found in each of the sampled squares. If, based on the distribution of businesses, an expansion threshold has been determined to be 10, every additional square in which 10 or more informal businesses are operating triggers another expansion.[8]

ISES covers eight cities in Nepal, and the results are representative of those cities (World Bank 2025b). Biratnagar, Birgunj, Butwal, Dhankuta, Janakpur, Kathmandu, Nepalgunj, and Pokhara are preselected to be part of the ISES, and the results are generalizable to those cities.

The M-ES focuses on the same cities and uses the same business listings constructed during the ISES data collection, but the survey interviews are conducted among businesses registered with the IRD. The M-ES uses stratified random sampling whereby the population of establishments is first separated into nonoverlapping groups or strata, and then respondents are selected through simple random sampling from each stratum. Three stratification categories are used, as follows: industry (retail, services, and manufacturing), size (1 category: one–four workers), and region, which includes the same eight urban areas on which the ISES focuses. Sectoral stratification was undertaken to maximize comparability with the stratification of the Nepal ISES.

Occasionally, the analysis is supplemented with results from the 2023 World Bank Enterprise Survey, which covers formal non-microenterprises and is representative at the national level (World Bank 2023). The Enterprise Survey covers formal firms in Nepal with more than five workers and is representative of Nepal's private sector economy (refer to table 1.1).

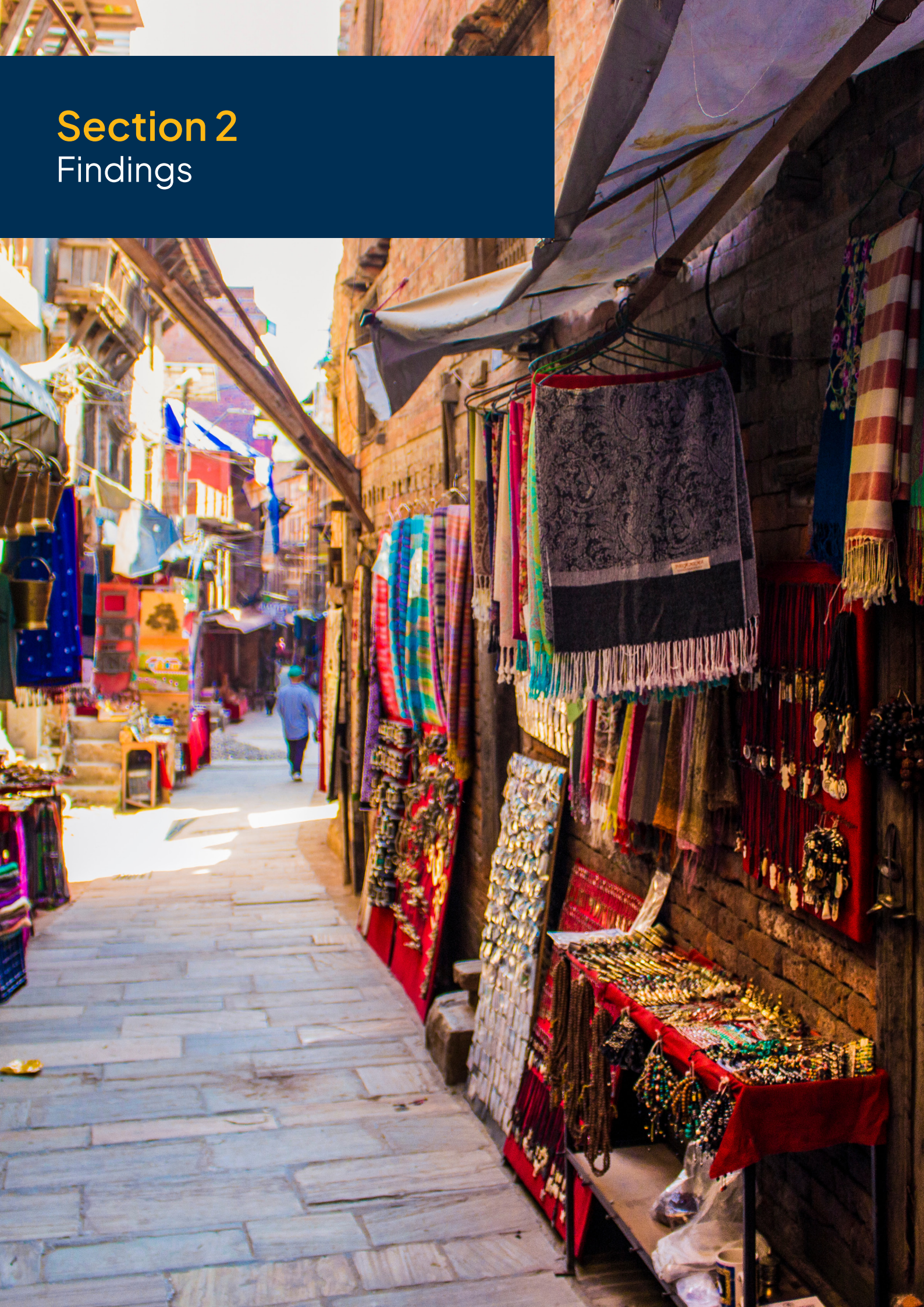
4 For the ISES, refer to World Bank (2025b). The M-ES focuses on the same cities and uses the same business listings constructed during the ISES data collection, but the survey interviews are conducted across businesses registered with the Inland Revenue Department (IRD).
5 Refer to WBES (World Bank Enterprise Surveys) (dashboard), World Bank, https://www.enterprisesurveys.org/en/enterprisesurveys.
6 While some sources, including the International Labour Organization (ILO 2022), suggest that only limited liability companies are required to register with the Office of the Company Registrar, other literature indicates that registration with the office is mandatory for all businesses. This confusion indicates a lack of clarity in legal and operational processes and practices.
7 The literature also points to the possibility of registration at the ward level for small local businesses with limited capital, such as tea shops and small grocery stores. These businesses may register solely at the ward office without establishing a company structure.
8 Full details of the methodology are provided by Aga et al. (2023).

Table 1.1 Summary of the three enterprise surveys utilized in the report

Survey type	Employees, number	Registration with IRD	Sampling universe	Coverage and representativeness	Sample size
Informal Sector Enterprise Survey (ISES), 2024–25	Mostly 1–4	No	Adaptive cluster sampling (no list of informal businesses exists)	Biratnagar, Birgunj, Butwal, Dhankuta, Janakpur, Kathmandu, Nepalgunj, and Pokhara (representative at the city level)	2,535
Micro-Formal Enterprise Survey (M-ES), 2025	1–4	Yes	Listing exercise conducted for ISES	Biratnagar, Birgunj, Butwal, Dhankuta, Janakpur, Kathmandu, Nepalgunj, and Pokhara (representative at the city level)	1,740
Enterprise Survey, 2023	5 or more	Yes	List of eligible firms obtained from formal sources and databases	National	582

Sources: Original table for this publication based on M-ES; World Bank 2023, 2025b.

Section 2
Findings

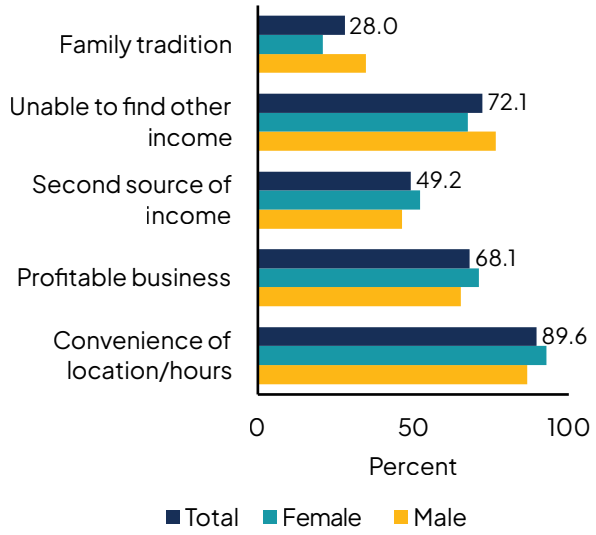


This section answers five core questions about informal microenterprises in urban Nepal. First, it profiles informal microenterprises and their owners to understand who operates these firms and under what conditions. Second, it compares informal microenterprises with formal microenterprises to highlight structural differences in capabilities, practices, and performance. Third, it assesses which informal firms, if any, have the potential to benefit from formalization. Fourth, it examines why informal firms remain informal, distinguishing among subsistence constraints, structural barriers, misperceptions, and preferences for flexibility. Fifth, it explores the relationship between formalization and firm growth and what this implies for policy.

Owner Characteristics

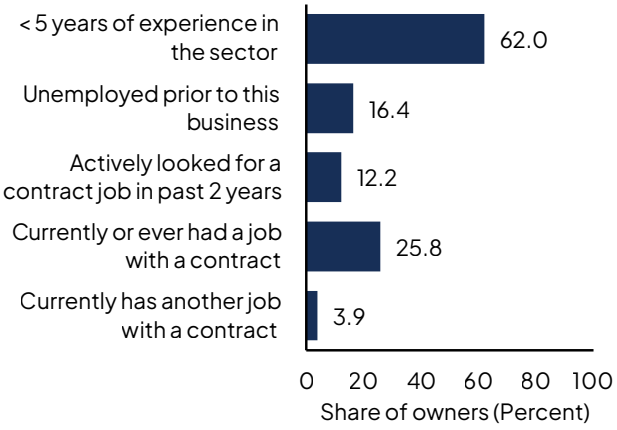
Informal microenterprises are operated by subsistence entrepreneurs. The owners of informal microenterprises are mostly entrepreneurs by necessity. The majority operate informally because they are unable to generate income in any other way. Although one in every two microentrepreneurs reported that they had started their businesses as a means to earn a secondary income, 72 percent stated that they had been unable to find another source of income (refer to figure 2.1).[9] More than half (55 percent) were the primary income earners in their households. A third of the respondents had children under age 6 in their households.

Figure 2.1 Starting an informal business



Source: Original figure for this publication based on World Bank 2025b.

Figure 2.2 Owner employment and experience



Source: Original figure for this publication based on World Bank 2025b.

Owners exhibit low human capital. Most have low educational attainment. No education is a characteristic of 18 percent, and an additional 23 percent have not completed primary education. This is in line with the overall low educational attainment of the working-age population in Nepal, where 27 percent have never attended school (NSO 2024).

Owners tend to have limited years of experience in the sector in which they operate and most have never held a wage job with a contract. More than 60 percent have less than five years of sectoral experience. The majority had never had a contract (74 percent), and 16 percent were unemployed prior to the launch of the businesses (refer to figure 2.2).

Although profitability was cited as a key motivating factor for starting a business by more than half of the owners, the profits of informal microenterprises were low and were mostly compensation for owner's labor. The average monthly net profit of an informal microenterprise, at NPR 15,293, was lower than the average urban wage, at NPR 17,965 (CBS 2019).[10] It is also lower than the average monthly minimum wage, at NPR 19,550 as of July 2025. This means that many informal urban businesses in Nepal, as in many developing countries, operate at a subsistence scale and exist mainly because of the inability of the owners to access wage opportunities.[11] This narrow margin indicates that profits largely reflecting the owner's labor rather

9 Owners could select among multiple responses on the question about the reasons for starting their businesses. The responses were not mutually exclusive. Future survey questionnaires could be more precise in the possible responses about the need for a secondary source of income. It is unclear whether the respondents to the current survey were referring to a secondary source of income for themselves or for their households.

10 The information on the net profits of businesses were self-reported by survey respondents.

11 The absolute poverty line in Nepal is estimated at NPR 6,075 per person per month (World Bank 2024a). Monthly net profits of NPR 15,293

than returns to capital or entrepreneurship.

Female and internal migrants account for a large share of the owners of informal microenterprises. Close to half of informal microenterprises (48 percent) are owned by females. Internal migrants—defined as owners who have not lived their entire lives in the city in which they operate their businesses—represent 61 percent of the owners.

Female entrepreneurs may have different reasons for operating informal businesses, particularly reasons related to flexibility in location and hours. While 90 percent of the owners cited convenience of location and hours as their primary motivation for launching an informal business, the share was higher among females (92.0 percent) than among males (85.6 percent). Female owners of informal microenterprises are less likely to report that they are the household breadwinners (34 percent among females; 73 percent among males), which means that businesses operated by females are more likely to be a secondary source of income for the household. Indeed, relative to males (46 percent), a higher share of females (52 percent) reported that access to a secondary source of income was their main reason for starting the business. Operating an informal business could also allow females to navigate their care and household duties more easily, especially because a higher share of females (40 percent) than males (25 percent) run their businesses from inside the home. A substantial literature shows that females' concentration in home-based informal enterprises is closely linked to care duties, safety, the need for mobility, and the absence of childcare services (ILO 2018; Rahman et al. 2023).

In a smaller number of cases, informal businesses are a continuation of family businesses. Among owners, 28 percent cited family tradition as a reason for starting an informal business (34.8 percent among males; 21.0 percent among females). Family tradition could also be linked with caste or ethnicity, given the dominance of caste in certain trades. Caste groups have historically been associated in Nepal with specific artisanal occupations, for example, the Damai with tailoring and musical instruments, the Kami with metalworking and blacksmithing, and the Sarki with leatherwork and cobbling. These occupational specializations continue to influence patterns of business ownership and self-employment across microenterprises (Acharya 2023; Giri 2016). In the sample, 30 percent of informal microenterprise owners belong to the Janajati caste (Hill or Terai); 15 percent, to the Hill Chhetri caste; 11 percent, to the Newari caste; and 9 percent, to the Hill Brahmin caste.[12]

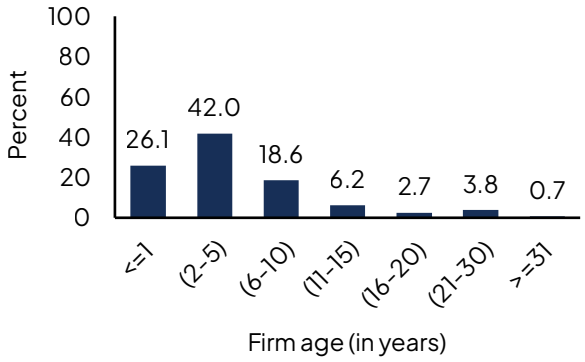
Firm Characteristics

Informal microenterprises are mostly young. Among informal businesses, 68 percent are ages 5 or less (refer to figure 2.3). This pattern supports the finding that relatively few enterprises are likely to be inherited family businesses because family businesses may be expected to be much older However, without more data, distinguishing whether the young age of informal microenterprises reflects high business turnover or low survival rates among informal microenterprises is difficult.

suggest that many informal microenterprise owners may live in households close to or below the poverty line, particularly if the enterprise owner is the primary income earner. However, because the survey does not collect information on total household income or assets, it is not possible to directly assess the household poverty status of informal microenterprises or make a precise comparison using official poverty measures.

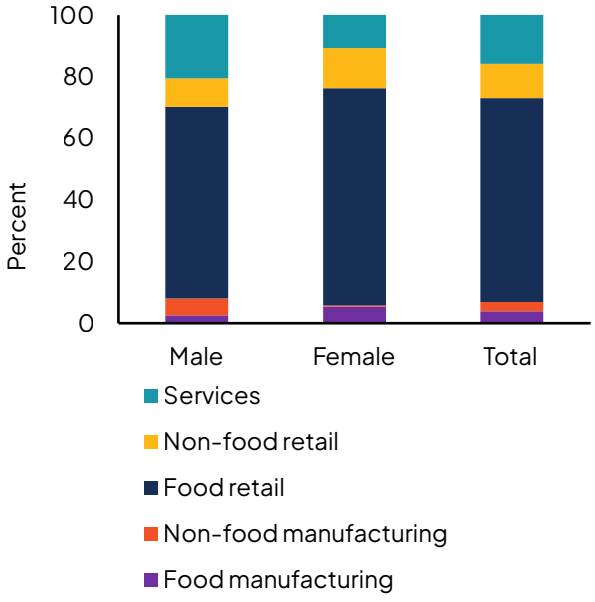
12 Other castes include Terai Brahmin-Chhetri (4.7 percent), other Terai caste (16.7 percent), Hill Dalit (4.9 percent), Terai Dalit (2.9 percent), Muslim (4.9 percent), and other (0.62 percent).

Figure 2.3 Share of firms, by firm age



Source: Original figure for this publication based on World Bank 2025b.

Figure 2.4 Share of firms, by sector of operation and sex of owner



Source: Original figure for this publication based on World Bank 2025b.

Informal microenterprises dominate in the food retail business. Because of the importance of agribusiness in job creation in low- and middle-income countries, the sectoral distribution of the results of the analysis is broken down by the food and nonfood industries to cover the agricultural food value chain. The results are disaggregated by five subsectors: reselling of food (food retail), retail other than food, food processing (food manufacturing), nonfood manufacturing, and services other than food. Most businesses dominate in the food retail sector (refer to figure 2.4). There are some sectoral differences in the sex of the owner. Male-owned enterprises are more likely to be active in the nonfood sectors, such as manufacturing and services. Female-owned enterprises are more likely to be active in food and nonfood retail.

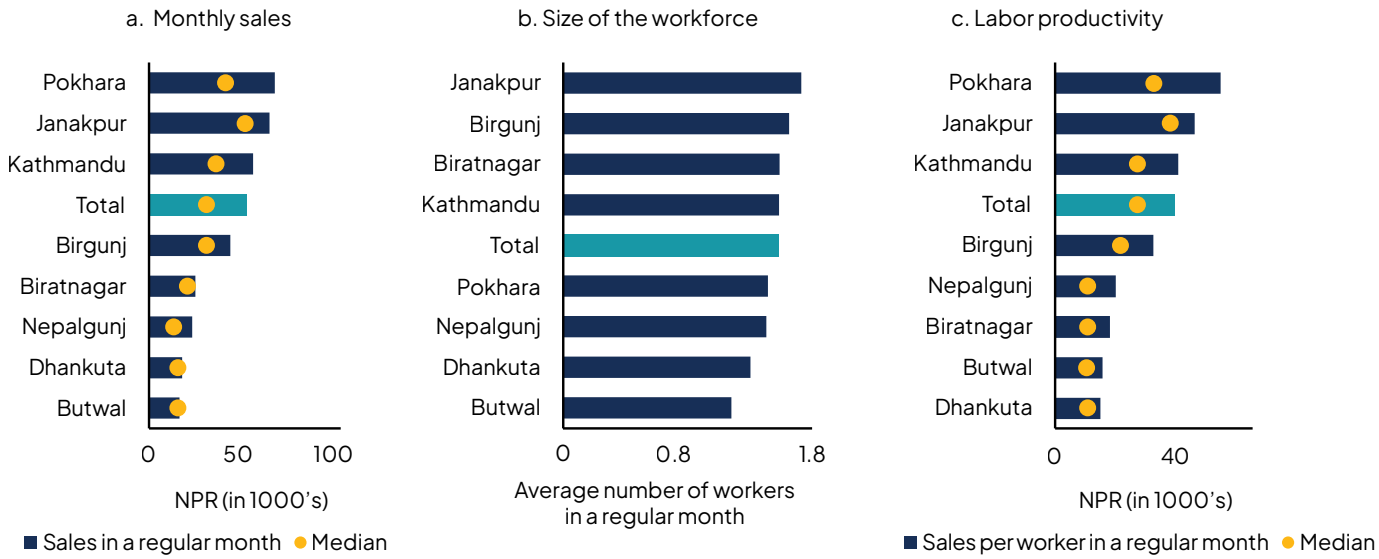
Informal microenterprises are mostly single-person enterprises (including the owner), and the majority do not have any monthly paid workers. In the month prior to data collection, 54 percent of businesses only had one worker (including the owner).[13] In a regular month, the average number of workers is 1.5. The share of paid workers is small. Only 8 percent of informal businesses had at least one paid worker in the month prior to data collection. Moreover, the share of paid workers among all workers in informal microenterprises is only 5 percent.[14]

Few informal microenterprises are seasonal, and the majority operate from a fixed location. Only 2 percent of informal businesses operate for 6 months or less during a year, while 20 percent operate for less than 12 months. Only 13 percent operate from nonfixed premises, such as street hawkers. The rest operate from households (31 percent), non-households with permanent structures (42 percent), or non-households with temporary structures, including stalls or stands (13 percent).

There is spatial heterogeneity among urban informal microenterprises in monthly sales, size, and output per worker, that is, labor productivity. The average urban informal business has total sales of NPR 50,991 in a regular month, employs 1.56 workers, and has output per worker of NPR 25,874 (refer to figure 2.5). Firms in Janakpur, Kathmandu, and Pokhara are larger and have above-average sales in a regular month. They are also more productive, suggesting that the largest informal firms in these locations may also be the most productive. This pattern is not driven by the more productive sectors in these cities because this finding persists even after accounting for the five subsectors, suggesting that factors associated with these cities and their locations support better firm performance.

13 Number of workers may include family members, the owner, and the respondent, if applicable. It may also include both paid and unpaid workers.
14 This indicator measures the total number of paid workers, divided by the number of all workers in a firm.

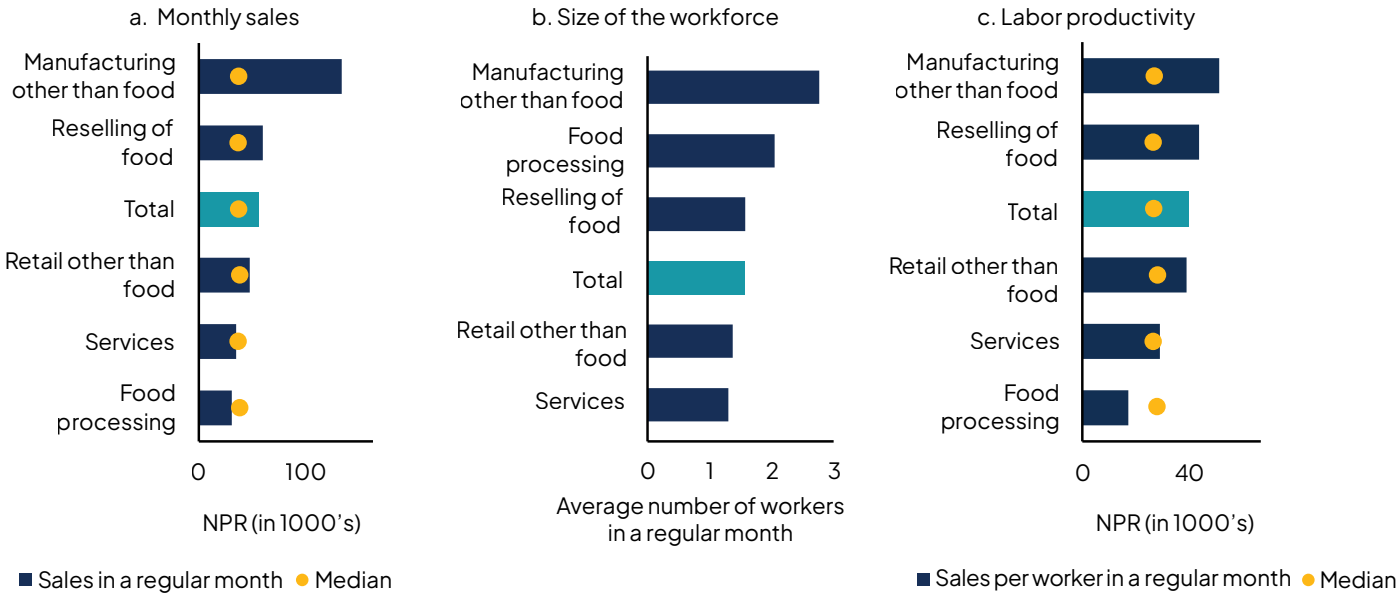
Figure 2.5 Monthly sales, size of the workforce, and labor productivity, by city



Source: Original figure for this publication based on World Bank 2025b.
Note: Sales data in the month prior to the survey have a large number of 0 values. Regular monthly sales are therefore used instead. This variable is replaced by the sales of the prior month if regular monthly sales are missing, unknown, or 0. The same operation is performed for the number of employees to maintain consistency in the productivity measure. This pattern holds even if account is taken of five subsector fixed effects.

There is also sectoral heterogeneity among urban informal microenterprises in monthly sales, size, and labor productivity. The most productive sectors are nonfood manufacturing and food retail, which also exhibit larger than average monthly sales and are larger in size (refer to figure 2.6). This is consistent with the finding that the largest informal firms may also be the most productive. The two least productive sectors are services and food manufacturing.

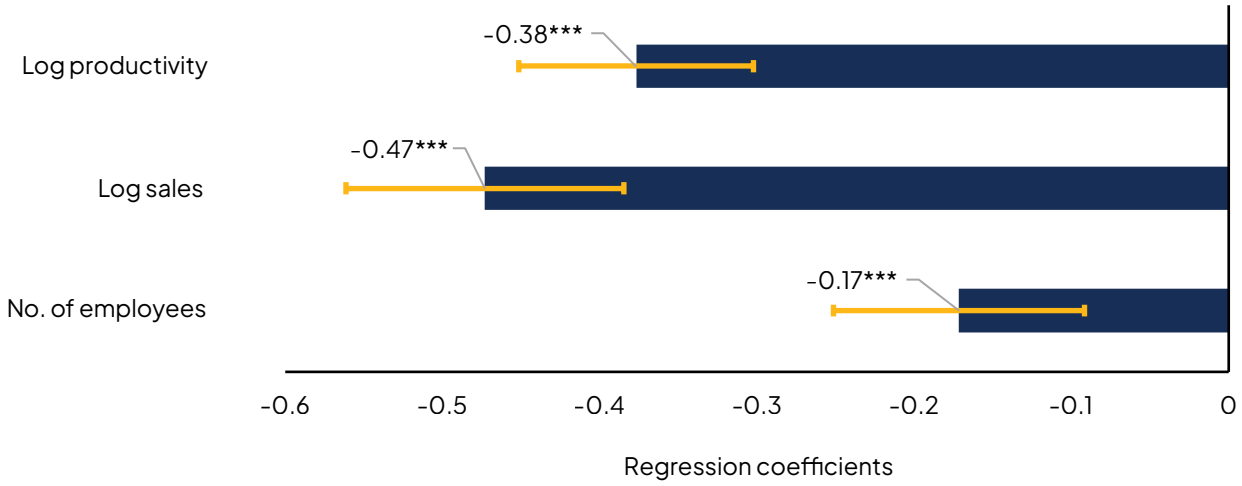
Figure 2.6 Monthly sales, size of the workforce, and labor productivity, by sector



Source: Original figure for this publication based on World Bank 2025b.

Informal businesses owned by females have fewer employees, sell less, and are less productive than informal male-owned businesses. Figure 2.7 illustrates the differences between female- and male-owned enterprises in size, sales in a regular month, and labor productivity. Female-owned businesses have 0.17 fewer employees. In a log specification, the estimated coefficients of −0.38 and −0.47 imply that female-owned businesses show productivity levels approximately 32 percent lower and monthly sales approximately 38 percent lower relative to male-owned businesses. However, this female penalty is not uniform across all sectors. Female owners in food manufacturing have smaller firms than males, but sell more, meaning that they are about 15 percent more productive than male-owned firms in the same sector (refer to annex A, figure A.1). In all other sectors, they sell relatively less and hire relatively more, making them less productive than comparable male-owned firms, particularly in retail, which is by far the most important activity among both sexes.

Figure 2.7 Regular monthly employment, sales, and labor productivity, by sex of owner



Source: Original figure for this publication based on World Bank 2025b.
Note: The figure plots the coefficients from a regression where each of the y-axis variables is regressed on a female ownership dummy, controlling for city and sector fixed effects. Log coefficients can be converted into percentage effects using the exponential transformation: $(e^{-0.38}-1)*100 = -31.6\%$, and $(e^{-0.47}-1)*100 = -37.5\%$. Gold whiskers show 95% confidence intervals.
** p < .1 ** p < .05 *** p < .01.*

Sex differences in performance are not driven by females self-selecting into economic sectors with lower productivity potential, but are partly explained by the prevalence of home based lower productivity businesses among females. Using a Blinder-Oaxaca decomposition analysis to unpack drivers of productivity differences between female- and male-owned enterprises shows that the hypothesis that females self-select into low-productivity sectors is not the case here (refer to annex B, table B.1). Indeed, females work in larger numbers in more highly productive sectors relative to males (such as food retail), even though females generally operate smaller firms. Had females not worked in more highly productive sectors relative to males, the productivity gap would be even larger, at 38 percent instead of 32 percent. A partial explanation of the lower productivity of female-owned firms is that females are more likely to operate household-run businesses that are less productive. Females also tend to have less educational attainment and fewer years of experience. In addition, they have different reasons for launching a business. They are thus more likely to start a business because they have no other source of income and because of the convenience of (home) location and the flexibility in hours worked. Accounting for these factors lowers the productivity gap from 38 percent to 29.5 percent. The rest of the gap remains unexplained after the inclusion of observable characteristics.[15]

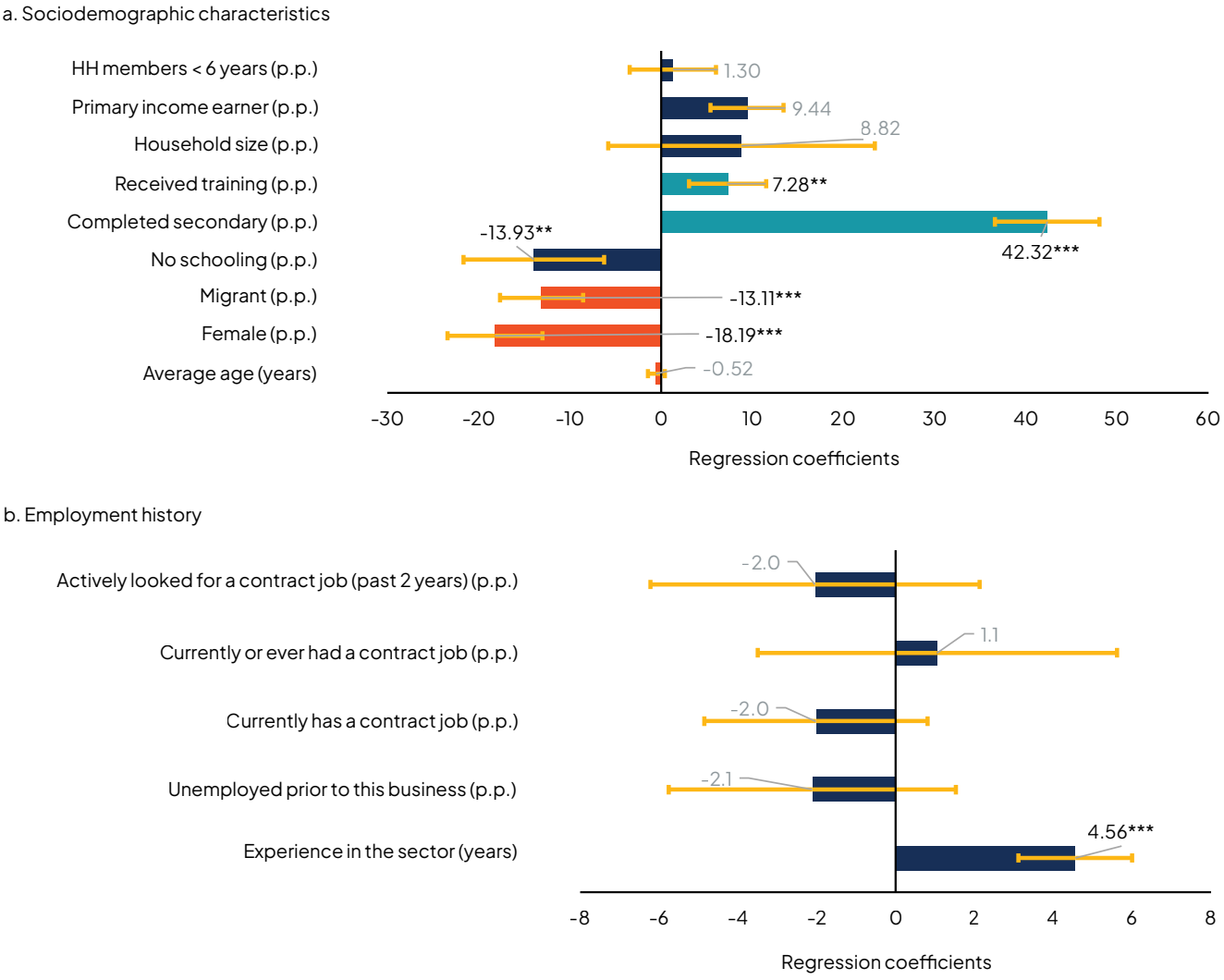
15 Hardy and Kagy (2018) use data from the Ghana garment sector to document that female-owned microenterprises earn much less profit (about half) compared with male-owned firms, even within the same industry. Similar to the findings of this report, much of the gap is unexplained because no combination of observables from their rich firm- and owner-level dataset explains the large and robust differences in profits between females and males.

The heterogeneity is wide in the performance of informal businesses outside the averages and between the top and bottom of the productivity distribution. Productivity averages hide substantial heterogeneity among informal microenterprises at the top and bottom of the distribution, especially in food manufacturing. A highly productive informal firm—one at the 90th percentile of the labor productivity distribution—generates nine times more sales per worker than a firm at the bottom 10th percentile. Among informal firms in food manufacturing, those at the top of the productivity distribution (the 90th percentile) generate 12 times more sales per worker than those at the bottom (the 10th percentile) (refer to annex A, figure A.2).

Differences Between Formal and Informal Microenterprises

The owners of formal microenterprises have higher human capital and more sectoral experience. The owners of formal microenterprises and the owners of informal microenterprises differ in characteristics and employment experience (refer to figure 2.8). The owners of formal microenterprises are 42 percentage points more likely to have completed secondary education, and 20 percent of the owners of formal microenterprises have received business skills training. While this is not a large share, these owners are still 7 percentage points more likely to have received training relative to the owners of informal microenterprises. The owners of formal microenterprises have an average of five more years of experience relative to the owners of informal microenterprises.

Figure 2.8 Owner characteristics, formal vs. informal microenterprises



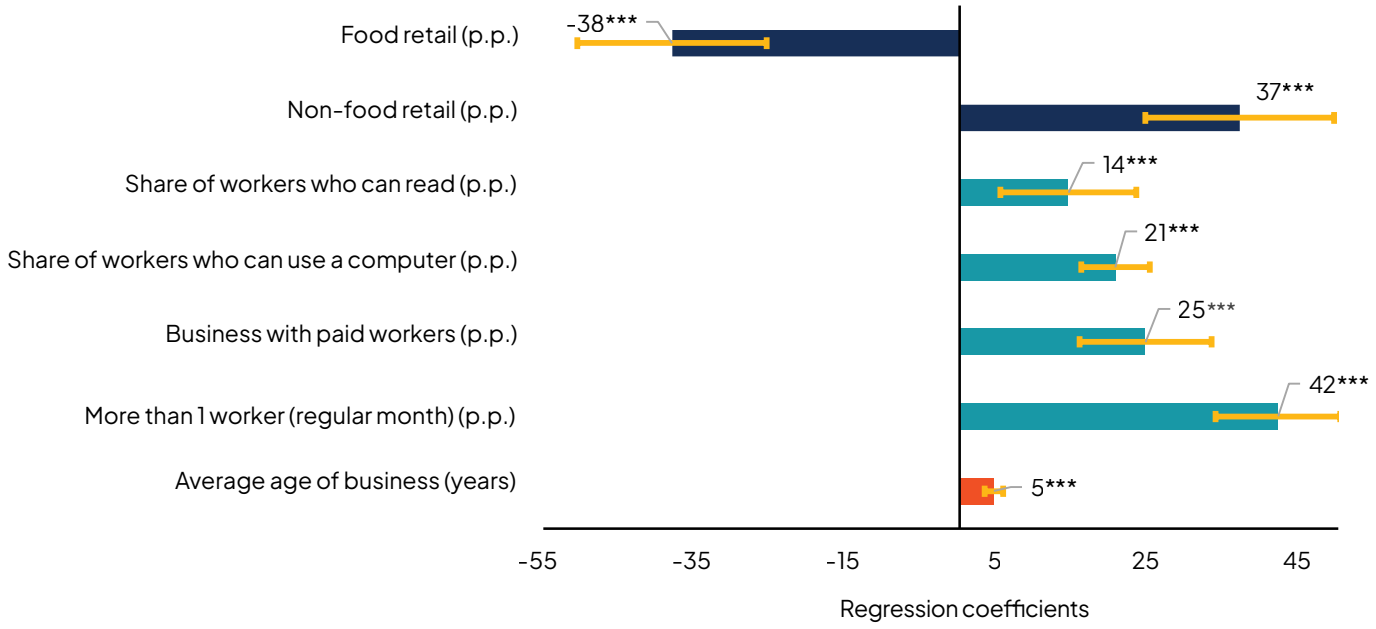
Source: Original figure for this publication based on M-ES; and World Bank 2025b.
Note: The panels plot the coefficient of formality from a regression of outcomes on a formality dummy, controlling for the log of firm employment size, the firm's main sector, and the city in which the firm operates. Standard errors are clustered at the strata level. Panel a: The training received entails improvement in business skills. Light grey means the result is not statistically significant. Gold whiskers show 95% confidence intervals.
**p < .1 **p < .05 ***p < .01.*

The owners of formal microenterprises are less likely to be female. Only 27 percent of formal microenterprise owners are female. There is a difference of 18 percentage points in the ownership by females of formal and informal microenterprises (refer to figure 2.8). The owners of formal microenterprises are 13 percentage points less likely to be internal migrants.

Owners of formal microenterprises represent different ethnic backgrounds, although the differences disappear after accounting for city, sector, and education effects. Among the owners of formal microenterprises, 22 percent are Hill Brahmin (against 9 percent of owners of informal microenterprises), and 21 percent are Hill Chhetri (against 15 percent). The Janajati caste (Hill or Terai) represents the largest caste or ethnic category among owners of informal microenterprises. The different probabilities of formality by caste and ethnicity disappear once city, sector, and education fixed effects are considered (refer to annex B, table B.2). Thus, differences in formality across castes are mostly explained by where people live, the sectors they work in, and their educational attainment.

Formal microenterprises are older, more likely to employ more than one worker in a regular month, and more likely to have paid and skilled workers. Formal microenterprises are, on average, five years older than their informal counterparts (refer to figure 2.9). Their average age is 10 years. They are 42 percentage points more likely to have more than one worker in a regular month. Their average workforce is 2.5 workers. They are 25 percentage points more likely than informal microbusinesses to have paid workers. The formal microenterprise workforce is more skilled. The shares of workers in formal microenterprises who can read and use a computer are 14 percentage points and 21 percentage points higher than workers in informal microenterprises, respectively.

Figure 2.9 Business characteristics, formal vs. informal microenterprises



Sources: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The figure plots the coefficient of formality from a regression of the outcomes on a formality dummy, controlling for the log of firm employment size, the firm's main sector, and the city in which the firm operates. No control is run for the log of firm employment size if the outcome is employs more than 1 worker during a regular month. The sector fixed effect is not added if the outcome is a sector. Standard errors are clustered at the strata level. Gold whiskers show 95% confidence intervals.
** p < .1 ** p < .05 *** p < .01.*

While the retail sector dominates among formal and informal operations, food-related activities dominate much more among informal microenterprises, reflecting a fundamental difference in economic activity. Similar to informal microenterprises, the retail sector dominates in the operations of formal microenterprises. Among formal businesses, 76 percent are in retail, compared with 18 percent in services, and only 6 percent in manufacturing. However, food-related activities dominate much more among informal microenterprises (refer to annex A, figure A.3). They account for more than two-thirds of the total activity among informal firms, compared with only about one-third among formal microenterprises. A mix of nonfood activities dominate in the formal microenterprise retail sector. For example, 30 percent of formal businesses sell clothing and household items, and 27 percent sell other products, such as computer and phone business services, jewelry, and medicinal products.

Formal microenterprise owners are less likely to start a business for the purpose of subsistence and are more likely to express a desire to expand their businesses. The largest difference between formal and informal microenterprises in the motivation for starting a business appears to be in the need for a secondary source of income. This is cited by only 32 percent of formal microenterprise owners, but 50 percent of informal microenterprise owners (refer to figure 2.10). This suggests that many informal workers are unable to find good-quality jobs with sufficient pay or hours. Formal microenterprise owners are 14 percentage points less likely to start a business because they have no other source of income. Moreover, their decisions differ on business expansion. For example, 48 percent of formal microenterprise owners wish to expand their businesses, compared with 35 percent of informal business owners (refer to figure 2.10). This difference is statistically significant.

Figure 2.10 Decisions to start and expand, formal vs. informal microenterprises

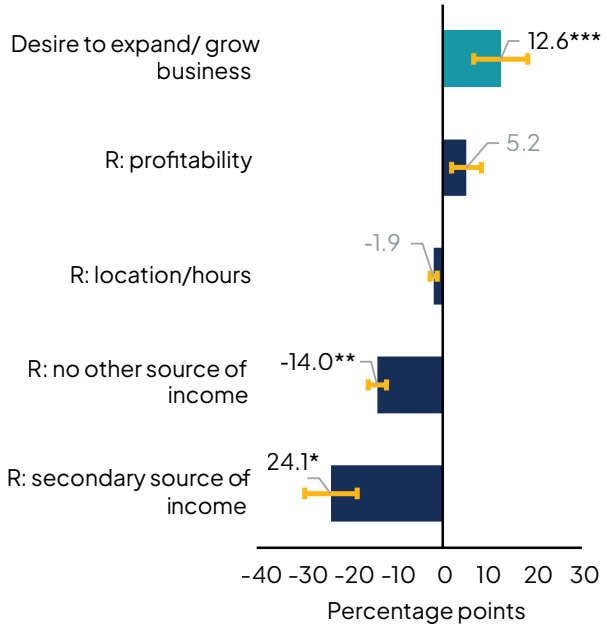
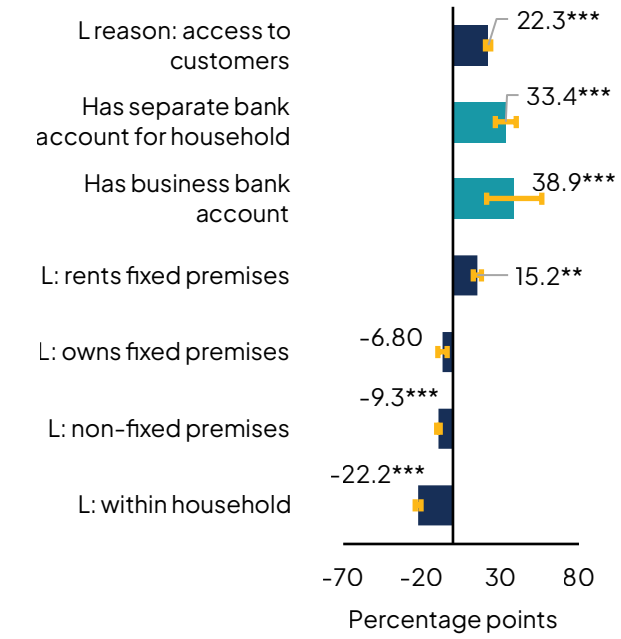


Figure 2.11 Location of business, formal vs. informal microenterprises

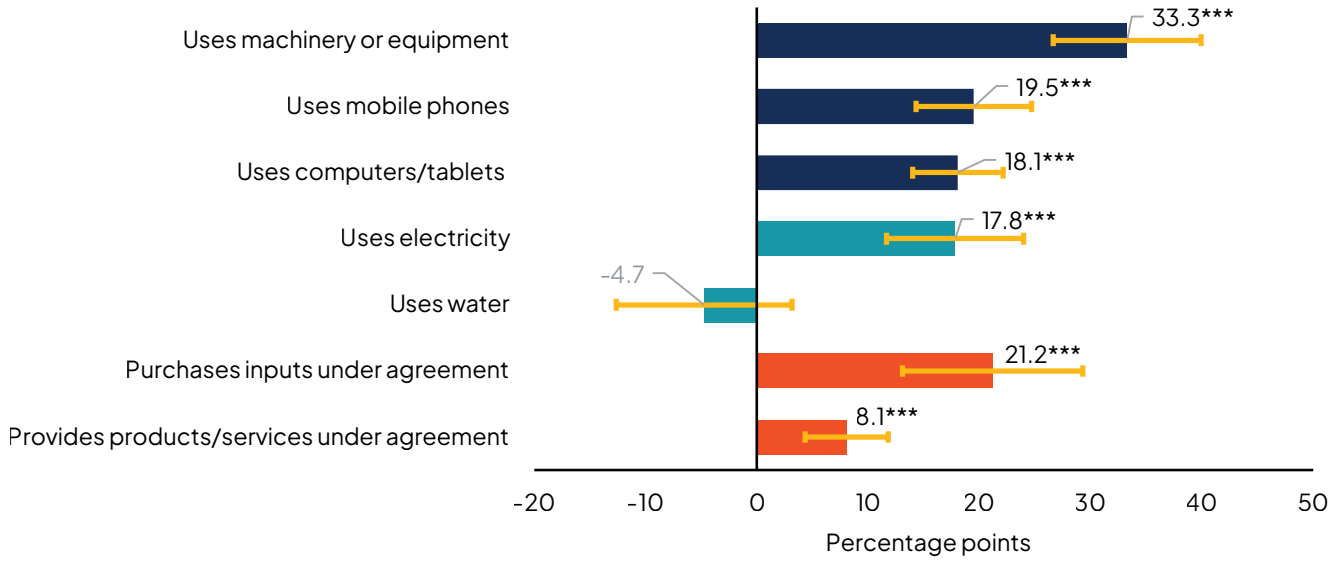


Sources: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The figures plot the coefficients from a regression of the outcomes on a formality dummy, controlling for the log of firm employment size, the firm's main sector, and the city in which the firm operates. R = main reason to start a business. L = location. The coefficient for location: nonfixed premises includes hawkers. Standard errors are clustered at the strata level. Gold whiskers show 95% confidence intervals.
** p < .1 ** p < .05 *** p < .01.*

Formal microenterprises apply different operational practices; one key element is separating the household from the business in location and finance. Formal microenterprises are 39 percentage points more likely to have a bank account for the business and 33 percentage points more likely to have a separate bank account for the household (refer to figure 2.11). Formal microbusinesses are 22 percentage points less likely to operate from within a household and 9 percentage points less likely to operate from nonfixed premises, such as street hawking. Their choice of location reflects their growth aspirations as formal businesses. They are 22 percentage points more likely to choose a location based on the ease of access to customers. Formal microenterprises are 15 percentage points more likely to pay rent if they operate from nonhousehold fixed locations.

Operational differences are apparent in the use of formal business relations, technology, and infrastructure. Formal microenterprises are 8 percentage points more likely to provide services under an agreement and 21 percentage points more likely to purchase inputs under an agreement (refer to figure 2.12). Formal microbusinesses are more likely to use technology. They are 20 percentage points more likely to use mobile phones, 18 percentage points more likely to use computers, and 33 percentage points more likely to use machinery or equipment. They also have access to better infrastructure. Thus, they are 18 percentage points more likely to use electricity.

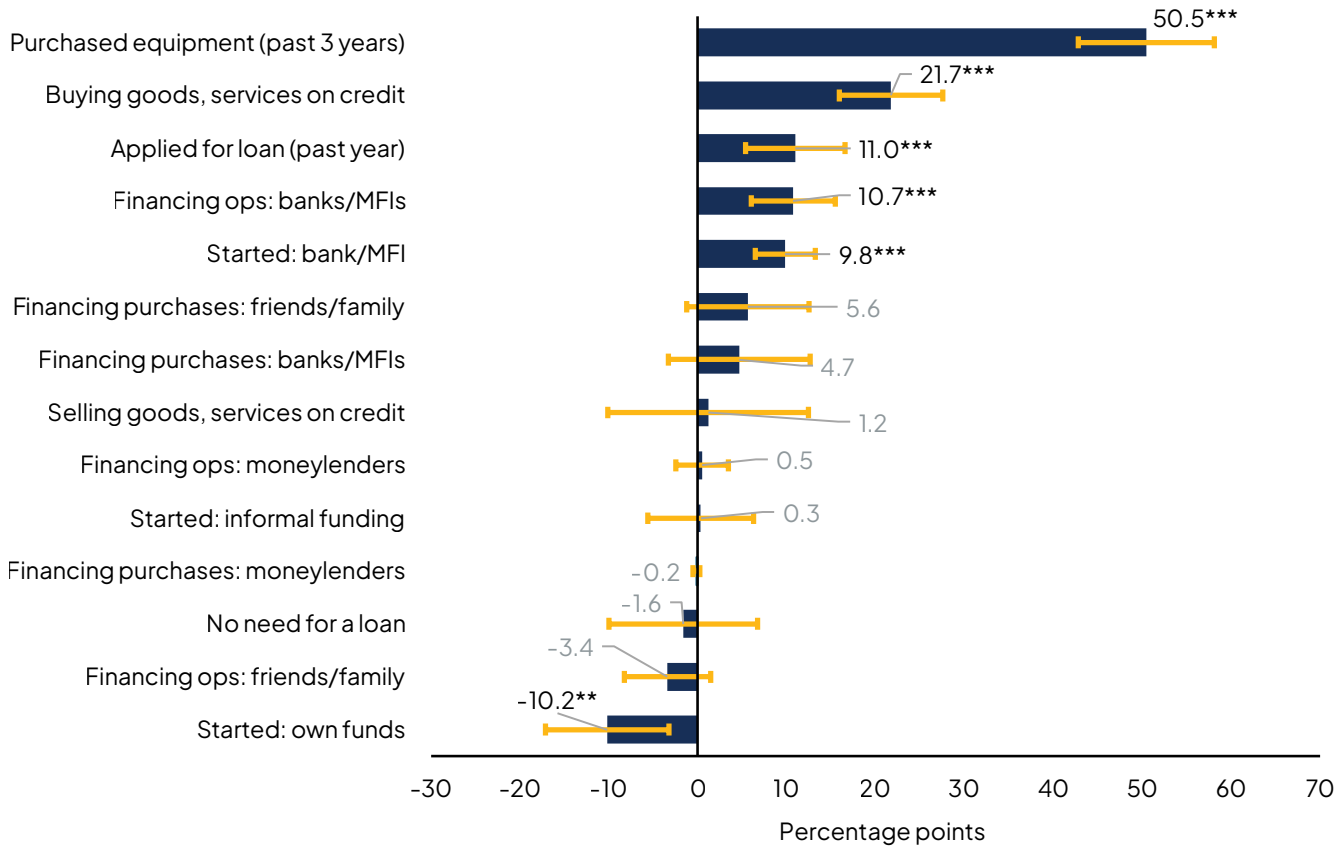
Figure 2.12 Formal vs. informal microfirms: infrastructure, technology, and business relations



Sources: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The figure plots the coefficient of formality from a regression of outcomes on a formality dummy, controlling for the log of firm employment size, the firm's main sector, and the city in which the firm operates. Mobile phones include cell phones or smartphones. Agreements may include contractual or other types of agreements. Standard errors are clustered at the strata level. Gold whiskers show 95% confidence intervals.
**p < .1 **p < .05 ***p < .01.*

Formal microbusinesses are more likely to purchase machinery and equipment and to use credit and formal financial services. Formal microenterprises are 50 percentage points more likely to have purchased machinery or other equipment in the previous three years (refer to figure 2.13). This is probably an outcome of their ability to access formal credit and financial services. For instance, relative to their informal counterparts, formal microbusinesses are 22 percentage points more likely to buy goods and services on credit, 11 percentage points more likely to apply for loans, 11 percentage points more likely to finance their business through banks or microfinance institutions, 10 percentage points more likely to launch with bank or microfinance funding, and 10 percentage points less likely to launch with the funds of the main owner.

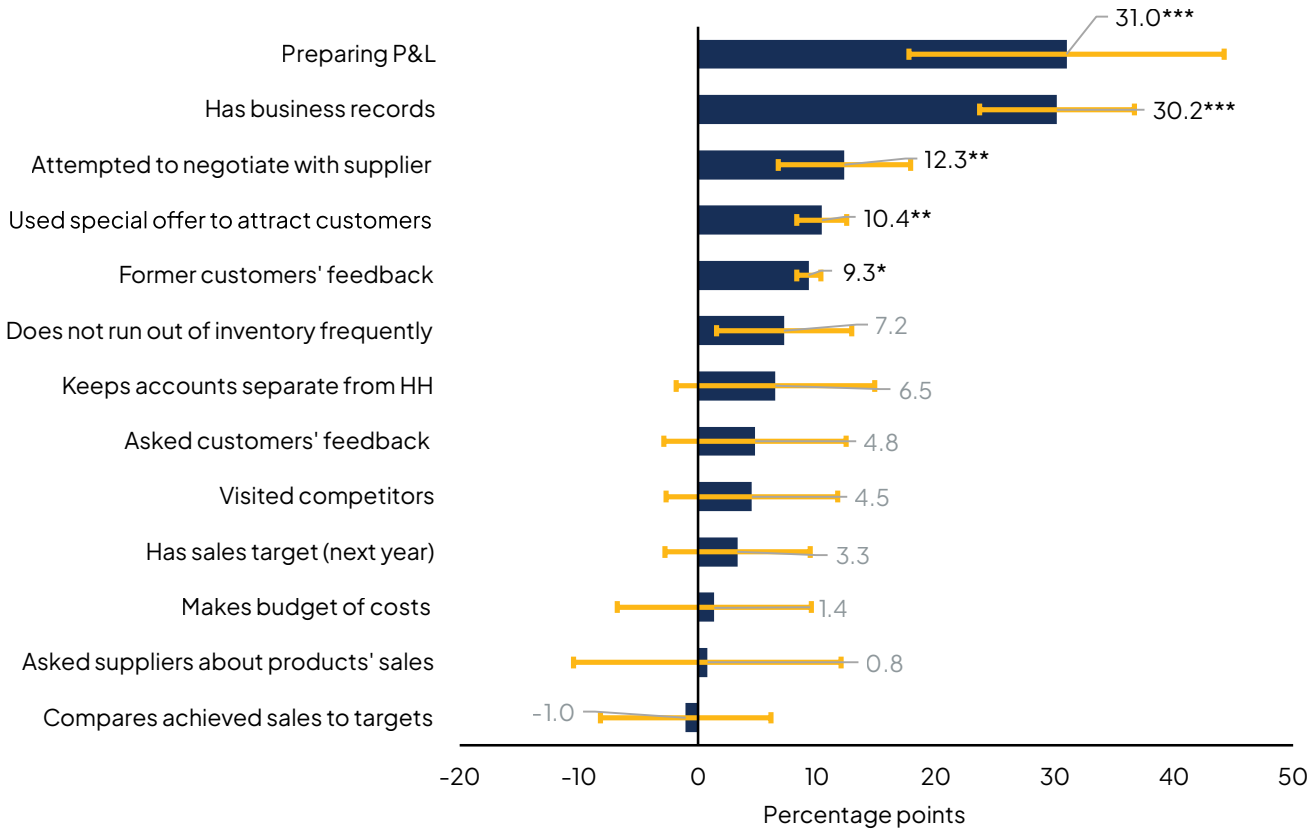
Figure 2.13 Use of financial services, formal vs. informal microenterprises



Sources: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The figure plots the coefficient of formality from a regression of outcomes on a formality dummy, controlling for the log of firm employment size, the firm's main sector, and the city in which the firm operates. Financing purchases entails major purchases. Started implies that the owner started the business using the given source. MFI = microfinance institution. Standard errors are clustered at the strata level. Gold whiskers show 95% confidence intervals.
** p < .1 ** p < .05 *** p < .01.*

Formal microenterprises tend to follow management best practice, which is evident even after one controls for differences in owner education. Formal microbusinesses are 31 percentage points more likely to prepare profit and loss statements at least once a year, 30 percentage points more likely to maintain written or recorded business records, 12 percentage points more likely to negotiate with suppliers for lower prices, 10 percentage points more likely to announce special offers to attract customers, and 9 percentage points more likely to seek feedback from customers (refer to figure 2.14).

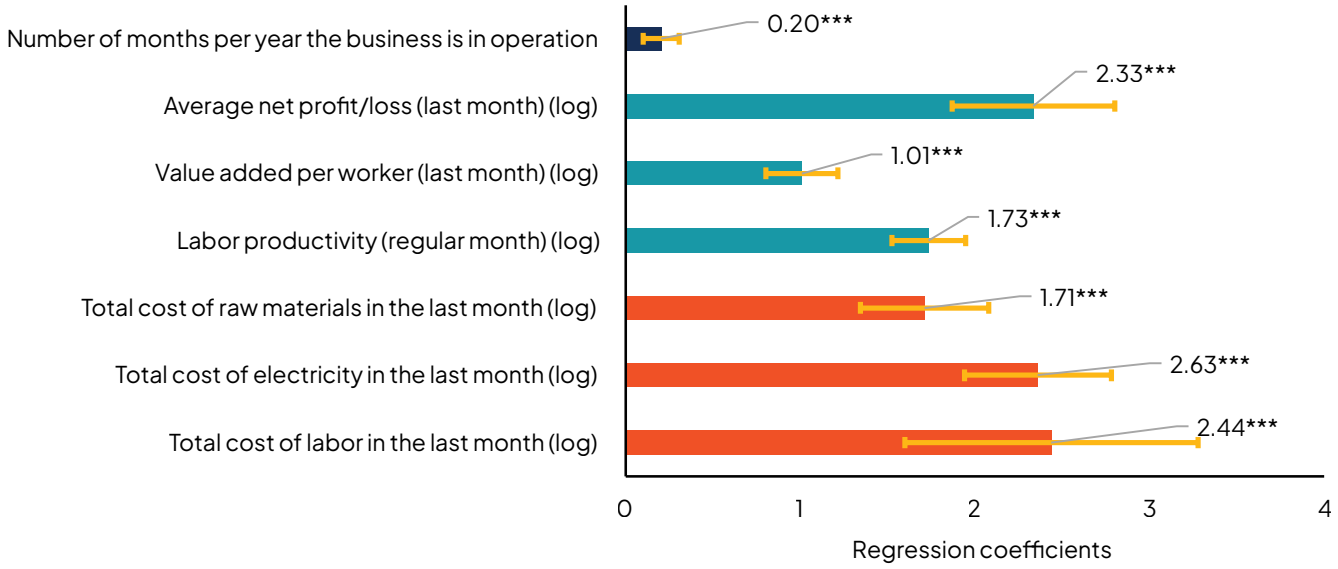
Figure 2.14 Key management practices, formal vs. informal microenterprises



Sources: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The figure plots the coefficient of formality from a regression of outcomes on a formality dummy, controlling for the log of firm employment size, the firm's main sector, the city in which the firm operates, and two variables on owner education (owner has no education and owner has secondary education). Formal businesses tend to compare achieved sales with targets at least monthly, prepare a profit and loss statement at least once a year, establish a budget of probable costs in the coming year, visit competitors to learn about their products, ask customers for feedback on potential new products, talk with former customers to see why they stopped buying, and attempt to negotiate with suppliers for lower prices. HH = household. P&L = profit and loss statement. Standard errors are clustered at the strata level. Gold whiskers show 95% confidence intervals.
** p < .1 ** p < .05 *** p < .01.*

Formal microenterprises are an average six times more labor productive than their informal counterparts. Key performance indicators show that the average labor productivity gap is wide between formal and informal microbusinesses (refer to figure 2.15). Converting the log difference of 1.73 into level ratios reveals that formal microenterprises are an average of 5.6 times more labor productive than their informal counterparts. Moreover, the variation at the top and bottom of the distribution is wide (refer to annex B, table B.3). For example, an informal microenterprise at the 90th percentile of the labor productivity distribution (that is, the top 10 percent) produces five times less output per worker than a formal microenterprise at the same distribution. A formal microenterprise at the 10th percentile of the labor productivity distribution (the bottom 10 percent) still produces three times more output per worker than an informal microenterprise at the same distribution.

Figure 2.15 Performance, formal vs. informal microenterprises



Source: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The figure plots the coefficient of formality from a regression of outcomes on a formality dummy, controlling for the log of firm employment size, the firm's main sector, and the city in which the firm operates. No control is run for the log of firm employment size if the outcome is employs more than one worker during a regular month. Productivity is defined as sales per worker in a regular month. Value added per worker is net profits (as reported by respondents), divided by the number of workers. Average net profit and loss represents a company's profitability over a specific period, including both profits and losses. Log coefficients can be recalculated to ratios through the exponential transformation: Net profit: $e^{2.33} = 10.3$; value added: $e^{1.01} = 2.7$; Labor productivity: $e^{1.73} = 5.6$; Raw material costs: $e^{1.71} = 5.5$; Electricity: $e^{2.63} = 13.9$; Labor: $e^{2.44} = 11.5$. Standard errors are clustered at the strata level. Gold whiskers show 95% confidence intervals.
**p < .1 **p < .05 ***p < .01.*

Average productivity differentials in favor of formal microenterprises are apparent across all subsectors, with the largest gap in the nonfood retail sector. The largest average productivity differential between formal microbusinesses and informal businesses is in the nonfood retail sector, at NPR 262,922 (refer to table 2.1; annex A, figure A.4). The second largest gap is apparent in the nonfood manufacturing sector, at NPR 126,851. The lowest productivity differential in favor of formal microbusinesses is in the food manufacturing sector. These findings illustrate that the biggest gap with formal microenterprises is not as apparent in low productivity sectors (for instance, food manufacturing) as in more productive sectors, especially nonfood sectors, where there are not many informal businesses.

Table 2.1 Average labor productivity, by subsector (NPR)

Sector	a. Formal microenterprises	b. Informal microenterprises	Difference a. – b.
Food manufacturing	39,688	15,407	24,281
Nonfood manufacturing	172,802	45,951	126,851
Food retail	113,542	39,179	74,363
Nonfood retail	297,918	34,996	262,922
Services	98,086	26,020	72,066

Sources: Original table for this publication based on M-ES; World Bank 2025b.

Formal microenterprises are more profitable, have high input costs, and are in operation slightly more frequently in a year. Formal microenterprises are more profitable than informal businesses and produce more value per worker (net profit per worker). Converting the estimated log differences in figure 2.15 into level ratios shows that the differences are large. Formal microenterprises are approximately 10 times more profitable than informal businesses and generate about three times the value added per worker. Consistent with the larger workforce and greater output of the formal firms, their input costs are also higher. Expenditure on raw materials is about 5.5 times greater; electricity costs are roughly 14.0 times higher; and labor costs are approximately 11.5 times those of informal firms. Formal microbusinesses also operate 0.20 more months in a year (a difference of a little less than a week). Among informal firms, 20 percent are active less than 12 months a year. This is true of only 3 percent of formal microbusinesses.

Across the age cohorts of surviving firms, older formal microenterprises exhibit greater productivity than younger ones, whereas informal microenterprises show little variation in workforce size or sales across cohorts. A comparison of younger and older cohorts among informal microenterprises suggests that they remain relatively flat in size and sales (refer to figures 2.16 and 2.17). By contrast, among formal microenterprises, older cohorts display higher average monthly sales relative to younger cohorts , although performance differs depending on whether firms started informally or formally. Formal microenterprises that started formally record sales at between 6 and 20 times the sales of young informal microenterprises, while formal firms that started informally exhibit sales at between 2 and 11 times the sales of young informal firms. These patterns reflect differences among cohorts, and should not be interpreted as within firm growth over time because the data do not track firms longitudinally.

Figure 2.16 Average number of workers, by firm age

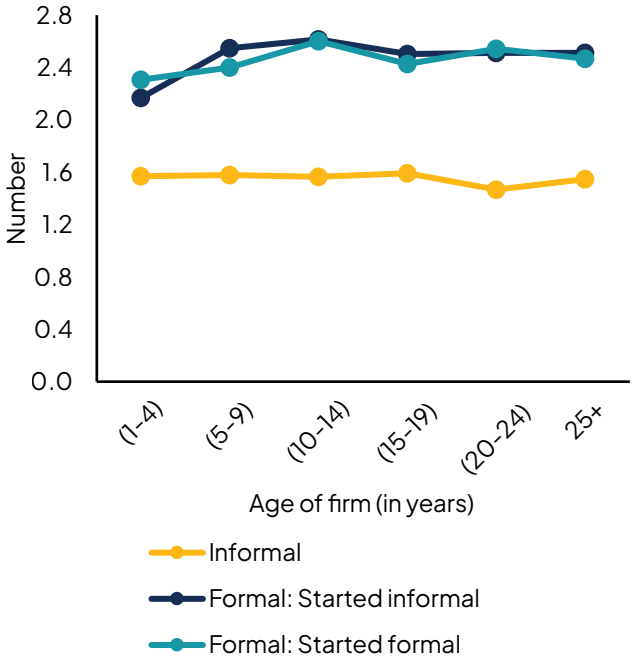
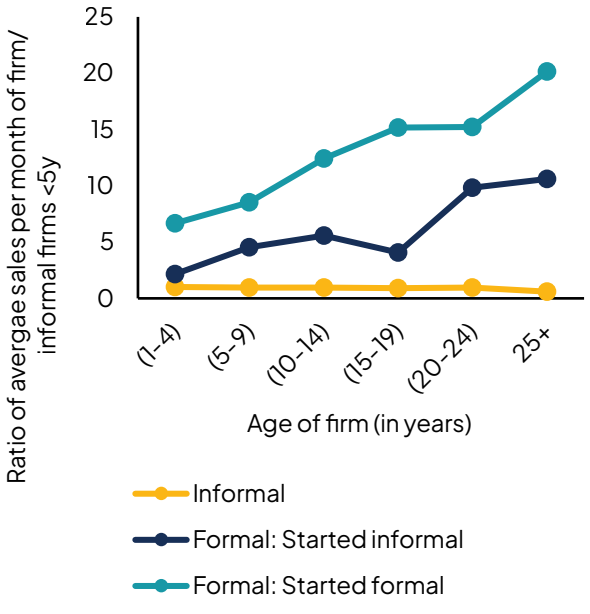


Figure 2.17 Average sales per month relative to young microfirms, by firm age



Source: Original figure for this publication based on M-ES; World Bank 2025b.

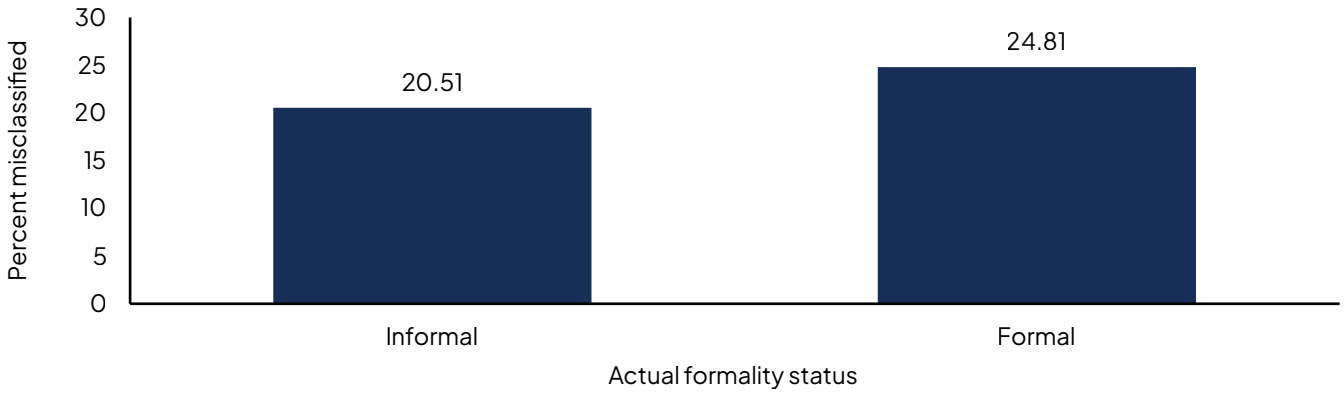
Formal microenterprises that begin operations informally are unable to catch up with formal microenterprises that started formally because they accumulate fewer productive capabilities early on, placing them on a trajectory of lower growth that carries on after formalization. Decomposing the productivity gap among formal microenterprises by initial status shows that the sizable gap narrows sharply once firm characteristics are introduced (refer to annex B, table B.4). Accounting for firm and workforce characteristics, such as worker literacy, computer use, firm size, paid employment status, business age, and management practices, substantially reduces the unexplained portion of the gap. If additional controls are introduced that capture access to finance and credit, infrastructure and technology use (including electricity, machinery, and digital tools), and participation in formal business relationships and contracts, the explained component of the gap exceeds the unexplained component. This suggests that differences in firm quality and capabilities persist even after informal firms formalize and that these differences are closely linked to early deficits in access to credit, technology, infrastructure, and managerial routines. The findings align with a body of literature arguing that starting informally can lock firms into a habit of lower capability that is difficult to reverse.

The Benefits of Formalization for Informal Microenterprises

It is difficult to isolate the impact of formalization on firm performance from inherent firm and owner characteristics that also drive productivity differences. Will formalization be accompanied by benefits to informal microenterprises? It is not possible to estimate the causal impact of formalization on firm performance using the surveys at hand. While formal microenterprises are substantially more productive and profitable than informal microfirms, the evidence suggests that productivity precedes formalization. Firms that are already more productive, more well managed, and more growth oriented are thus more likely to start formally or to formalize. The analysis presented above concludes that formal microenterprises apply better management practices. This has been shown to be closely associated with higher productivity, firm survival, and growth across low and middle income countries (Bruhn and McKenzie 2014; Bruhn et al. 2018; McKenzie and Woodruff 2017).

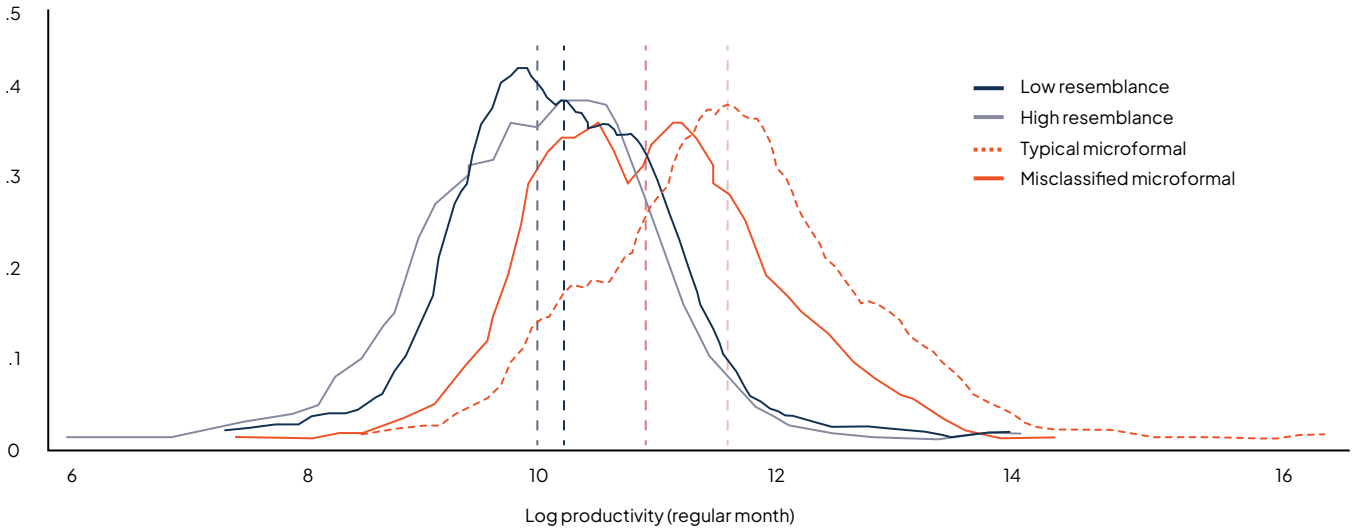
The analysis indicates that productivity differences between formal and informal microenterprises persist even after accounting for a wide range of firm and owner characteristics. Linear discriminant analysis shows that approximately one fifth of informal microenterprises closely resemble formal microenterprises across key dimensions. These include pivotal owner characteristics, such as age, gender, sectoral experience, education, and skills, and major firm characteristics, such as employee skill and management practices (refer to figure 2.18). The owners of these high-resemblance firms are more likely to be males who are more well educated, more highly experienced, have a more highly skilled workforce, and apply better management practices, mirroring formal microenterprises by construction (refer to annex B, table B.5, panel a). Yet, despite the similarities, these firms remain substantially less productive than their formal counterparts (refer to figure 2.19).

Figure 2.18 Firm misclassification according to linear discriminant analysis



Source: Original figure for this publication based on M-ES; World Bank 2025b.

Figure 2.19 Labor productivity, low- and high-resemblance informal microenterprises



N low resemblance = 2000 ; N high resemblance = 456 ; N typical micro formal = 1090 ; N misclassified microformal = 348

Source: Original figure for this publication based on M-ES; World Bank 2025b.
Note: Following Aga et al. (2021) and building on an approach outlined by Ghossein et al. (2024), linear discriminant analysis is used to predict whether a firm is formal or informal based on a set of firm and owner characteristics. This includes whether the majority owner is a female, age of the owner, business experience and skills, level of education, whether the owner has received business training, and the share of employees who can read, write, use a computer, or speak a language other than their own. Business practices are incorporated through a management index. A leave-one-out misclassification exercise was also conducted whereby the predicted formality status of each firm is estimated using the information from all other firms in the sample. This approach enables an identification of formal firms that are incorrectly classified as informal and of informal firms that, despite being informal in practice, share key observable characteristics with formal firms.

This pattern suggests that formalization may confer additional benefits on a limited subset of firms. The wide productivity differentials observed between formal microenterprises and informal high-resemblance microenterprises indicate that improvements in the human capital and management practices of owner may be insufficient alone to close productivity gaps and that formalization related benefits, such as access to credit, technology, infrastructure, and broader markets, are likely to matter most for informal firms with relatively strong underlying capabilities. While informal high-resemblance enterprises are more likely to access services related to credit, equipment, and basic infrastructure, such as water, formalization may enable deeper, more stable, and higher quality access to these inputs (refer to annex B, table B.5, panel b).[16] These effects are likely to be particularly important in more productive sectors such as nonfood retail and nonfood manufacturing, where the productivity gaps between formal and informal firms are the largest and limited access to such services places informal enterprises at a greater disadvantage. Indeed, informal high-resemblance microenterprises are more likely than non-resemblance microenterprises to operate in nonfood retail by 8 percentage points and exhibit a somewhat lower, but notable probability of operating in nonfood manufacturing (refer to annex A, figure A.5).

Decomposition analysis confirms that a substantial part of the productivity gap between formal and informal microenterprises is explained by variables that may be associated with operating in the formal sector. A Blinder-Oaxaca decomposition of the productivity gap between formal and informal microenterprises supports the message about formalization benefits and shows that around 15 percent of the raw productivity gap is explained by owner characteristics, employee skills, and the quality of management practices. The explained portion of the gap rises to 30 percent if other variables that may be associated with operating in the formal sector, such as access to finance, technology, and better infrastructure, are included (refer to annex B, table B.6). Nonetheless, 70 percent of the gap remains unexplained. This points to the limitations of

16 According to Rand and Torm (2012), manufacturing SMEs in Viet Nam that formalize experience higher profits and more investment activity. This is driven by better access to formal credit and finance, public infrastructure, and services (for instance, electricity, technology, and logistics), the reduced risks associated with sanctions or disruptions by authorities, and improved relations with customers, suppliers, and financial institutions because of less uncertainty about the legal standing and credibility of the firms. The caveat is that the more productive firms may be more effective at using services, such as credit and technology. Thus, rather than influencing their performance, the services may be a benefit related to their better performance.

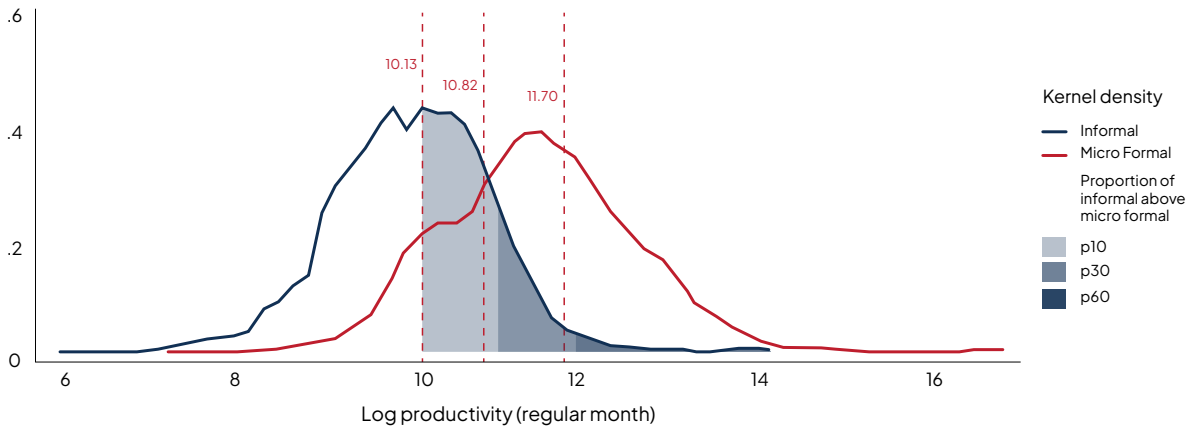
survey data in fully capturing entrepreneurial ability and other unobservable traits that may influence productivity differentials between informal and formal microenterprises.

High-resemblance informal microenterprises—around 20.5 percent of all informal microenterprises—may hence benefit from formalization support because they have greater capacity than other informal microenterprises, and formalization could improve their productivity. This evidence is confirmed by the finding that 25 percent of formal microenterprises have low-quality characteristics and were misclassified as informal in the linear discriminant analysis (refer to figure 2.18). Yet, the misclassified formal microfirms are roughly twice as productive as high-resemblance informal microenterprises (refer to figure 2.19), suggesting that formalization plays a role in improving productivity.

Informal microenterprises that are already as productive as top formal microenterprises are a second group that has the potential to become formal. Facilitating the formalization of productive informal firms helps increase the share of formal, higher -quality jobs that are covered by legal and social protections.[17] It can also promote aggregate productivity growth, which may translate into higher wages and better jobs.[18]

In Nepal, only a small share of informal firms are high-productivity firms. High-productivity informal microenterprises are defined as informal firms that fall within the top 40 percent cutoff of the productivity distribution among formal microenterprises. This follows the methodological approach used by Aga et al., (2021) and is consistent with the diagnostic framework outlined by Ghossein et al. (2024). Conceptually, the cutoff is conservative. It is close to the productivity of a median formal microenterprise and therefore covers informal firms that, plausibly, are capable of formal operations, and it does not focus on outliers. A kernel density distribution shows that half of informal microenterprises in Nepal are positioned within the productivity distribution of 90 percent of formal microenterprises, whereas the productivity of the other half is lower than the productivity of most formal microenterprises (refer to figure 2.20). Only around 2.3 percent of informal microenterprises are at least as productive as the top 40 percent of formal microenterprises. The food manufacturing sector has a higher concentration of high-productivity informal firms. This sector shows the lowest productivity differential between formal and informal microenterprises (refer to annex A, figure A.6; annex B, table B.7).

Figure 2.20 Kernel density distribution of formal and informal microenterprises



Computed on firms with non-zero output. N informal firms = 2484 ; N micro formal = 1724

Sources: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The 10th percentile value for the log of the labor productivity of microformal firms is 10.13. The 30th percentile value is 10.82, and the 60th percentile value is 11.70. These values are shown by dashed red lines.

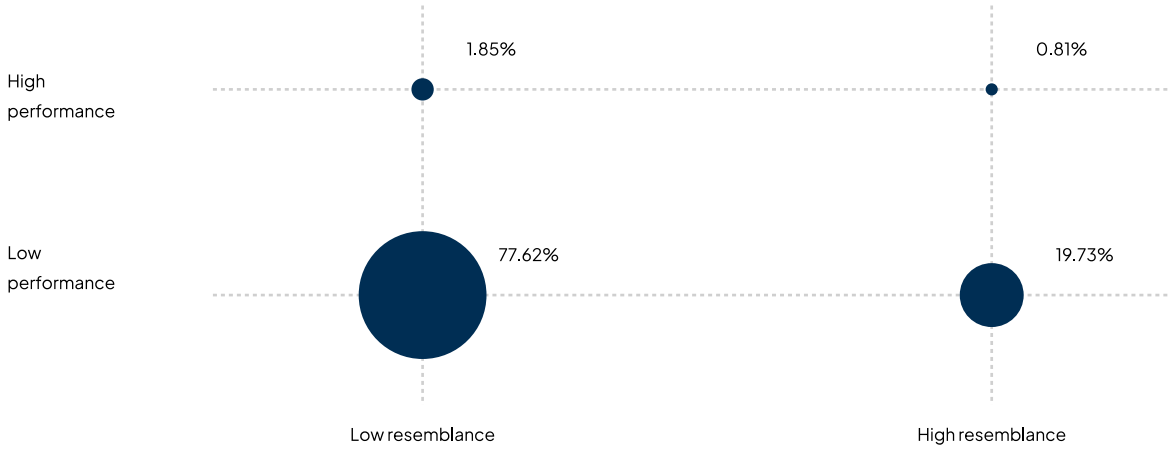
17 A review of the evidence on the relationship between contributory social protection and the formalization of micro-and small enterprises in low- and middle-income countries paints a favorable picture. Yet, it is not a given that enterprise formalization (the extensive margin) automatically leads to worker formalization (the intensive margin) (Torm and Oehme 2024).

18 Ulyssea (2018) argues that productivity improvements arise if formalization enables reallocation toward more productive firms and reduces distortions, especially labor informality and regulatory distortions.

High-productivity informal firms exhibit more business potential than other informal microenterprises. A comparison of high-productivity informal firms with the rest of informal microenterprises shows that high-productivity informal firms are more growth-oriented; their owners have better human capital, such as higher education and more years of experience; and they follow higher-quality managerial practices (refer to annex A, figure A.7).But there are additional elements that distinguish them from the rest of informal microenterprises and make them comparable to formal microenterprises, such as use of contractual agreements, use of finance and credit, use of technology, accessing better infrastructure, and operating from outside the household.

Overall, the share of firms with productive potential, who could benefit from formalization support comes to 22.66 percent of informal microenterprises. Figure 2.21 illustrates a classification of informal microenterprises into four groups along the resemblance-productivity spectrum: high performance–high resemblance; low performance–low resemblance; high performance–low resemblance; and low performance–low resemblance. The majority of informal microenterprises in Nepal (78 percent) fall in the low resemblance–low performance category. The rest (22 percent) fall into one of the three categories and may be labeled as informal microenterprises with productive potential. They resemble formal microenterprises in key firm and owner capabilities, or they are as productive as the top 40 percent of formal microenterprises.

Figure 2.21 Informal microenterprises: a performance–resemblance spectrum



Source: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The methodology relies on a linear discriminant analysis based on Aga et al. (2021).

Barriers Facing Informal Microenterprises in Formalizing

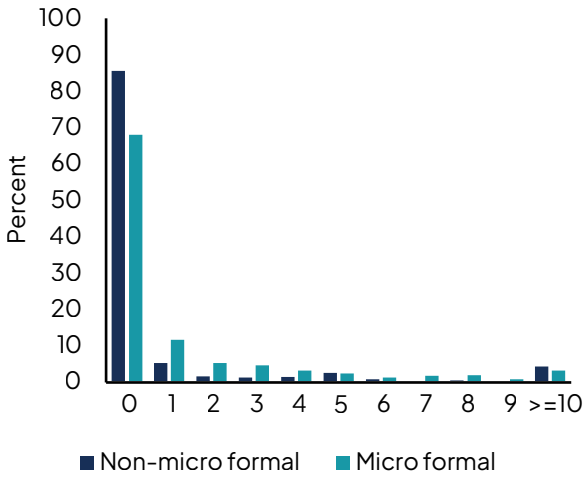
Understanding why informal firms remain informal is key to determining the type of policy intervention beneficial to such businesses and their owners. The literature points to a multitude of non–mutually exclusive reasons why firms remain informal. First is the survivalist or necessity entrepreneur view, according to which a large share of informal firms in developing countries are subsistence enterprises operating at low productivity. The benefits that might be expected from formalization among these firms would not compensate for the fixed and recurrent costs of formal compliance. This outcome does not reflect a narrow firm-level cost–benefit calculation so much as the consideration that these firms encounter insufficient and low-quality wage job opportunities. Informality thus serves as a safety net for some profitable activities (La Porta and Shleifer 2014; Maloney 2004; Marusic et al. 2020). Second is the parasite view, according to which informal firms that are capable of formalizing choose to remain informal to gain advantage by avoiding taxes and costly regulations, especially if tax enforcement is weak or corrupt (Farrell 2004). The third reason centers on structural barriers. According to this view, owners of productive informal firms who would potentially formalize cannot do so because of entry barriers, such as high regulatory costs, complex administrative procedures, and lack of information (de Soto 1989). Structural barriers entail frictions in credit, infrastructure, and market access

that are exacerbated among informal firms and trap them in low productivity (Cunningham et al. 2024; Grover and Pereira-López 2023; Hatayama et al. 2021; Jolevski et al. 2024). The fourth reason is limited perceived benefits, that is, firms that could potentially formalize remain informal because of a cost-benefit calculus revealing few tangible gains from registering (none to minimal new market access, little change in access to finance, and so on) relative to the high costs of compliance (Maloney 2004).

The analysis indicates that the survivalist view is the most prominent reason for remaining informal among Nepali microenterprises. Most informal firms show low productivity and have limited growth prospects. This prevents them from benefiting from formal status. Relative to owners of formal microenterprises, many owners of informal firms are more likely to operate their business to meet subsistence needs, mostly as a secondary source of income because of the low quality of their primary jobs or as a survival mechanism because of their inability to access other wage opportunities. The empirical literature shows that, among subsistence firms, tax registration involves more costs through tax payments and compliance and does not help raise productivity or revenues because these firms are too small to benefit from an expanded customer base or better access to credit.[19] Owners of low-productivity subsistence firms thus likely expect weak or zero returns from formal status (McKenzie and Sakho 2010).[20] In this instance, remaining informal likely reflects a constrained outcome rather than a voluntary decision.

Meanwhile, owners of formal microenterprises, who are typically more highly skilled, more well educated, and have plans to grow, self-select into formal status from the start of their operations in anticipation of benefits from formalization. Among such owners, 68 percent undertook their initial operations formally (refer to figure 2.22). Among formal nonmicrofirms, the share is higher, at 85 percent. Among firms that began informally, most formalize within the first one to five years (refer to figure 2.23). This reinforces the evidence that owners of productive firms anticipate benefits from formalization. This drives their decision to formalize, even if they do not begin operations formally. They enjoy greater productivity and higher-level skills relative to most informal microenterprises, and this likely affords them some benefits from formalization. Owners of formal microenterprises report that access to finance (92 percent), access to inputs and government services (82 percent), fewer bribes (81 percent), and better access to customers (70 percent) are the main benefits of formalization.

Figure 2.22 Informal operation before registration, all firms, years

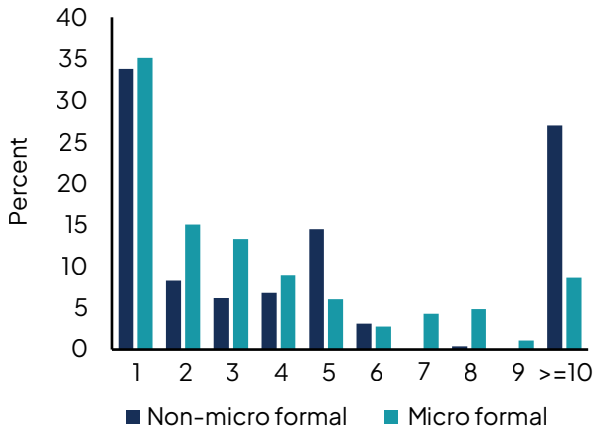


Source: Original figure for this publication based on M-ES; World Bank 2023.

19 In addition to IRD registration, formal firms in Nepal face recurring compliance burdens, including value added tax registration, periodic tax filings, the maintenance of audit documentation, and industry specific regulatory reporting. Refer to Business Tax Compliance Requirements in Nepal (web page), MedhaCorpLaw, https://medhacorplaw.com/business-tax-compliance-requirements-in-nepal/.

20 Using evidence on Bolivia, McKenzie and Sakho (2010) exploit variations in the distance to tax offices as an instrument for tax registration to estimate causal effects of formalization on firm performance. They find that, while tax registration raises profits on average, it lowers profits among small firms, that is, firms in the lower part of the sample distribution of employment and capital.

Figure 2.23 Informal operation before registration, firms that started informally, years



Source: Original figure for this publication based on M-ES; World Bank 2023.

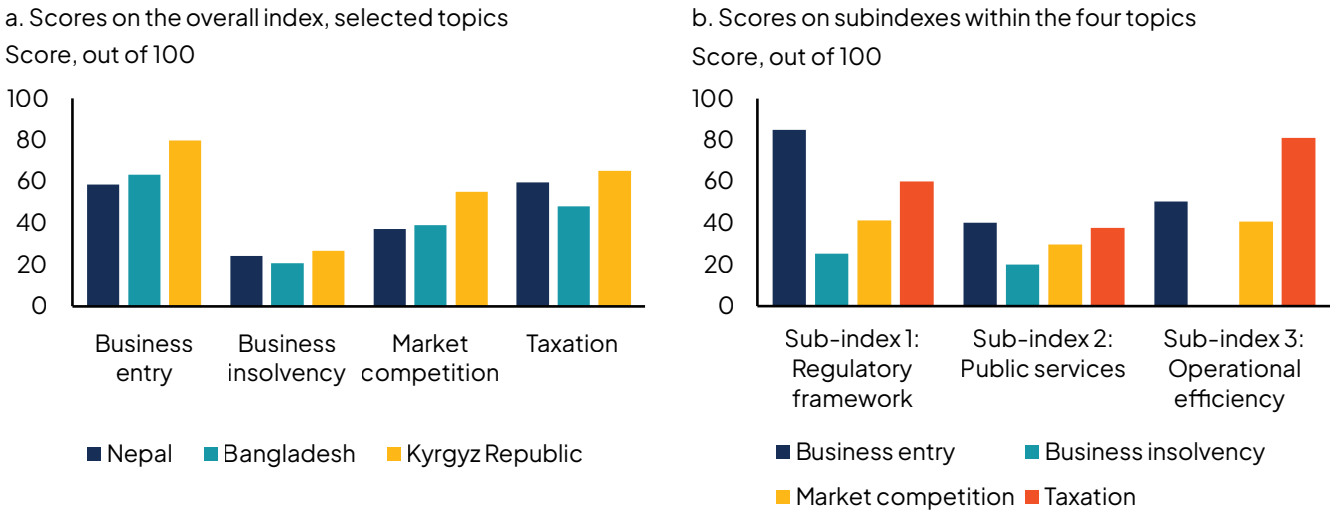
There is no evidence that informal firms in Nepal are parasites. Many firms do not appear to be sufficiently productive to formalize, and the owners choose to remain informal to avoid the costs, given the limited productivity overlap between formal and informal microfirms. This hypothesis may be validated by determining if formal microfirms exposed to large-scale competition from informal firms show less productivity than other firms. If so, this would suggest that some informal firms are operating at the margin to avoid costs and maximize gains. In Nepal, while most formal microenterprises identify competition from the informal sector as a challenge to growth, only a small share—ranging from 1.7 percent (nonfood manufacturing) to 11.4 percent (nonfood retail)—consider the competition a major obstacle to growth. A regression analysis shows that firms with owners who believe the competition they face from informal firms is a severe obstacle to growth are, in fact, no less productive than otherwise similar firms facing competition that the owners do not perceive as an obstacle (refer to annex B, table B.8).

Among the owners of some female-led microenterprises, informality may be preferred for reasons of flexibility, autonomy, and risk minimization, especially if the business is a secondary source of income. Flexibility and convenience are cited by both sexes as the primary motive for launching a formal or informal business. However, there is a 10-percentage point difference in the prevalence of this motive among females who operate informal businesses compared with females who operate formal businesses (93 percent versus 84 percent, respectively). This does not hold among males. The prevalence of this motive is the same among all males operating a business, whether formal or informal, at 87 percent. This suggests that informality offers females some flexibility. While the choice may be labeled voluntary, it is underpinned by structural constraints facing females that may not allow them to lead more competitive businesses and work long hours. These include unbalanced household responsibilities between males and females, restrictions around females working in certain sectors or locations, and norms around childcare (Alaref et al. 2024). For example, Nepali females of working age spend an average of 5.9 hours a day on unpaid domestic work compared with only 2.25 hours among males (including cooking, cleaning, and care activities) (Nikore et al. 2025). This is consistent with experimental evidence from Uganda showing that the presence of young children at females' workplaces is associated with significantly lower business profits, a phenomenon known as the baby-profit gap (Delecourt and Fitzpatrick 2021).

Structural barriers related to registration time and cost are likely binding among some informal microenterprises that have productive potential and may benefit from formalization. They may also explain the lag in formalization among formal microenterprises that start informally. While formalization would likely elicit benefits among a few capable and productive informal firms, it is associated with costs that may span from registration to renewal and closure. In the survey, 40 percent of informal microenterprise owners reported that they faced barriers related to registration costs, such as time, fees, and paperwork. Owners of high-productivity informal firms are 3 percentage points more likely to report this barrier than owners of lower-productivity informal firms, although the difference is not statistically significant (refer to annex A, figure A.6). The World Bank business ready (B-READY) index 2025 confirms that operational costs are high (refer to figure 2.24). Nepal's score on registration and start of operations is 58.5 out of 100. In comparison, Bangladesh and the Kyrgyz Republic, considered structural peers of Nepal, score higher, at 63.3 and 79.7, respectively. Nepal's score lags especially in two subindexes (digital public services and transparency of information for business entry) and in operational efficiency related to the time and cost required for the registration of new firms. A review shows that registration costs at the Department of Industry or the Department of Small and Cottage Industries (a step before IRD registration) vary by industry size. They may range from NPR 500–NPR

5,000 for cottage and small industries.[21] On time, the overall process for registering a company can require 15–30 working days, excluding additional clearances.[22] The time and direct costs of registration can be sizable relative to firm scale, with an upper-bound estimate of about 5 percent–10 percent of average annual sales.[23]

Figure 2.24 Nepal scores, World Bank B-READY index, selected topics, 2025



Source: Original figure for this publication based on World Bank 2025a.
Note: 100 is the maximum score.

Another barrier encountered by informal microenterprises with productive potential is the cost of business closure. Closing a business is a complex and lengthy process in Nepal. It involves various institutions, particularly if the closure is a consequence of insolvency or compulsory liquidation. In such cases, closure is driven by often protracted court proceedings under the Insolvency Act 2006. Nepal scores low on this topic on the B-READY index, at 24.1 points out of 100 (compared with 26.6 points for the Kyrgyz Republic). Nepal has a score of 0 on the operational efficiency subindex on the time and cost of liquidation and reorganization (refer to figure 2.24).

Weak market competition and challenges with tax administration also represent costs. A lack of fair market competition and regulations that create an equal playing field in markets may lead to opaque rules that firms may not be able to navigate. Nepal scored 37.2 out of 100 in market competition on the B-READY index. The Kyrgyz Republic scored 55.0. The score of Nepal lags especially on the public services subindex (score of 29.8), which relates to the provision of competition authority, the institutional framework supporting innovation, intellectual property services, and e-procurement (refer to figure 2.24). Taxes could represent a third cost. Respondents for 18 percent of informal microenterprises reported that taxes were a barrier. Taxes imposed by multiple government agencies has raised the cost of operating a business in Nepal (ILO 2022). Nepal scored 59.5 points out of 100 on the taxation pillar of the B-READY index, compared with 65.1 for the Kyrgyz Republic. Nepal lags on the public services subindex that relates to the availability of digital taxpayer services, such as electronic filling and the electronic payment of taxes, data management and system integration, transparency, and tax audits (a score of 37.6 out of 100) (refer to figure 2.24).

Frictions in access to credit, infrastructure, and technology are additional structural barriers that

21 Registration costs range between costs range between NPR 10,000 and NPR 25,000 for medium industries and between NPR 50,000 and NPR 100,000 for large industries.
22 Company incorporation at the Office of the Company Registrar typically takes 3–5 working days, while registration with the Department of Industry or provincial industry offices takes 7–10 working days. Registration for a permanent account number usually requires 1–2 working days. Where applicable, environmental approvals, such as initial environmental examinations or environmental impact assessments, can extend the process by one to six months, depending on project size.
23 Using the survey mean monthly sales of NPR 50,991 (≈ NPR 611,892 annually), a registration process taking 15–30 working days corresponds to roughly 0.6–1.2 months of sales (≈ NPR 29,000–NPR 59,000), assuming time spent in offices and paperwork displaces business activity. Adding direct registration fees for small and cottage industries (≈ NPR 500–NPR 5,000) implies a total burden on the order of NPR 30,000–NPR 64,000, or about 5 percent–10 percent of average annual sales. This should be interpreted as an upper bound, as some firms may be able to complete procedures without interrupting operations.

may keep firms that could otherwise formalize in a low-productivity cycle. Informal firms are less likely to access productivity-enhancing services, such as credit, technology, and infrastructure. This may tend to restrict them to a cycle of low productivity. This may be especially relevant in the case of high-resemblance firms that may otherwise have the capability to improve their business functions and firm owners who desire to grow their businesses (35 percent of informal businesses), but are unable to access such services.

Limited knowledge of the benefits that informal businesses with productive potential could realize from formalization is a reason why some firms fail to formalize. The owners of 28 percent of informal microenterprises report that the lack of information on registration is the main barrier (refer to figure 2.25). The share is lower by 14 percentage points among owners of high-productivity informal firms and by 11 percentage points among owners of high-resemblance microenterprises, indicating that the lack of information on how to register is not the most relevant factor among productive or capable informal firms (refer to annex A, figure A.7, panel e, and figure A.8). On the other hand, perceptions of limited benefits from formalization are prevalent. The owners of 26 percent of informal microenterprises report that they see no benefit in registration. While the difference is not statistically significant between high-productivity informal and lower-productivity informal firms, high-resemblance informal microenterprises are 5 percentage points more likely than non-resemblance microenterprises to report no perceived benefit, indicating that some informal firms, especially the capable ones, may underestimate what they could gain from formalization. When comparing between what formal microenterprises report as a benefit of actual registration and what informal microenterprises report as their perceptions of benefits to be obtained from registration, informal firms are 18 percentage points less likely to believe access to finance as a benefit of registration, 20 percentage points less likely to believe registration means fewer bribes, and 18 percentage points less likely to believe registration can help them gain better access to customers (refer to figure 2.26).

Figure 2.25 Reasons for not registering, owners of informal microfirms

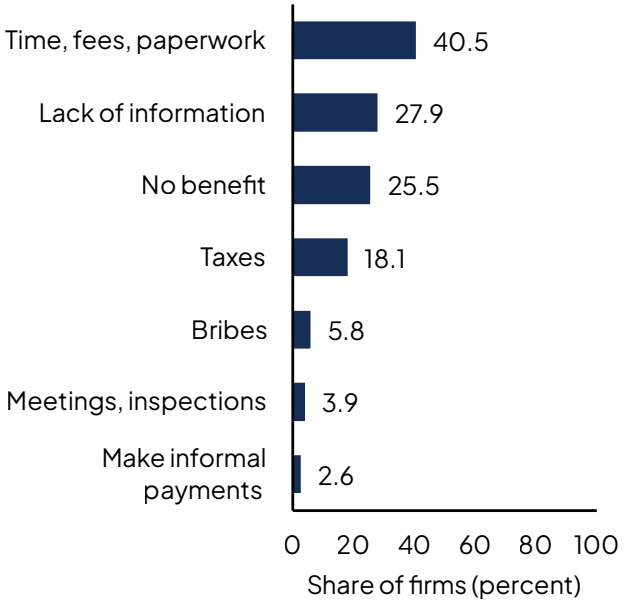
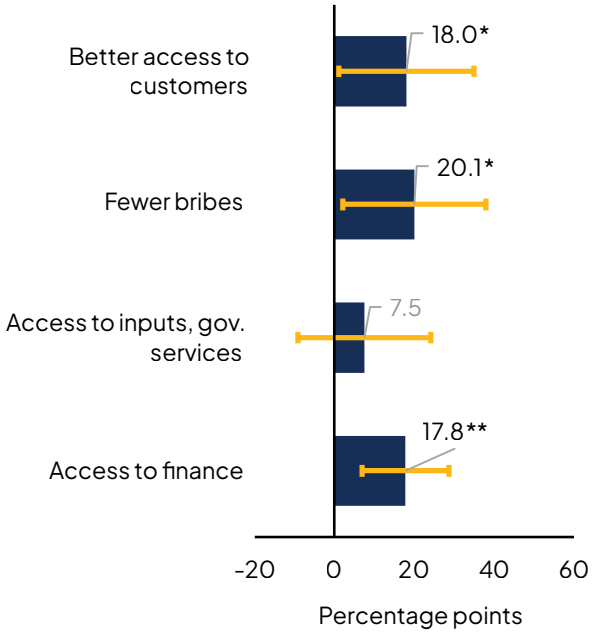


Figure 2.26 Registration benefits, formal vs. informal microfirm owners



Source: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The figures control for the log of firm employment size, the firm's main sector, and the city in which the firm operates. Standard errors are clustered at the strata level. Gold whiskers show 95% confidence intervals.
** p < .1 ** p < .05 *** p < .01.*

Addressing the Economy-Wide Constraints to Growth: All Firms

The relationship between formalization and enterprise growth is complicated. It is not possible to grow without formalization. Informality and firm growth are fundamentally incompatible. Beyond a threshold of small size, remaining informal is not optimal nor feasible (Ulyssea 2018). Moreover, starting a business informally and then formalizing is not optimal because informal firms accumulate fewer productive capabilities early on. Nonetheless, formalization does not ensure growth. Despite their formal status, most formal microenterprises, whether young or old, do not exceed an average of 2.5 workers (refer to figure 2.16).

Formalization is not always associated with better performance among microenterprises. Among formal microenterprises, 25 percent resemble informal businesses in low owner and firm capabilities, and these firms are characterized by lower productivity (refer to figure 2.18). Formal female-led microenterprises are also more likely to exhibit lower productivity than formal male-owned microenterprises. The average raw productivity gap between formal male- and female-led microenterprises is 24 percent. This is lower than the gender gap in the informal sector (at 38 percent), but it is still substantial.

The constraints on growth among formal microenterprises self-reported by owners include poor access to finance, land, and licenses, as well as political instability. Among owners of formal microenterprises, 34 percent report that access to land, business licensing and permitting, and finance are the main barriers to the growth of their firms. Access barriers in finance appear to be more binding among formal microenterprises than among larger enterprises. Thus, owners of formal microenterprises are more likely than owners of small formal enterprises (5–19 employees) to have started their business, to finance their own operations, and to finance major purchases with funds of their own or of friends rather than using credit from microfinance or banking institutions.[24] Access to land is hampered by fragmented ownership, incomplete records, and complex approval procedures. Other constraints reported by owners of formal microenterprises include political instability (29 percent), corruption (9 percent), customs and trade regulations (7 percent), tax rates (8 percent), and the practices of informal competitors (5 percent).

Challenges in gaining access to finance are particularly acute among formal female-owned microbusinesses. A Blinder-Oaxaca decomposition analysis has been used to unpack the drivers of productivity differences between formal female- and male-owned microenterprises (refer to annex B, table B.9). It shows that female entrepreneurs receive lower returns to education. Access to finance appears to be particularly important among female entrepreneurs because, while they are much less likely to have a separate business and household bank accounts, their returns to better access to finance are high. The analysis shows that the gender gap narrows to 17 percent once the returns to obtaining a loan and a separate bank account are considered. This finding is consistent with the broader literature on financial autonomy showing that the returns to marginal capital investments from grants provided to microenterprises can be high among some high-ability, financially constrained female-owned firms (de Mel et al. 2009). Females' financial autonomy and ability to grow their businesses are limited somewhat by laws (World Bank 2024b). For instance, the law does not prohibit discrimination in access to credit based on gender, and there are gender distinctions in property and inheritance rights.

Formal SMEs have faced sluggish growth rates in Nepal in recent years.[25] Xie and Alaref (2026) show that net employment growth among formal SMEs in Nepal has been slow since 2021. Employment among formal nonmicro firms grew at an average annual rate of 0.9 percent. SMEs that typically experience the most rapid employment increases faced sluggish expansion in Nepal. Employment rose by 0.8 percent annually among small firms (fewer than 20 workers). Employment among medium firms (20–99 employees) contracted at –0.22 percent. In comparison, the average employment growth rate was 3.8 percent and 5.5 percent, respectively, among SMEs in other emerging market and development economies (refer to figures 2.27 and 2.28).

24 Only 11 percent and 9 percent of formal enterprises with 5–9 employees and with 10–19 employees, respectively, finance operations using funds from friends or family compared with 24 percent among formal microenterprises (M-ES 2025; World Bank 2023).

25 Formal SMEs and formal microenterprises present different profiles. Many small firms are in services (47 percent) whereas most microenterprises are in retail (over 70 percent). The labor productivity of small firms is double that of microenterprises, and their owners have more years of experience and are less likely to be female.

Figure 2.27 Average annual employment growth, small firms

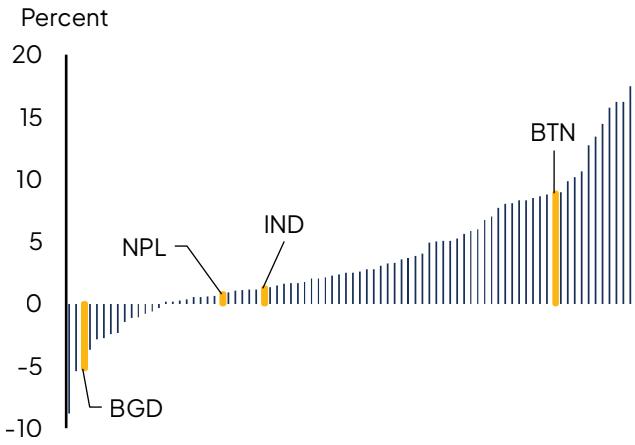
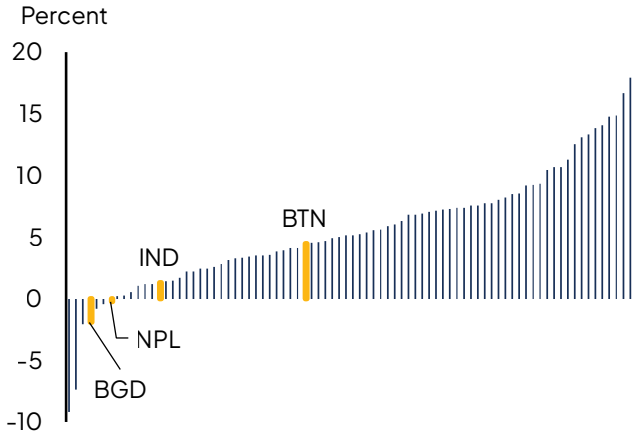


Figure 2.28 Average annual employment growth, medium firms



Source: Xie and Alaref 2026, based on WBES (World Bank Enterprise Surveys) (dashboard), World Bank, https://www.enterprisesurveys.org/en/enterprisesurveys.
Note: The sample consists of the latest Enterprise Surveys of 82 emerging market and developing economies in 2022–25, including Bangladesh (2022), Bhutan (2024), India (2022), and Nepal (2023) in South Asia. For each country, the annual employment growth of formal firms is the employment weighted average of the annualized employment growth of the firms. Small firms have fewer than 20 workers. Medium firms have 20–99 workers. Large firms have at least 100 workers. BGD = Bangladesh. BTN = Bhutan. IND = India. NPL = Nepal.

The average employment growth rate of young formal firms was much slower than the average employment growth of young formal firms in other emerging market and developing economies. Lack of growth among young firms means firms are less likely to expand to become bigger firms as they age. The average employment size of firms ages 15–24 years was less than 1.5 times the average size of young firms in Nepal. In the median emerging market and developing economy, firms ages 15–24 years were an average of more than double the size of young firms (Xie and Alaref 2026).

The tourism, and food-related sectors, which tend to be labor intensive and could help absorb Nepal's large working-age population, have also not grown enough. Employment growth was higher among Nepal's nonmicro construction firms than among construction firms elsewhere. It was similar to the case of Bhutan, where hydropower construction was booming. Job growth was slow in tourism-related sectors in Nepal, such as passenger transport, short-term accommodation, and travel agency services, and in food-related sectors, such as food, beverage, and tobacco processing and retailing and food and beverage services (refer to figures 2.29 and 2.30).

Figure 2.29 Average annual employment growth, tourism sectors

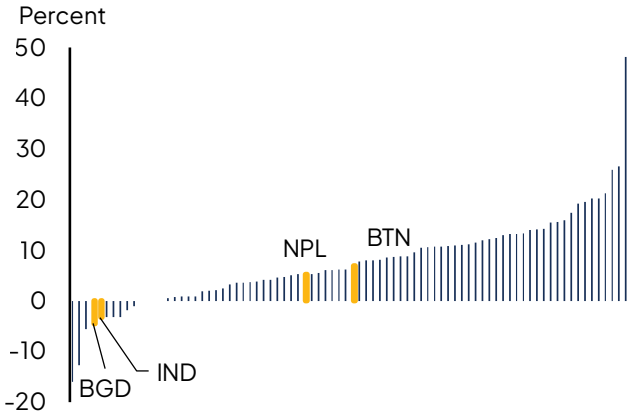
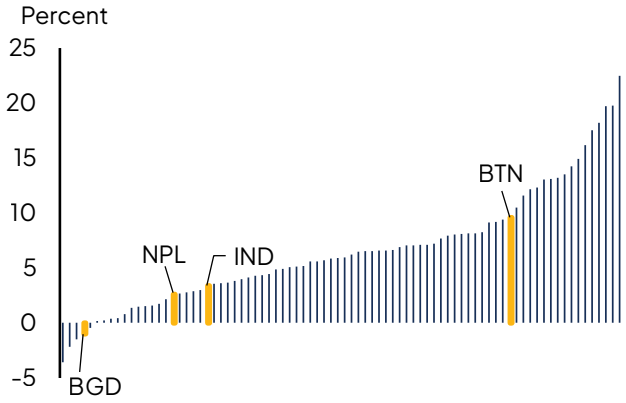


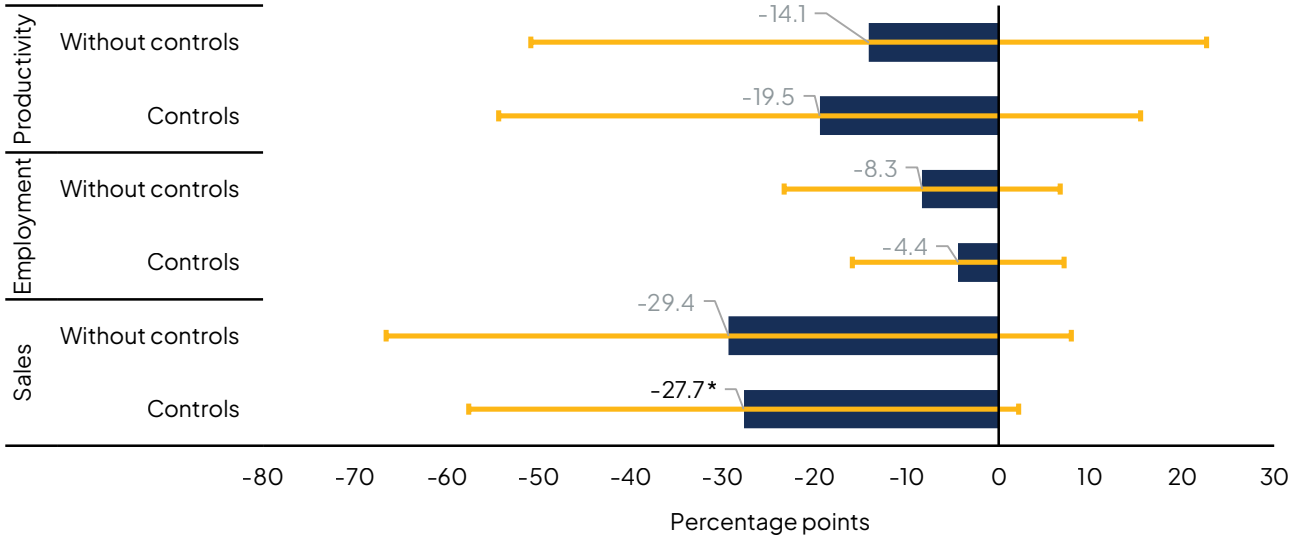
Figure 2.30 Average annual employment growth, food sectors



Source: Xie and Alaref 2026, based on WBES (World Bank Enterprise Surveys (dashboard), World Bank, https://www.enterprisesurveys.org/en/enterprisesurveys.
Note: The sample consists of the latest Enterprise Surveys of 82 emerging market and developing economies in 2022–25, including Bangladesh (2022), Bhutan (2024), India (2022), and Nepal (2023) in South Asia. For each country, the annual employment growth of formal firms is the employment weighted average of the annualized employment growth of the firms. Sectors are identified using ISIC-v4 codes. Refer to ISIC (International Standard Industrial Classification of All Economic Activities) (dashboard), Statistics Division, Department of Economic and Social Affairs, United Nations, https://unstats.un.org/unsd/classifications/Econ/ISIC.cshtml. The tourism-related sectors are passenger transport, short-term accommodation, and travel agency services. The food-related sectors are food, beverage, and tobacco processing (manufacturing), food, beverage, and tobacco retailing, and food and beverage services. BGD = Bangladesh. BTN = Bhutan. IND = India. NPL = Nepal.

The 10 percent most productive nonmicro formal firms in Nepal (frontier firms) are not adding jobs. These firms account for half of all firm sales (54 percent), but only 13 percent of the workforce. Many frontier firms are in manufacturing and tourism, which are not growing (refer to figure 2.29; annex A, figure A.9). Frontier firms do not exhibit better performance than nonfrontier firms in similar sectors. The differences between the two types of firms on performance indicators such as sales and employment growth in recent years are generally not statistically significant (refer to figure 2.31).

Figure 2.31 Differences in growth, frontier vs. nonfrontier firms, 2020–2023



Source: Original figure for this publication based on World Bank 2023.
Note: Results are based on regressions of different firm performance variables on a dummy for the most productive frontier firms, controlling for firm size, age, location, and economic sector. Frontier firms are defined as the most productive 10 percent of all formal firms based on total factor productivity or labor productivity, similar to the methodology of Galal et al. (2025).

Owners of nonmicro firms, similar to owners of microfirms, report political instability as a major or severe obstacle to growth (59 percent of respondents), followed by access to finance (25 percent). Barriers also differ by the profile of firms. For example, analysis shows that formal firms in Nepal with employment growth rates in the 75th percentile of the distribution can navigate some of the institutional barriers reported in the B-READY index related to business licensing and permits, infrastructure constraints, such as transport costs, and tax administration. Their owners are therefore less likely to report these barriers as constraints. However, they do report barriers related to crime and theft and to the courts (refer to figure 2.32). The implementation of training programs among employees or the introduction of new production processes does not explain job growth among firms in Nepal. Meanwhile, formal firms that started informally, but are in the 75th percentile of the growth distribution face more barriers related to labor regulations and education of the workforce (refer to annex B, table B.10, specification 2).

Figure 2.32 Reported barriers to growth, high growth firms vs. other firms

Source: Original figure for this publication based on World Bank 2023.
Note: High job growth = 75th percentile of the sample distribution. Sector fixed effects, region fixed effects, and log of the number of employees are control variables. The results from the full model are reported in annex B, table B.10, specification 1. Gold whiskers show 95% confidence intervals.
** p < .1 ** p < .05 *** p < .01.*

Altogether, the evidence suggests that economy-wide constraints affect the growth potential of formal firms and capable informal firms, irrespective of formalization. The full spectrum of firms in the formal sector face horizontal (economy-wide) constraints. Pursuing formalization policies without complementary reforms to the wider business environment are unlikely to be successful on their own in helping microenterprises realize their productive potential if they formalize.

Section 3
Policy Recommendations

This report argues for a differentiated and tailored policy approach to the provision of support to informal microenterprises in urban Nepal, considering their aspirations, capabilities, and performance. The analysis finds that the informal sector in Nepal is heterogeneous. Many firms differ in growth aspirations, firm and owner capabilities, and productivity. While there is some overlap with the formal sector in performance or resemblance, it is not large. This suggests that a one size-fits-all approach to the sector in Nepal is unlikely to be successful. Table 3.1 presents policy recommendations organized by the major types of firms identified through this analysis, alongside a suggested priority level for each policy. Policies are not mutually exclusive. Several interventions are relevant across more than one type of firm.

Table 3.1 Proposed policy recommendations, by firm type and policy priority

Enterprise type	Primary policy objective	Policy intervention	Policy priority
All enterprises	Reduce the size of the informal subsistence sector and support the growth of formal firms	• Economy-wide and targeted reforms to strengthen the business environment and expand formal wage employment among MSMEs	High
Informal microenterprises with productive potential (≈ 22 percent of the total)	Support productivity enhancement and formalization procedures	• Reduce the time and cost of formalization across the full business cycle • Formalization incentives, targeted information campaigns • Targeted productivity support for high-resemblance informal firms (≈ 20 percent): credit, technology, business coaching, and market links • Gender-responsive support: childcare, financial autonomy mechanisms, grants in kind	Medium to high
Survivalist or necessity microenterprises (≈ 78 percent of the total)	Protect livelihoods, stabilize incomes, and reduce household vulnerability	• Consumption smoothing support, social protection coverage, basic business training • Active labor market programs, intermediation support	High
Parasite enterprises	Incentivize or enforce formalization	• Stronger enforcement, simplified formalization procedures	Low

Source: Original table for this publication.
Note: Policy priorities—high, medium to high, and low—reflect both the estimated prevalence of each firm type in urban Nepal and the broader policy relevance of each intervention. Parasite firms are not common in Nepal.

Among the available policy levers, accelerating formal sector growth and job creation represents the most important way to reduce the prevalence of subsistence informality in Nepal. The report finds that the formal and informal sectors are inherently intertwined in Nepal, and the informal subsistence sector is a consequence of stagnant job creation in the formal sector. The growth of formal MSMEs and the creation of more wage employment opportunities are needed to facilitate the exit of many low-productivity informal businesses away from self-employment and into wage employment (La Porta and Shleifer 2014). Fundamental reforms to reduce uncertainty and lower operating costs among firms at all sizes are important. These relate to improving the business environment in which Nepali firms operate; strengthening access to critical inputs, such as infrastructure, land, and finance; tackling governance challenges, and implementing investment oriented reforms that can improve competitiveness and expand market opportunities.

Informal microenterprises with productive potential should be supported through productivity enhancement and formalization pathways. Among informal microenterprises with productive potential (22.7 percent of all informal microenterprises), formalization support could be beneficial. As the analysis shows, high productivity informal microenterprises are comparable to formal microenterprises in their productivity levels. Reforms tackling costly business registration barriers, coupled with reforms to strengthen formalization benefits and increased awareness about the benefits of formalization for firm productivity and growth, may improve their incentives to register. The 20 percent of informal microenterprises that exhibit low productivity, but that possess capabilities resembling the capabilities of formal microenterprises and that aspire to grow, could benefit from productivity-enhancing measures. Such measures that may support their eventual formalization might include more access to credit, infrastructure, and markets. Female entrepreneurs in particular require support services that address constraints related to childcare, financial autonomy, and intrahousehold dynamics.

A policy priority is to support informal survivalist and subsistence microenterprises in urban Nepal through livelihood-enhancing measures and the extension of social protection. About four in five informal businesses in Nepal have limited capabilities and low productivity and are thus on the low-resemblance–low-performance continuum (refer to figure 2.21). Evidence suggests that formalization rarely transforms the typical informal enterprise. Randomized evidence on developing countries and cross-country reviews reach a similar conclusion. Entry and registration reforms generally deliver only modest increases in formalization, and most microenterprises do not experience a net benefit (Bruhn and McKenzie 2014; de Mel et al. 2013). Thus, a high priority for policy makers is to support informal survivalist or necessity businesses through livelihood-enhancing measures, social protection coverage, and active labor market programs to promote a transition to wage employment.

These policy recommendations are intended to provide a strategic road map for supporting informal microenterprises in urban Nepal rather than prescriptive reforms. They translate the report's empirical findings into broad policy proposals that clarify where action is likely to be most effective across different firm types. The Enterprise Survey data underlying the analysis place limits on the level of operational specificity and detailed policy design or implementation support that can be offered. The recommendations are therefore framed as policy orientations and priorities. More work drawing on complementary diagnostics, administrative data, and close collaboration with government counterparts and operational teams is needed to translate the recommendations into concrete, context specific reforms.

Economy-Wide and Targeted Reforms in Favor of Formal MSMEs

Accelerating MSME growth requires a combination of economy wide (horizontal) and targeted reforms that reduce uncertainty, lower operating costs, and ease access to critical inputs. While government policies, such as the Industrial Policy 2011 and the National Startup Enterprise Policy 2023, provide an important strategic foundation, the analysis in this report shows that many formal MSMEs in Nepal continue to face binding constraints that limit productivity, investment, and job creation (Nepal Law Commission 2011; IEDI 2023). Measures that address structural barriers and improve the business environment are therefore needed to support the growth prospects of all MSMEs in Nepal.

First, horizontal reforms to improve the business environment are central to formal sector growth. Priorities include simplifying business procedures across the firm life cycle. This includes streamlining business entry and closure and simplifying the issuance and renewal of licenses and permits; improving tax administration through the expansion of digital tax services, such as electronic filing and payment systems, improved data management and system integration, greater transparency, and tax audits; enhancing public procurement and regulatory predictability; strengthening competition and innovation systems; and addressing governance challenges, such as policy uncertainty and corruption. Export and investment oriented reforms are also critical because they improve competitiveness, attract domestic and foreign investment, and expand market opportunities to grow MSMEs.[26] Taken together, these measures

26 The Nepal Country Economic Memorandum 2025 argues that Nepal's inward policy distortions, such as high tariffs and trade taxes, have created an antiexport bias by raising costs and reducing competitiveness among domestic producers. "Tariffs on intermediate goods in particular increase production costs," the report notes (World Bank 2025c, xi), "making it difficult for Nepali firms to upgrade the quality of their products and expand into higher-value markets. Political instability and policy uncertainty have added to the challenges, with frequent changes in government delaying reforms and deterring both domestic and foreign firms

reduce risk and transaction costs, improve compliance incentives, and support longer term investment and formalization decisions by firms.

Second, improved access to critical inputs, particularly infrastructure, land, and financing, is essential for MSME growth and job creation. Reliable electricity, adequate transport, and well functioning urban services help reduce the costs and time associated with reaching suppliers and customers and facilitate participation in denser commercial networks. The evidence shows that informal microenterprises in Pokhara, Janakpur, and Kathmandu are more productive than the national average, suggesting that the infrastructure and spatial advantages of these cities may support better firm performance. Yet, Nepal faces substantial infrastructure gaps. Much of the road network is vulnerable to climate hazards. The country ranks 114 out of 167 on the global logistics performance index (Arvis et al. 2018). International evidence shows that limited transport connectivity and electricity shortages constrain firm productivity.[27] Strengthening urban infrastructure and connectivity can therefore reduce operating costs, enable longer working hours, expand market reach, and improve product quality. These benefits that are especially important for microenterprise owners seeking better access to supply chains and customers.

Access to land and secure business premises is a key constraint on MSME growth, associated primarily with eligibility for credit. If lending practices are collateral heavy and credit information systems are underdeveloped, lenders may rely predominantly on formally registered land and property as collateral (IDA 2026). Weak land administration systems and unclear or insecure tenure arrangements may thus limit the ability of firm owners to use land as collateral, thereby restricting their access to finance. Broader evidence from developing countries confirms this link. Deininger (2003) shows that secure, transferable land rights are foundational to investment incentives and credit market participation, while Feder and Nishio (1998) demonstrate that formal titling improves access to institutional credit. The "Business Regulation Operational Guide" (World Bank 2022a) identifies cumbersome land registration procedures and weak property registries as barriers that discourage private investment and restrict credit access. Priority reforms should therefore focus on strengthening land readiness for investment through simplified, transparent valuation and registration procedures, clearer institutional coordination in land conversion, and more strategic land management mechanisms that facilitate land assembly and improve the availability of serviced, investment ready land (World Bank 2026a).

Lack of access to finance interacts closely with these infrastructure and land constraints and remains a critical barrier experienced by MSMEs in Nepal. MSMEs in Nepal have long faced high collateral requirements, interest rates, and service charges (ILO 2022; NRB 2019). Recent reforms have begun easing these constraints. The 2025/26 monetary policy lowered the policy rate from 5.0 percent to 4.5 percent (NRB 2025). Along with reductions in the bank rate and the deposit collection rate, this signaled a push for cheaper credit and expanded lending to the private sector. The same policy introduced collateral free loans up to NPR 1 million for agriculture and small businesses and expanded working capital access for small businesses and priority sectors (Dhakal 2025; Himalini 2025). Despite these improvements, many entrepreneurs still rely on savings or informal channels rather than bank financing, a pattern consistent with the recent literature and the survey findings that only 15 percent of the owners of formal microenterprises started their businesses with bank or microfinance funding (ILO 2022; M-ES 2025). Continuing to ease collateral requirements, streamline loan procedures, design and scale de risking facilities, such as credit guarantees to support a shift toward cash flow–based lending, and strengthen credit information systems will be essential to ensuring that formal MSMEs benefit from these policy changes.

Third, horizontal reforms must be complemented by targeted support for formal microfirms, which often face additional constraints even if the broader business environment improves. These constraints include limited access to financing, especially among female owned firms, constrained managerial and technical skills, and gaps in digital adoption. Tailored instruments, such as MSME appropriate financial products, targeted management and skills development, digital adoption support, and access to affordable workspaces, can help smaller formal firms translate improvements in the enabling environment and infrastructure into concrete growth and employment outcomes.

from investing in export-oriented sectors."

27 Allcott et al. (2016) find that electricity shortages reduce the average plant's revenues and producer surpluses by 5 percent–10 percent, especially among plants without generators. Fisher-Vanden et al. (2015) find that electricity scarcity increased the production costs of firms in China and that outsourcing can be costly for firms. Iimi (2021) shows that improved transport connectivity, including the government of Mozambique's heavy investment in a primary road network, raises firm productivity.

Supporting Formalization Among Informal Firms with Productive Potential

Lower the Time and Cost of Registration and Raise Awareness of the Benefits

For the few informal microenterprises with productive potential in Nepal, lowering entry barriers is important. Reforms could be considered to reduce the overall time it takes for firm registration and to clarify the process across the multiple layers of government. For example, there is a lack of clarity on whether provincial governments are required to register only medium and large industries, or whether cottage and small industries also fall within their jurisdiction (ILO 2022). Moreover, improvements in the provision of digital public services, service interoperability, and the transparency of online information would also help clarify entry requirements. Nepal lags in these areas as measured by the B-READY index. International experience illustrates the potential gains from addressing such coordination and transparency challenges through digital solutions. Indonesia provides a relevant comparator in a federal like context, having implemented the Online Single Submission System, which integrates central ministries and subnational governments on a unified digital platform and applies a risk based licensing approach (Government of Indonesia 2021; Khomeni and Atmoko 2025).[28] More broadly, business environment reforms would also support informal microenterprises with productive potential by reducing the costs and risks of operating formally, thereby strengthening the incentives to formalize.

Lowering entry barriers alone likely would not trigger a surge in formalization unless it is paired with tangible economic benefits. A large body of empirical research shows that lowering entry barriers alone is rarely sufficient to induce formalization, even if registration procedures are simplified or offered without fees, unless formality is associated with credible, tangible benefits in access to finance, markets, or public services, such as eligibility for government procurement, improved access to credit, or tax-linked incentives (Bruhn and McKenzie 2014; McKenzie and Sakho 2010; Ulyssea 2018). Enforcement-based approaches, such as inspections, fines, or penalties, can increase registration rates in the short run, but the evidence cautions that these may impose costs without improving firm performance or welfare.

The government offers incentives for business formalization that are largely concentrated in the areas of tax exemption through several policy initiatives. However, in practice, these exemptions are not always reflected in the government's annual budget. One of the more explicit incentives for formalization is provided through income tax exemptions under the Industrial Enterprises Act 2020. The law grants income tax exemptions and concessions to registered industries based on the nature of the business, geographic location, level of investment, and employment generation (Articles 24–36). It introduces a 100 percent income tax exemption for all microindustries (Article 26) and a 50 percent income tax exemption for tea, dairy, and textile industries (Article 24). Both exemptions are granted for an unlimited time. In addition, the National Startup Enterprise Policy 2023 includes provisions aimed at incentivizing the formalization of start-ups mainly through reduced entry barriers (IEDI 2023). It exempts start-ups from registration, renewal, and industrial property rights registration fees, in addition to tax exemption for up to 10 years. The draft Integrated National Strategy on Formalization 2024 provides an overarching framework to support the formalization of informal businesses. In practice, the incentives offered under some laws become difficult to implement if such incentives are not clearly funded in the annual budget. Targeted incentives that require cash outlays and are not backed by the annual budget remain unavailable.

The evidence suggests that the government could strengthen the benefits of formalization and implement information campaigns on the value of formalization. Some of the benefits that formal status can offer are access to government contracts, the ability to issue receipts, improved access to credit, and legal protections (Ulyssea 2020). Such benefits could be enhanced in Nepal. However, implementing such benefits effectively requires lowering the costs associated with formalization so that the overall cost-benefit calculation of firms becomes more favorable. Information campaigns on the benefits could become an additional supportive measure. Findings show that some informal microenterprises, particularly high-resemblance informal firms, do not perceive many benefits from formalization, but such campaigns are unlikely to be successful on their own (de Andrade et al. 2016).

28 Under this system, low risk business activities—common among MSMEs—require only basic registration, while additional permits are required only for higher risk activities. The Online Single Submission System platform issues a single business identification number that links firms automatically to tax, labor, and sectoral authorities, reducing duplication and clarifying compliance requirements across levels of government, even though implementation challenges persist in local capacity and digital literacy.

These reforms are important for supporting the formalization of informal microenterprises with productive potential, but also for enabling new firms to enter the market formally. Evidence presented in the report shows that the owners of 32 percent of formal microenterprises and 15 percent of nonmicro formal enterprises report that they launched their operations informally. As the analysis shows, firms that start informally accumulate fewer productive capabilities early on, placing them on a lower growth trajectory even after formalization. Reforms that lower business registration barriers are therefore important in reducing informality through the extensive margin (the entry of new formal firms) and reducing the lag in formalization among firms that initiate operations informally.

Productivity-Enhancing Support for High-Resemblance Informal Firms

Support for high-resemblance informal microenterprises through productivity-enhancing measures: Productivity improvements can support formalization decisions because they enhance the performance and growth prospects of firms and eventually their incentives to register. The analysis finds that formal microenterprises and high-productivity informal firms are more likely than other informal microenterprises to access important services that seem to play a role in improving productivity, such as the use of credit and technology, access to better infrastructure, and the adoption of more formal practices, such as contractual agreements and formal workplace environments outside the household. These services may be especially relevant among high-resemblance firms that exhibit higher-level owner and firm capabilities, operate in more productive sectors, and could benefit from more support in raising productivity and eventually enabling formalization.

Advanced targeted training: Traditional business training has a limited average impact. The size of the effect is typically an increase of around 5 percent–10 percent in profits (McKenzie and Woodruff 2014). Targeted training shows more promise. Evidence indicates that more intense counseling and management consulting services are associated with high returns in productivity and growth among high-ability entrepreneurs (Brooks et al. 2018; Bruhn et al. 2018; McKenzie 2021). The effectiveness of training depends on three factors: (1) entrepreneur selection and readiness, (2) training quality and practical relevance, and (3) post-training support mechanisms. The literature highlights the importance of innovations in the content of training by, for example, incorporating kaizen methods, localization and mentoring, heuristics, and psychology (McKenzie 2021; McKenzie et al. 2023).

Enhanced access to modern technologies, such as digital payment systems and e-commerce platforms: Digital payments can improve financial management, create verifiable transaction histories that support credit access, and reduce leakage in benefit delivery (Goffe 2017; Muralidharan et al. 2016; World Bank 2022b). Recent reforms in Nepal have lowered adoption barriers. Nepal Clearing House Limited now waives fees on digital transfers up to NPR 500 and applies low charges for small merchant payments, thereby reducing costs among microentrepreneurs (NCHL 2025).[29] Nepal Rastra Bank has made domestic digital payments via cards, QR codes, wallets, and mobile banking free for customers, although businesses still pay merchant side fees (ICT Frame 2025). Challenges persist, such as limited digital literacy among the population and the consumer preference for cash (AFI 2025; IEG 2023; IFC and UNCDF 2023). In addition, the use of digital payment tools by informal microenterprises may not be easy in practice because the personal accounts of the owners of these firms are subject to tiered know-your-customer policies enforced by banks if the volume of transactions increases to a threshold. Simpler digital onboarding tools could help microentrepreneurs meet compliance requirements and may encourage informal businesses to register. Expanding targeted digital literacy training could increase take-up, and offering incentives might encourage customers to shift away from using cash. In parallel, supporting the use by microentrepreneurs of e commerce platforms could expand the customer base of firms and strengthen the incentives among owners to formalize. Evidence from South Asia shows that informal firms that sell online gain greater market access, followed by increases in sales and then business expansion (Bussolo et al. 2025).

Access to locations outside the household: The operational locations of informal businesses shapes the performance and growth potential of firms. A substantial share of informal microenterprises operate within households, which may entail productivity costs because of distractions, weaker coordination, limited peer effects, and constraints on specialization or scale. Evidence on developing countries indicates that reallocating production away from household settings to more formal, dedicated workplace environments

29 The fees are NPR 2 for payments up to NPR 500 and NPR 4 for payments up to NPR 5,000.

can generate productivity gains (Atkin et al. 2023; McCaig and Pavcnik 2018). The survey analysis in this report underscores the relevance of this channel. High-resemblance firms are more likely to operate from within households although household based operation is associated with lower productivity, particularly among female-owned businesses (refer to annex B, table B.5, panel b). These findings highlight the trade off between the convenience and cost saving advantages of household operations and the productivity constraints they may impose, suggesting the scope exists for policies that facilitate access to affordable commercial space or shared workplace arrangements.

Stronger links between informal firms and formal input and output markets: Deeper integration in formal supply chains and commercial networks can support learning, upgrading, and growth among informal firms. The analysis shows that more highly productive informal microenterprises tend to resemble formal firms in commercial practices, including the greater use of written contracts and formal contractual arrangements in procuring inputs or providing services. Cross country evidence suggests that such supply chain links whereby informal firms sell to or buy from formal enterprises under contractual relationships can facilitate repeat transactions, strengthen buyer supplier relationships, and enable participation in higher value supply chains. These arrangements can also transmit managerial practices, standards, and knowledge from formal to informal firms, thereby supporting productivity improvements over time (Djidonou et al. 2025; Meagher 2013).

Grants in kind or in cash, complemented by access to microfinance loans: Complementary evidence on developing countries finds that one-off grants provided to microenterprises can generate high average returns to capital among some microenterprises, particularly the more-capable and cash-constrained firms. For example, in Sri Lanka, randomized cash and equipment grants raised average real returns to capital well above market interest rates, at 4.6 percent–5.3 percent per month (55 percent–63 percent a year), and the effects were greater among entrepreneurs with higher ability and more baseline profits (de Mel et al. 2008). Access to microfinance loans may complement such grants by providing ongoing working capital. Yet, meta-analyses show only modest average impacts of traditional microfinance on business growth (Meager 2019). Emerging approaches, including savings-led products, flexible repayment structures aligned with business cash flows, and digital credit platforms that reduce transaction costs and enable rapid disbursement, seek to address some of these limitations, though their effectiveness remains context dependent.

Grants in kind targeted on high-potential female-owned microenterprises, coupled with specific services that reduce intrahousehold constraints, improve financial autonomy, and provide childcare support: Experimental evidence on Ghana shows that grants in kind increased profits among female-owned microfirms more reliably than unrestricted cash because females face greater household-level pressure to divert cash toward household needs, whereas grants in kind (such as equipment or inventory) remain in the enterprise (Fafchamps et al. 2014). Complementary evidence on India and Sri Lanka shows that cash is associated with lower returns among female-owned businesses because females frequently reallocate capital toward other enterprises within the household, often businesses of their husbands, and that returns are substantially larger if females are the sole enterprise operators (Bernhardt et al. 2017). These examples reflect a structural constraint rather than a preference. The solution is not to limit females' financial autonomy, but to address the underlying conditions that create competing claims on their resources, including unequal care responsibility and intrahousehold bargaining power. Taken together, these findings indicate that supporting high-potential Nepali female entrepreneurs is most effective if the support is bundled with services that strengthen females' control over resources, such as investment support in kind, dedicated business accounts, or commitment savings mechanisms, alongside complementary services (for instance, subsidized childcare, flexible training schedules, and safe workspaces outside the home) that reduce competing time and resource constraints and enable females to deploy capital more productively.

Improving the cost-effectiveness of productivity-enhancing services: This calls for an approach that is fundamentally different from standard microenterprise support programs, one that is selective in its targets, more intensive in the support it provides, and oriented toward markets. Standard programs that spread limited resources across a heterogeneous pool of firms, many of which are subsistence operations with little motivation or capacity to grow, have generally produced only modest, insubstantial impacts on sales, profits, and long-term growth (Cho and Honorati 2013; Grimm and Paffhausen 2015; McKenzie and Woodruff 2014). By contrast, support for high-potential microenterprises needs to begin with rigorous screening. Targeting criteria can be centered on observable benchmarks, such as high baseline sales or employment, in addition to indicators of entrepreneurial potential, such as initiative, aspirations, or other psychometric measures. The intensity is also important in improving performance. Business plan competitions represent such a mechanism, combining self-selection with scoring to funnel intensive support toward high-

scoring applicants. For instance, winners of a large-scale competition in Nigeria who received large grants (an average grant size of about US$50,000 per winning business), alongside business plan training, showed a higher rate of firm survival, employment, and job creation postservices relative to nonwinners (McKenzie 2017). Orienting support toward more demanding markets can generate sustained productivity gains and capability upgrading among high-potential firms. Evidence on the Arab Republic of Egypt, where small informal producers were connected to export markets and exposed to the quality standards and feedback loops of foreign buyers, indicates that treated firms realized monthly profit increases, alongside large productivity improvements (Atkin et al. 2017).

Livelihood-Enhancing Support for Informal Necessity Microenterprises

Supporting informal necessity microenterprises, which constitute the majority of informal microenterprises in Nepal, requires a comprehensive approach that focuses on stabilizing incomes, reducing risk and volatility, and enabling modest productivity improvements. The informal sector continues to be a major source of income for a large share of urban households. Most appear to be using self-employment primarily not as a job growth engine, but as a livelihoods strategy because they cannot access wage jobs or because they need a second source of income given the low quality of available jobs. This finding among informal firms in Nepal is consistent with evidence on other developing countries (Banerjee and Duflo 2011). While broader reforms to improve the business environment and expand formal employment opportunities are essential, such reforms take time to deliver results, underscoring the importance of short term livelihood supporting measures among informal businesses on which many households depend. Although these firms may not grow and although some may eventually exit, targeted livelihood interventions can help reduce household exposure to shocks and income instability, while enabling investments in human capital that support a transition to more-productive wage employment.

The government of Nepal has implemented a range of programs to support microenterprises, largely aimed at improving livelihoods and owner capacity. Key programs include the Rural Enterprises and Remittances (Samriddhi) Project, the Micro-Enterprise Development for Poverty Alleviation Program, the Udaya–Investment and Innovation for Economic Development Program, the Youth Self-Employment Fund, the Rural Enterprise and Economic Development Project, the Rural Self-Reliance Fund, and the Innovation in Enterprise Development and Job Creation Project. While these programs differ in design and implementation, many combine business development services with access to finance, capacity building, and market links and maintain a strong focus on poor households, females, youth, and disadvantaged groups. In some of these programs, the targeting and stated goals could be clearer. The Micro-Enterprise Development for Poverty Alleviation Program, for example, focuses on subsistence enterprises and low-income households, but some of its services cover start-ups and incubation programs, which may not align with the target group (World Bank 2026b).

Programs can be particularly effective at livelihood enhancement if they explicitly offer small grants, training in basic business practices, and social protection coverage. Among vulnerable household enterprises that are too small or volatile to graduate to formality, small amounts of cash can support consumption, food security, assets, and psychological well-being. Small cash grants can help households stabilize and avoid harmful coping mechanisms (such as distress sales or high-cost debt), but it may not lead to increased profits or capital reinvestments given the subsistence nature of many informal businesses. Support could also include light touch, practical business training focused on specific practices or heuristics, such as basic bookkeeping, cost accounting, pricing, and customer management, that tend to improve business practices (McKenzie and Woodruff 2014). Training can be targeted on females. The analysis finds that female owners of Nepali informal businesses have lower average educational attainment than male owners. This contributes to the negative productivity gap. Access to basic risk protection, such as health coverage, maternity benefits, disability support, and old-age benefits, can reduce exposure to shocks and support the labor market transition among informal workers.[30]

Urban livelihood programs can also be effective if they offer a coordinated package of services that address multiple constraints in a comprehensive manner. Urban adaptations of economic inclusion (graduation)

30 The government of Nepal has launched a scheme aimed at self-employed and informal workers as part of the Social Security Fund. Among informal sector workers, the total contribution is 20.37 percent. Central and local governments can contribute 9.37 percent on behalf of the workers. In such cases, workers will only have to contribute 11 percent. Among self-employed workers, the total contribution of 31.00 percent is borne by the self-employed worker. However, take-up rates are extremely low, which suggests that there are challenges with implementation. In fiscal year 2024/25, only 418 self-employed workers and 720 informal workers registered for the Social Security Fund.

programs that were initially piloted in rural areas combine time-bound cash transfers, small livelihood grants or assets, coaching, and links to social services and health coverage. Examples include BRAC urban pilot programs in Chittagong and Dhaka in Bangladesh that adapt the graduation approach in slum and periurban contexts, as well as several World Bank–supported economic inclusion programs in urban settings in, for instance, Ethiopia (World Bank 2025d).[31] Multicountry graduation evaluations that include urban and periurban participants are associated with durable welfare improvements long after asset transfers and coaching have ended (Avalos e al. 2021; Banerjee et al. 2015). For example, cash grants have increased earnings and assets among youth in to Uganda (Blattman et al. 2014).

Many informal microenterprises can be supported in achieving a smooth transition from self-employment and to wage employment through stronger active labor market programs. Evidence on multiple countries shows that informal household businesses experience substantial churning, that is, frequent entry and exit, suggesting that a transfer to wage employment is common if opportunities become available. Informal household firms in Viet Nam exhibit high turnover, for example, with 14 percent–18 percent entering or exiting annually (McCaig and Pavcnik 2021).[32] Policy designs should therefore accommodate churning and prioritize support through risk protection and buffers that relax liquidity constraints and enable job search, such as transportation and childcare subsidies. Rather than firm-specific training, the provision of transferable skills and job placement and intermediation services through Nepal's employment service centers could support access to wage employment opportunities.

31 The World Bank–supported Urban Productive Safety Net and Jobs Project equips Ethiopia's urban poor with opportunities to gain financial literacy, technical training, and start-up grants, enabling them to transition from temporary public works employment to sustainable entrepreneurship. Operating across 88 cities and benefiting 1.7 million people, the project combines short-term support with long-term empowerment, fostering economic inclusion and community transformation through innovative safety net initiatives.

32 Similar patterns are observed elsewhere. Across several Sub Saharan African countries, household enterprises exhibit high churning, primarily because of low profitability, financial constraints, and idiosyncratic shocks (Nagler and Naudé 2017). Cross country evidence on developing countries shows that micro- and small enterprises exhibit high turnover and that low productivity firms are more likely to exit (Li and Rama 2015).

References

Acharya, Bala Ram. 2023. "Occupational Shift Among Dalits." *RR Interdisciplinary Journal* 4 (4): 122–32. https://doi.org/10.3126/rrij.v4i4.62617.

Adhikari, Dipak Bahadur. 2018. ""Informal Economy and Poverty in Urban Nepal." *Economic Journal of Nepal* 41 (3–4): 12–24."

Adom, Idossou Marius. 2026. "Why Do Many Firms Start Informal Before Formalising a Few Years Later?" *VoxDev*, March 13. https://voxdev.org/topic/firms/why-do-many-firms-start-informal-formalising-few-years-later.

AFI (Alliance for Financial Inclusion). 2025. "Digital Payments Are Driving Financial Inclusion in Nepal." *Newsroom* (blog), March 21. https://www.afi-global.org/newsroom/blogs/digital-payments-are-driving-financial-inclusion-in-nepal/.

Aga, Gemechu A., David C. Francis, Filip Jolevski, Jorge Rodriguez Meza, and Joshua Seth Wimpey. 2023. "An Application of Adaptive Cluster Sampling to Businesses." *Journal of Survey Statistics and Methodology* 11 (5): 1246–66. https://doi.org/10.1093/jssam/smac037.

Alaref, Jumana Jamal Subhi, Aishwarya Shivaji Patil, Tasmia Rahman, Ana María Muñoz-Boudet, and Jasmine Rajbhandary. 2024. "Women's Labor Force Participation in Nepal: An Exploration of the Role of Social Norms." Policy Research Working Paper 10810, World Bank.

Allcott, Hunt, Allan Collard-Wexler, and Stephen D. O'Connell. 2016. "How Do Electricity Shortages Affect Industry? Evidence from India." *American Economic Review* 106 (3): 587–624.

Arvis, Jean-François, Lauri Ojala, Christina Wiederer, et al. 2018. "Connecting to Compete 2018: Trade Logistics in the Global Economy; the Logistics Performance Index and Its Indicators." World Bank.

Atkin, David Guy, Amit Kumar Khandelwal, and Adam Osman. 2017. "Exporting and Firm Performance: Evidence from a Randomized Experiment." *Quarterly Journal of Economics* 132 (2): 551–615.

Atkin, David Guy, Antoinette Schoar, and Sumit Shinde. 2023. "Working from Home, Worker Sorting, and Development." NBER Working Paper 31515 (July), National Bureau of Economic Research.

Avalos, Jorge Eduardo, Sarang Chaudhary, Timothy Joseph Peter Clay, and Puja Vasudeva Dutta. 2021. "A Path to Jobs for the Urban Poor." *PEI in Practice*, vol. 1 (November 17), Partnership for Economic Inclusion, World Bank. https://doi.org/10.1596/36594.

Ayyagari, Meghana, Asli Demirgüç-Kunt, and Vojislav Maksimovic. 2011. "Small vs. Young Firms Across the World: Contribution to Employment, Job Creation, and Growth." Policy Research Working Paper 5631, World Bank.

Banerjee, Abhijit Vinayak, and Esther Duflo. 2011. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. PublicAffairs.

Banerjee, Abhijit Vinayak, Esther Duflo, Nathanael Goldberg, et al. 2015. "A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries." *Science* 348 (6236): 772–89.

Bernhardt, Arielle, Erica M. Field, Rohini P. Pande, and Natalia Rigol. 2017. "Household Matters: Revisiting the Returns to Capital Among Female Micro-Entrepreneurs." NBER Working Paper 23358 (April), National Bureau of Economic Research. https://www.nber.org/papers/w23358.

Blattman, Christopher, Nathan Vincent Fiala, and Sebastián Martínez. 2014. "Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda." *Quarterly Journal of Economics* 129 (2): 697–752.

Brooks, Wyatt, Kevin Donovan, and Terence R. Johnson. 2018. "Mentors or Teachers? Microenterprise Training in Kenya." *American Economic Journal: Applied Economics* 10 (4): 196–221. https://doi.org/10.1257/app.20170042.

Bruhn, Miriam, Dean S. Karlan, and Antoinette Schoar. 2018. "The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico." *Journal of Political Economy* 126 (2): 635–87. https://doi.org/10.1086/696154.

Bruhn, Miriam, and David J. McKenzie. 2014. "Entry Regulation and the Formalization of Microenterprises in Developing Countries." *World Bank Research Observer* 29 (2): 186–201.

Bussolo, Maurizio, Akshay Dixit, Anne Marie Golla, et al. 2025. "How Selling Online Is Affecting Informal Firms in South Asia." *Asian Development Review* 42 (1): 143–78. https://doi.org/10.1142/S0116110525500064.

CBS (Central Bureau of Statistics, Nepal). 2019. *Report on the Nepal Labour Force Survey 2017/18*. CBS. https://giwmscdntwo.gov.np/media/app/public/36/posts/1692627226_64.pdf.

Cho, Yoonyoung, and Maddalena Honorati. 2013. "Entrepreneurship Programs in Developing Countries: A Meta Regression Analysis." Social Protection and Labor Discussion Paper 1302 (April), World Bank. http://hdl.handle.net/10986/13568.

Cunningham, Wendy V., David Locke Newhouse, Federica Ricaldi, Feraud Tchuisseu Seuyong, Mariana Viollaz, and Ifeanyi Nzegwu Edochie. 2024. "Urban Informality in Sub-Saharan Africa: Profiling Workers and Firms in an Urban Context." Policy Research Working Paper 10703, World Bank.

de Andrade, Gustavo Henrique, Miriam Bruhn, and David J. McKenzie. 2016. "A Helping Hand or the Long Arm of the Law? Experimental Evidence on What Governments Can Do to Formalize Firms." *World Bank Economic Review* 30 (1): 24–54. https://doi.org/10.1093/wber/lhu008.

Deininger, Klaus W. 2003. *Land Policies for Growth and Poverty Reduction*. World Bank Policy Research Report Series. World Bank; Oxford University Press.

Deléchat, Corinne C., and Leandro Medina, eds. 2021. *The Global Informal Workforce: Priorities for Inclusive Growth*. International Monetary Fund.

Delecourt, Solène, and Anne Fitzpatrick. 2021. "Childcare Matters: Female Business Owners and the Baby-Profit Gap." *Management Science* 67 (7): 4455–74. https://doi.org/10.1287/mnsc.2021.3976.

de Mel, Suresh, David J. McKenzie, and Christopher M. Woodruff. 2008. "Returns to Capital in Microenterprises: Evidence from a Field Experiment." *Quarterly Journal of Economics* 123 (4): 1329–72. https://doi.org/10.1162/qjec.2008.123.4.1329.

de Mel, Suresh, David J. McKenzie, and Christopher M. Woodruff. 2009. "Are Women More Credit Constrained? Experimental Evidence on Gender and Microenterprise Returns." *American Economic Journal: Applied Economics* 1 (3): 1–32. https://doi.org/10.1257/app.1.3.1.

de Mel, Suresh, David J. McKenzie, and Christopher M. Woodruff. 2013. "The Demand for, and Consequences of, Formalization Among Informal Firms in Sri Lanka." *American Economic Journal: Applied Economics* 5 (2): 122–50.

de Soto, Hernando. 1989. *The Other Path: The Invisible Revolution in the Third World*. Harper & Row.

Dhakal, Modnath. 2025. "NRB Slashes Interest Rates, Promotes Housing and Share Market Growth." *Rising Nepal*, July 12. https://risingnepaldaily.com/news/64962.

Dieppe, Alistair, ed. 2021. *Global Productivity: Trends, Drivers, and Policies*. World Bank.

Djidonou, Gbenoukpo Robert, Neil Foster-McGregor, and Nanditha Mathew. 2025. "Formal–Informal Supply Chain Linkages and Firm Productivity in Sub-Saharan Africa: The Role of Human Capital." MERIT Working Paper 2025–006 (February 13), United Nations University–Maastricht Economic and Social Research Institute on Innovation and Technology. https://cris.maastrichtuniversity.nl/ws/files/240364651/wp2025-006.pdf.

Fafchamps, Marcel, David J. McKenzie, Simon R. Quinn, and Christopher M. Woodruff. 2014. "Microenterprise Growth and the Flypaper Effect: Evidence from a Randomized Experiment in Ghana." *Journal of Development Economics* 106 (January): 211–26.

Farrell, Diana. 2004. "The Hidden Dangers of the Informal Economy." *McKinsey Quarterly* 3 (July 1): 27–37.

Feder, Gershon, and Akihiko Nishio. 1998. "The Benefits of Land Registration and Titling: Economic and Social Perspectives." *Land Use Policy* 15 (1): 25–43.

Fisher-Vanden, Karen, Erin T. Mansur, and Qiong Juliana Wang. 2015. "Electricity Shortages and Firm Productivity: Evidence from China's Industrial Firms." *Journal of Development Economics* 114 (May): 172–88.

Galal, Rami, Marc Schiffbauer, Alice Rossignol, and Gharam Dexter. 2025. "Frontier Firms and Job Creation in Bangladesh." World Bank.

Ghossein, Tania, Shu Yu, and Silvia Muzi. 2024. "A Toolkit for Analysis of Informality: From Diagnostics to Policy Reforms." World Bank.

Giri, Khem Raj. 2016. ""Traditional Occupational Status of Dalit Community: A Case Study of Madhya Nepal Nagarpalika, Lamjung District."." Master's thesis (April), Central Department of Rural Development, Tribhuvan University.

Goffe, Valeriya. 2017. "Guidance Note on Incorporating Digital Financial Services and FinTech Approaches in WBG Operations Seeking to Improve MSME Access to Credit." World Bank.

Government of Indonesia. 2021. *Perizinan Berusaha Berbasis Risiko* [Regulation No. 5/2021 on Implementation of Risk-Based Business Licensing]. [In Indonesian.] Government of Indonesia.

Grimm, Michael, and Anna Luisa Paffhausen. 2015. "Do Interventions Targeted at Micro-Entrepreneurs and Small and Medium-Sized Firms Create Jobs? A Systematic Review of the Evidence for Low and Middle Income Countries." *Labour Economics* 32 (January): 67–85.

Grover, Arti Goswami, and Mariana De La Paz Pereira-López. 2023. "Does Informality Depress Investments and Job Recovery? Firm-Level Evidence from the COVID-19 Crisis in South Asia." Policy Research Working Paper 10580, World Bank.

Hardy, Morgan L., and Gisella Kagy. 2018. "Mind The (Profit) Gap: Why Are Female Enterprise Owners Earning Less Than Men?" *American Economic Association: AEA Papers and Proceedings* 108 (May): 252–55.

Hatayama, Maho, Dino Leonardo Merotto, and Theresa Kay Osborne. 2021. "New Standard Enterprise Survey Indicators for Jobs Diagnostics: Characterizing the Jobs Problem and Diagnosing Constraints to Labor Demand." Jobs Note (March), World Bank.

Himalini. 2025. "Nepal's New Monetary Policy: Lower Interest Rates, Boosted Lending, and Relief for Banks." *Himalini*, July 12. https://himalini.com/en/nepals-new-monetary-policy-lower-interest-rates-boosted-lending-and-relief-for-banks.html.

ICT Frame. 2025. "Nepal Rastra Bank Waives Fees on Domestic Digital Payments: Boost for Nepal's Digital Economy." *ICT Frame* (blog), October 10. https://ictframe.com/nrb-waives-fees-domestic-digital-payments/.

IDA (International Development Association). 2026. "Nepal: Sustainable and Inclusive Finance Project." Project Appraisal Document, Report PADHI01141 (January 7), World Bank. http://documents.worldbank.org/curated/en/099010926133526300.

IEDI (Industrial Enterprise Development Institute, Nepal). 2023. "National Startup Enterprise Policy, 2023." IEDI.

IEG (Independent Evaluation Group). 2023. *Financial Inclusion: Lessons from World Bank Group Experience, Fiscal Years 2014–22*. World Bank.

IFC (International Finance Corporation) and UNCDF (United Nations Capital Development Fund). 2023. "Nepal Financial Inclusion Report 2023." IFC. https://www.ifc.org/content/dam/ifc/doc/2023-delta/2023-nepal-financial-inclusion-report.pdf.

Iimi, Atsushi. 2021. "Firm Productivity and Locational Choice: Evidence from Mozambique." Policy Research Working Paper 9727, World Bank.

ILO (International Labour Organization). 2018. *Women and Men in the Informal Economy: A Statistical Picture*, 3rd ed. ILO. https://www.ilo.org/sites/default/files/2024-04/Women_men_informal_economy_statistical_picture.pdf.

ILO (International Labour Organization). 2022. *Diagnostic Report on the Extent, Circumstances, Causes, Factors and Nature of Informality in Nepal*. ILO and Ministry of Labour, Employment, and Social Security. https://www.ilo.org/publications/diagnostic-report-extent-circumstances-causes-factors-and-nature.

Jolevski, Filip, Gaurav Nayyar, Regina Pleninger, and Shu Yu. 2024. "Spillovers in ICT Adoption from Formal to Informal Firms: Evidence from Zambia." Policy Research Working Paper 10757, World Bank.

Khomeni, Syamsul Anwar, and Andreo Wahyudi Atmoko. 2025. "Digital-Based Business Licensing Reform in Indonesia: An Analysis of the Online Single Submission (Oss) Policy." *Asian Journal of Social and Humanities* 4 (3): 2531–40. https://ajosh.org/index.php/jsh/article/view/658.

La Porta, Rafael, and Andrei Shleifer. 2014. "Informality and Development." *Journal of Economic Perspectives* 28 (3): 109–26. https://doi.org/10.1257/jep.28.3.109.

Li, Yue, and Martín Rama. 2015. "Firm Dynamics, Productivity Growth, and Job Creation in Developing Countries: The Role of Micro- and Small Enterprises." *World Bank Research Observer* 30 (1): 3–38.

Maloney, William F. 2004. "Informality Revisited." *World Development* 32 (7): 1159–1178.

Marusic, Andreja, William Nielsen, Tania Ghossein, and Sylvia Solf. 2020. "Re-thinking the Approach to Informal Businesses: Typologies, Evidence, and Future Exploration." Finance, Competitiveness, and Innovation: Investment Climate, In Focus Series, World Bank. https://documents1.worldbank.org/curated/en/599391605764444802/pdf/Re-thinking-the-Approach-to-Informal-Businesses-Typologies-Evidence-and-Future-Exploration.pdf.

McCaig, Brian, and Nina Pavcnik. 2018. "Export Markets and Labor Allocation in a Low-Income Country." *American Economic Review* 108 (7): 1899–1941. https://www.aeaweb.org/articles?id=10.1257/aer.20141096.

McCaig, Brian, and Nina Pavcnik. 2021. "Entry and Exit of Informal Firms and Development." NBER Working Paper 28986 (July), National Bureau of Economic Research.

McKenzie, David J. 2017. "Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition." *American Economic Review* 107 (8): 2278–2307.

McKenzie, David J. 2021. "Small Business Training to Improve Management Practices in Developing Countries: Reassessing the Evidence for 'Training Doesn't Work'." *Oxford Review of Economic Policy* 37 (2): 276–301. https://doi.org/10.1093/oxrep/grab002.

McKenzie, David J., and Yaye Seynabou Sakho. 2010. "Does It Pay Firms to Register for Taxes? The Impact of Formality on Firm Profitability." *Journal of Development Economics* 91 (1): 15–24.

McKenzie, David J., and Christopher M. Woodruff. 2014. "What Are We Learning from Business Training and Entrepreneurship Evaluations Around the Developing World?" *World Bank Research Observer* 29 (1): 48–82.

McKenzie, David J., and Christopher M. Woodruff. 2017. "Business Practices in Small Firms in Developing Countries." *Management Science* 63 (9): 2967–81.

McKenzie, David J., Christopher M. Woodruff, Kjetil Bjorvatn, Miriam Bruhn, Jing Cai, Juanita Gonzalez Uribe, et al., eds. 2023. "Training Entrepreneurs." *VoxDevLit* 1 (3). https://voxdev.org/voxdevlit/training-entrepreneurs.

Meager, Rachael. 2019. "Understanding the Average Impact of Microcredit Expansions: A Bayesian Hierarchical Analysis of Seven Randomized Experiments." *American Economic Journal: Applied Economics* 11 (1): 57–91. https://doi.org/10.1257/app.20170299.

Meagher, Kate. 2013. "Unlocking the Informal Economy: A Literature Review on Linkages Between Formal and Informal Economies in Developing Countries." WIEGO Working Paper 27 (April), Women in Informal Employment: Globalizing and Organizing.

Muralidharan, Karthik, Paul Niehaus, and Sandip Sukhtankar. 2016. "Building State Capacity: Evidence from

Biometric Smartcards in India." *American Economic Review* 106 (10): 2895–2929.

Nagler, Paula, and Wim Naudé. 2017. "Non-Farm Entrepreneurship in Rural Sub-Saharan Africa: New Empirical Evidence." *Food Policy* 67 (February): 175–91.

NCHL (Nepal Clearing House Limited). 2025. "Transaction Fee Schedule: Effective from 16th July 2024 (1st Shrawan 2081)." Updated April 2, 2025, NCHL. https://nchl.com.np/wp-content/uploads/2026/01/Updated_NCHL-consolidated-fee-and-charge-2-April-2025.pdf.

Nepal Law Commission. 2011. "Industrial Policy, 2011." Law Commission.

Nikore, Mitali, Vandhana Ramesh, and Brinda Juneja. 2025. "Building Nepal's Care Economy: Regional Insights and Strategic Framework for Development." *NEFTake* (blog), January 14. https://nepaleconomicforum.org/building-nepals-care-economy-regional-insights-and-strategic-framework-for-development/.

NRB (Nepal Rastra Bank). 2019. "SMEs Financing in Nepal 2076." NRB.

NRB (Nepal Rastra Bank). 2025. "Monetary Policy for 2025/26." August, NRB. https://www.nrb.org.np/contents/uploads/2025/08/Monetary-policy-in-English-2025_26.pdf.

NSO (National Statistics Office, Nepal). 2023. *National Economic Census 2075: Main Results*. [In Nepalese.] NSO. https://nsonepal.gov.np/content/7468/7468-national-economic-census-2075/.

NSO (National Statistics Office, Nepal). 2024. *Nepal Living Standards Survey IV 2022/23: Statistical Report*. NSO.

Ohnsorge, Franziska L., and Shu Yu, eds. 2021. *The Long Shadow of Informality: Challenges and Policies*. World Bank.

Rahman, Mahir A., Nahian Azad Shashi, and Sajeda Amin. 2023. "Care Responsibilities and Women's Work in Bangladesh." *Bangladesh Development Studies* 46 (3/4): 35–74.

Rand, John, and Nina Elisabeth Torm. 2012. "The Benefits of Formalization: Evidence from Vietnamese Manufacturing SMEs." *World Development* 40 (5): 983–98.

Ruppert Bulmer, Elizabeth N., Ami Shrestha, and Michelle Lisa Marshalian. 2020. *Jobs Diagnostic: Nepal*. Job Series 22. World Bank. https://documents1.worldbank.org/curated/en/501501592797725280/pdf/Nepal-Jobs-Diagnostic.pdf.

Torm, Nina Elisabeth, and Marty Oehme. 2024. "Social Protection and Formalization in Low- and Middle-Income Countries: A Scoping Review of the Literature." *World Development* 181 (September): 106662. https://doi.org/10.1016/j.worlddev.2024.106662.

Ulyssea, Gabriel. 2018. "Firms, Informality, and Development: Theory and Evidence from Brazil." *American Economic Review* 108 (8): 2015–47. https://doi.org/10.1257/aer.20141745.

Ulyssea, Gabriel. 2020. "Informality: Causes and Consequences for Development." *Annual Review of Economics* 12 (1): 525–46. https://doi.org/10.1146/annurev-economics-082119-121914.

World Bank. 2022a. "Business Regulation Operational Guide." Finance, Competitiveness, and Innovation: Investment Climate Series. World Bank.

World Bank. 2022b. "Fintech and SME Finance: Expanding Responsible Access." Fintech and the Future of Finance Flagship Technical Note, World Bank. https://openknowledge.worldbank.org/entities/publication/ccb7e18a-01a6-54e2-a258-bccd8dd64d2c.

World Bank. 2023. "Enterprise Surveys: Nepal 2023 Country Profile." Enterprise Analysis Unit, World Bank.

World Bank. 2024a. "Poverty and Equity Brief: Nepal." October, World Bank. https://documents1.worldbank.org/curated/en/099051101062533877/pdf/IDU-7b8e9555-a244-4fe7-9608-28aa787130cc.pdf.

World Bank. 2024b. "Women, Business, and the Law 2024: Nepal." World Bank. https://wbl.worldbank.org/content/dam/documents/wbl/2024/snapshots/Nepal.pdf.

World Bank. 2025a. "Business Ready 2025." World Bank. https://www.worldbank.org/en/businessready/publications.

World Bank. 2025b. "Informal Sector Enterprise Surveys: Profile of Cities in Nepal, 2024." Enterprise Analysis Unit, World Bank. https://microdata.worldbank.org/catalog/6712/related-materials.

World Bank. 2025c. *Unlocking Nepal's Growth Potential: Nepal Country Economic Memorandum 2025*. World Bank. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099032125103030263.

World Bank. 2025d. "Urban Productive Safety Net and Jobs Project Enables Economic Inclusion for Women." *Feature Story* (blog), January 14. https://www.worldbank.org/en/news/feature/2025/01/14/urban-productive-safety-net-and-jobs-project-enables-afe-economic-inclusion-for-women.

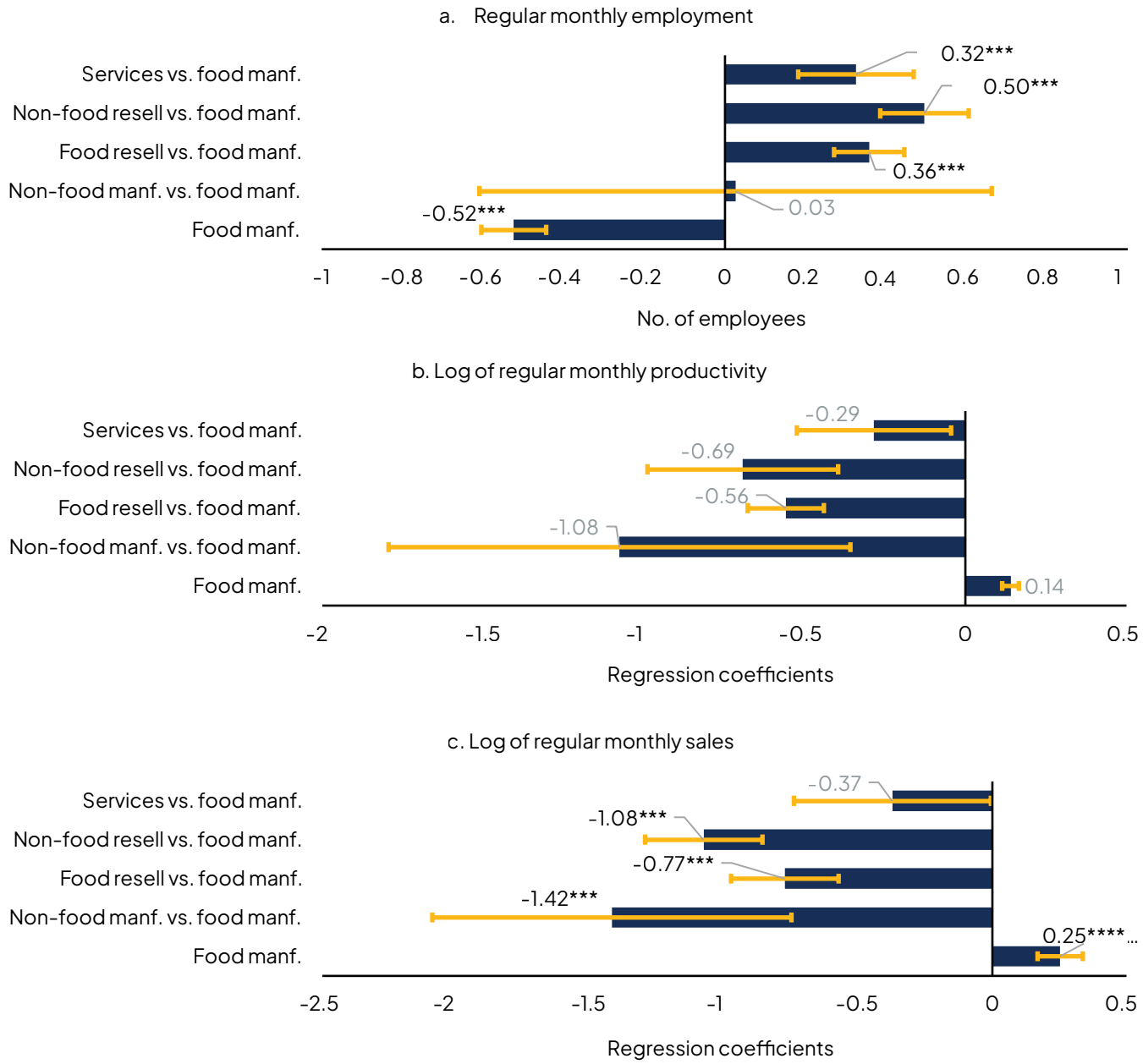
World Bank. 2026a. "Nepal Growth and Jobs: Getting to 7 Percent." Internal presentation, April, World Bank.

World Bank. 2026b. "Review of the Micro Enterprise Development for Poverty Alleviation (MEDPA) Program in Nepal." World Bank.

Xie, Zoe Leiyu, and Jumana Jamal Subhi Alaref. 2026. "Employment for More". In *Demographic Change in South Asia: Riding the Tailwinds for Development*. World Bank.

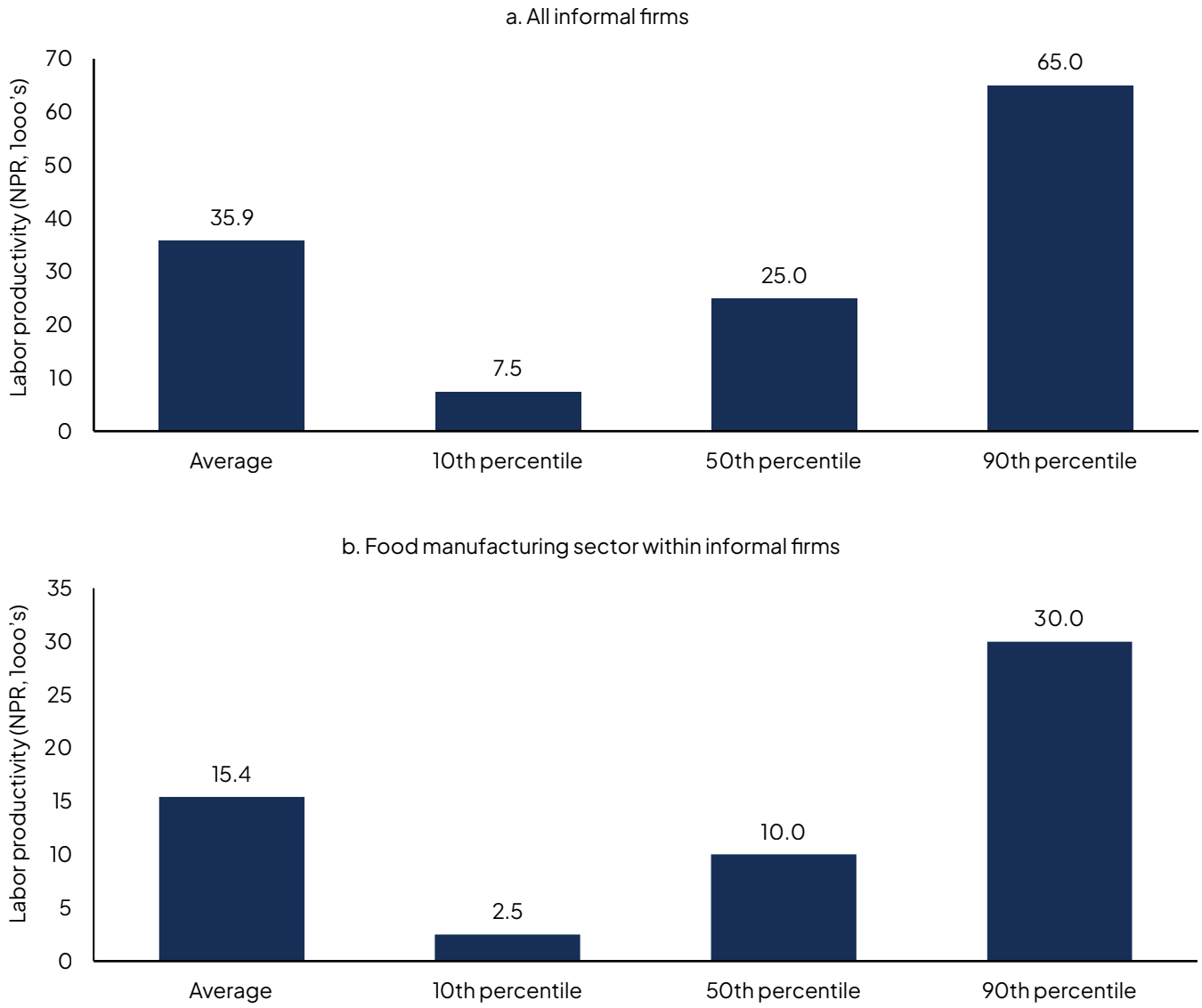
Annex A. Figures

Figure A.1 Informal female- and male-owned microenterprises: regular monthly employment, sales, and labor productivity, by sector



Source: Original figure for this publication based on World Bank 2025b.
Note: The three panels plot the point estimates from regressions of three different outcomes (number of employees, sales, and productivity) on a female ownership dummy. The female dummy is also interacted with sector dummies, allowing for heterogeneous relationships between female ownership and each outcome. The reference sector is food manufacturing. Log coefficients can be converted into percentage effects using the exponential transformation, for example, on the food manufacturing coefficient: $(e^{0.14}-1)*100 = 15$ percent. Gold whiskers show 95% confidence intervals.
** p < .1 ** p < .05 *** p < .01.*

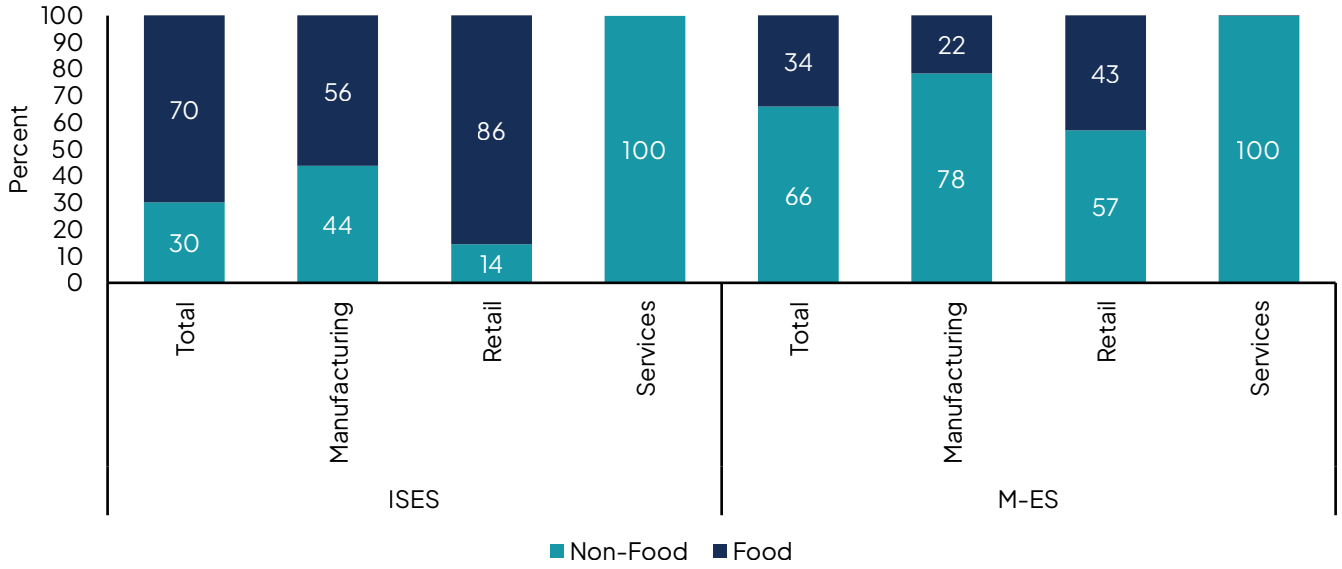
Figure A.2 Labor productivity, informal microenterprises



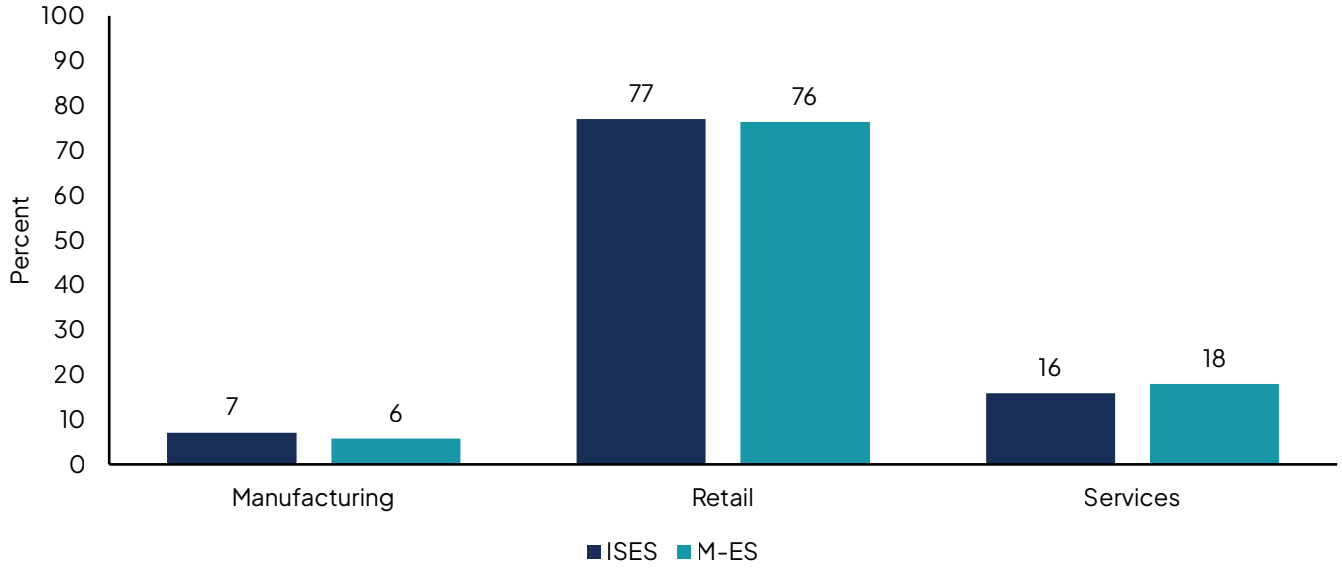
Source: Original figure for this publication based on World Bank 2025b.

Figure A.3 Sectoral composition of informal and formal microbusinesses

a. Sectoral composition, food and nonfood

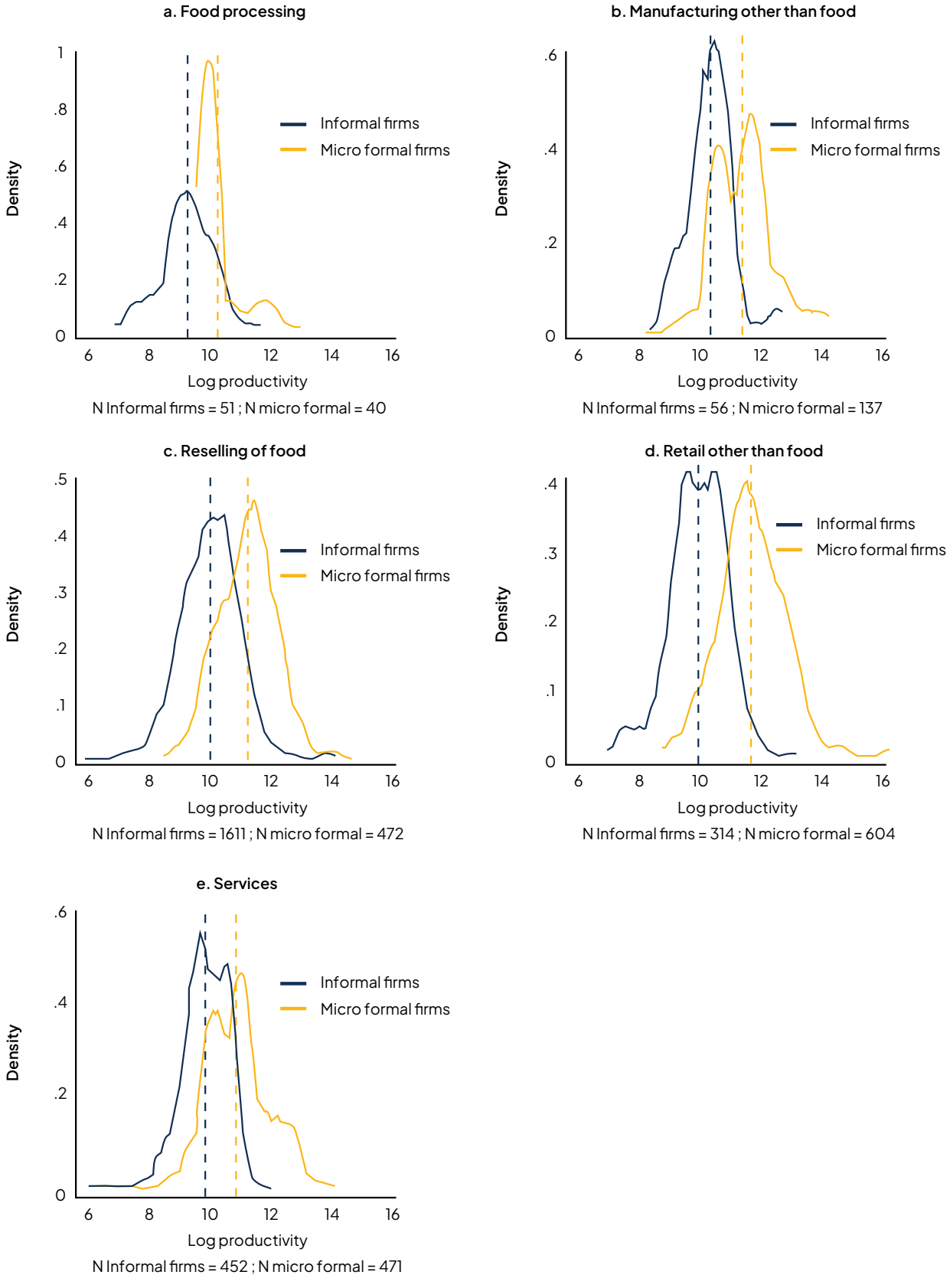


b. Sectoral composition, ISES and M-ES



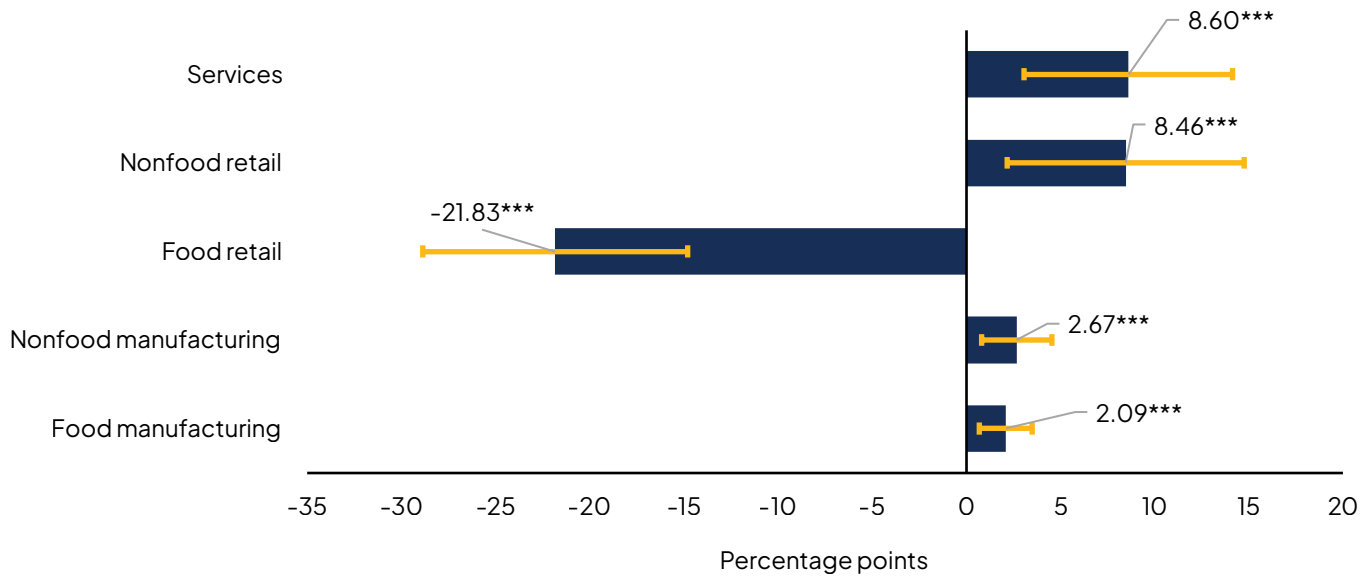
Source: Original figure for this publication based on M-ES; World Bank 2025b.

Figure A.4 Productivity (log) of informal and formal microbusinesses, by subsector



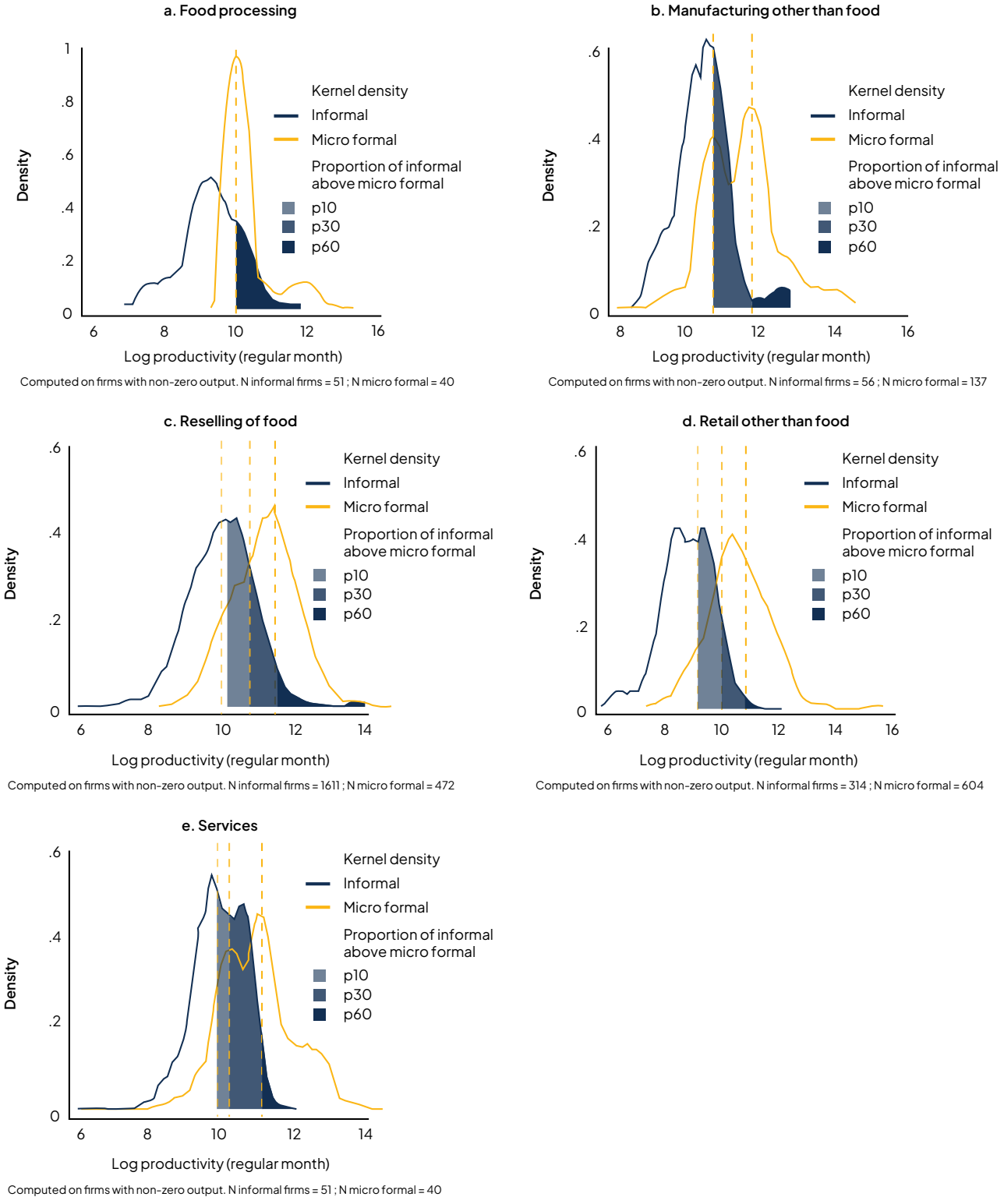
Sources: Original figure for this publication based on M-ES; World Bank 2025b.

Figure A.5 Marginal effect on the subsector of the classification of firms as high resemblance



Source: Original figure for this publication based on World Bank 2025b.
Note: The reported coefficients are estimated from a regression of outcomes on a high resemblance status dummy, controlling for city fixed effects and the log of the number of employees. Each coefficient on the x-axis represents the marginal effect of status as a high-resemblance informal firm on the probability to belong to each subsector, conditional on the controls. Gold whiskers show 95 percent confidence intervals.
**p < .10 **p < .05 ***p < .01.*

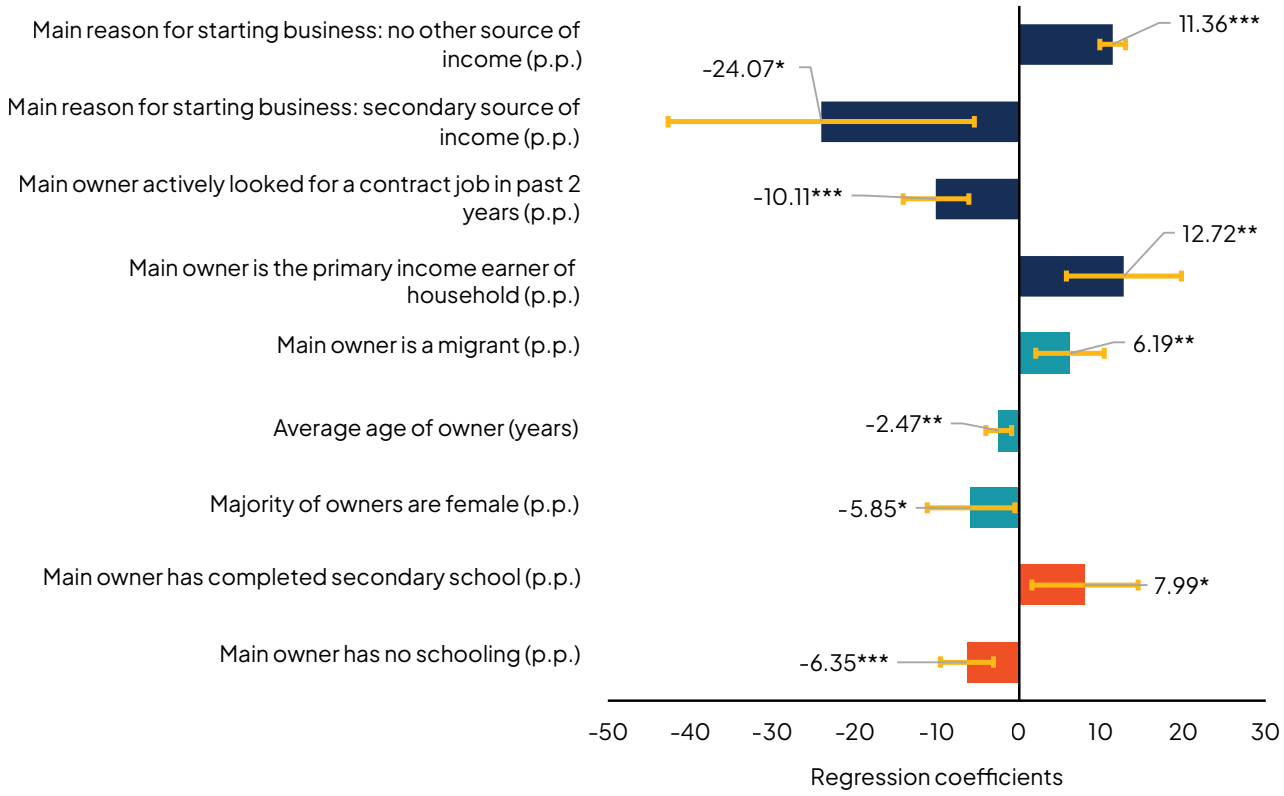
Figure A.6 High-productivity informal firms, by subsector



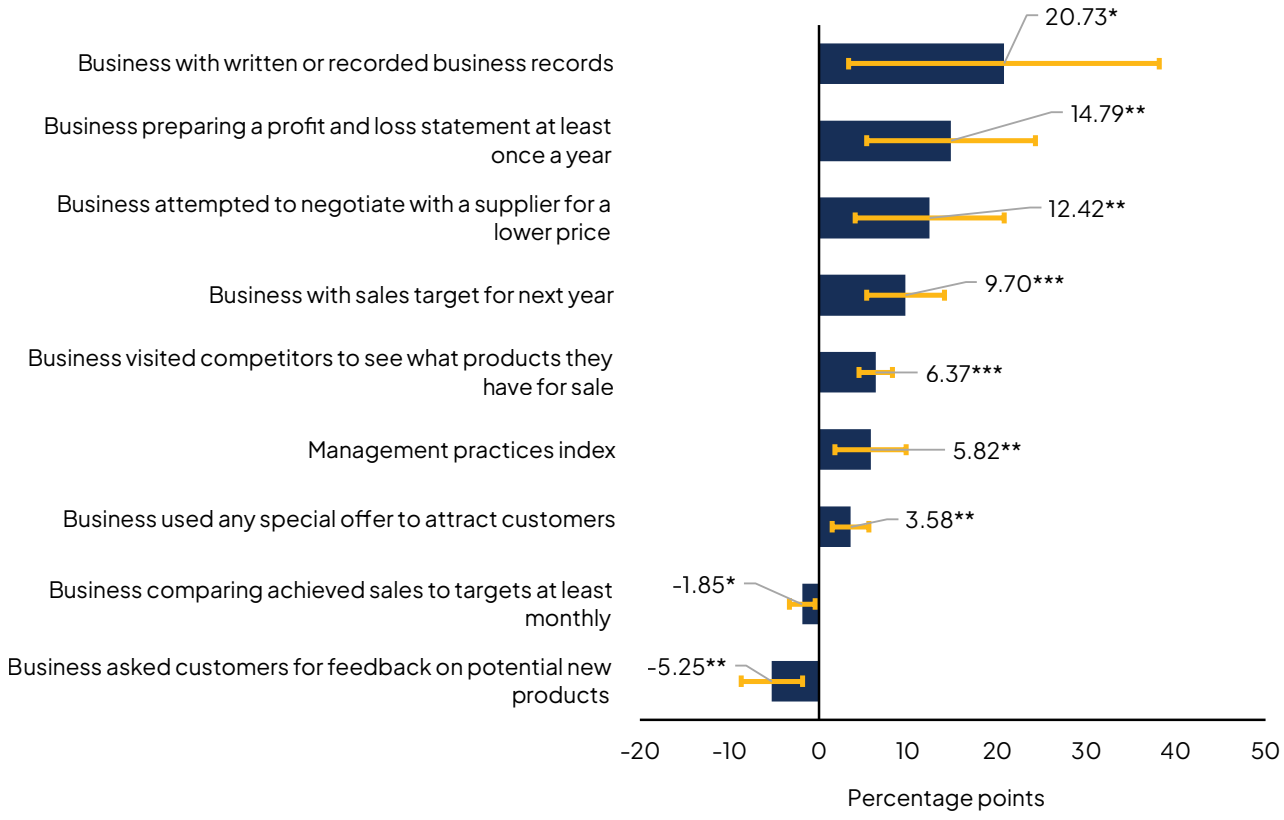
Sources: Original figure for this publication based on M-ES; World Bank 2025b.

Figure A.7 Differences between high-productivity informal and non-high-productivity informal microenterprises

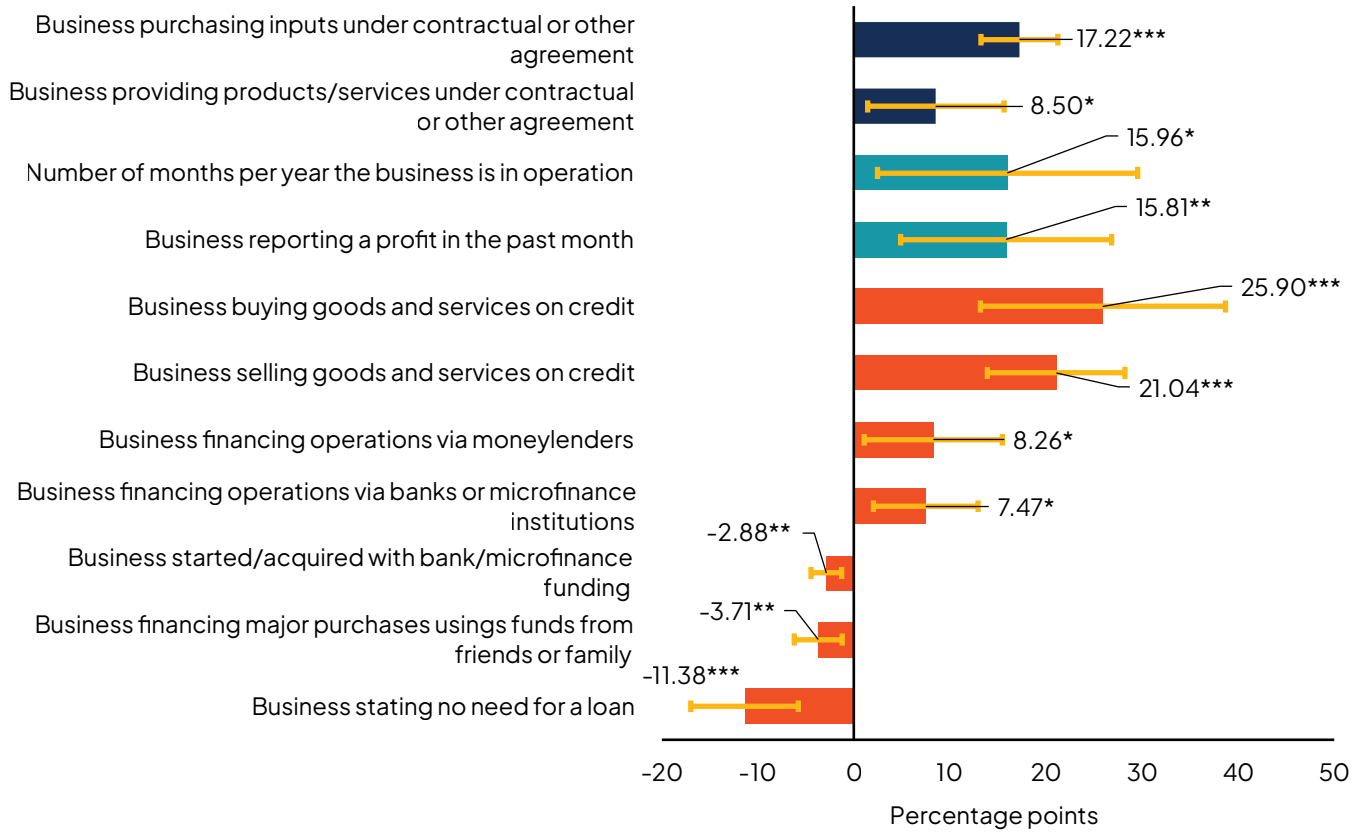
a. Household characteristics of owners



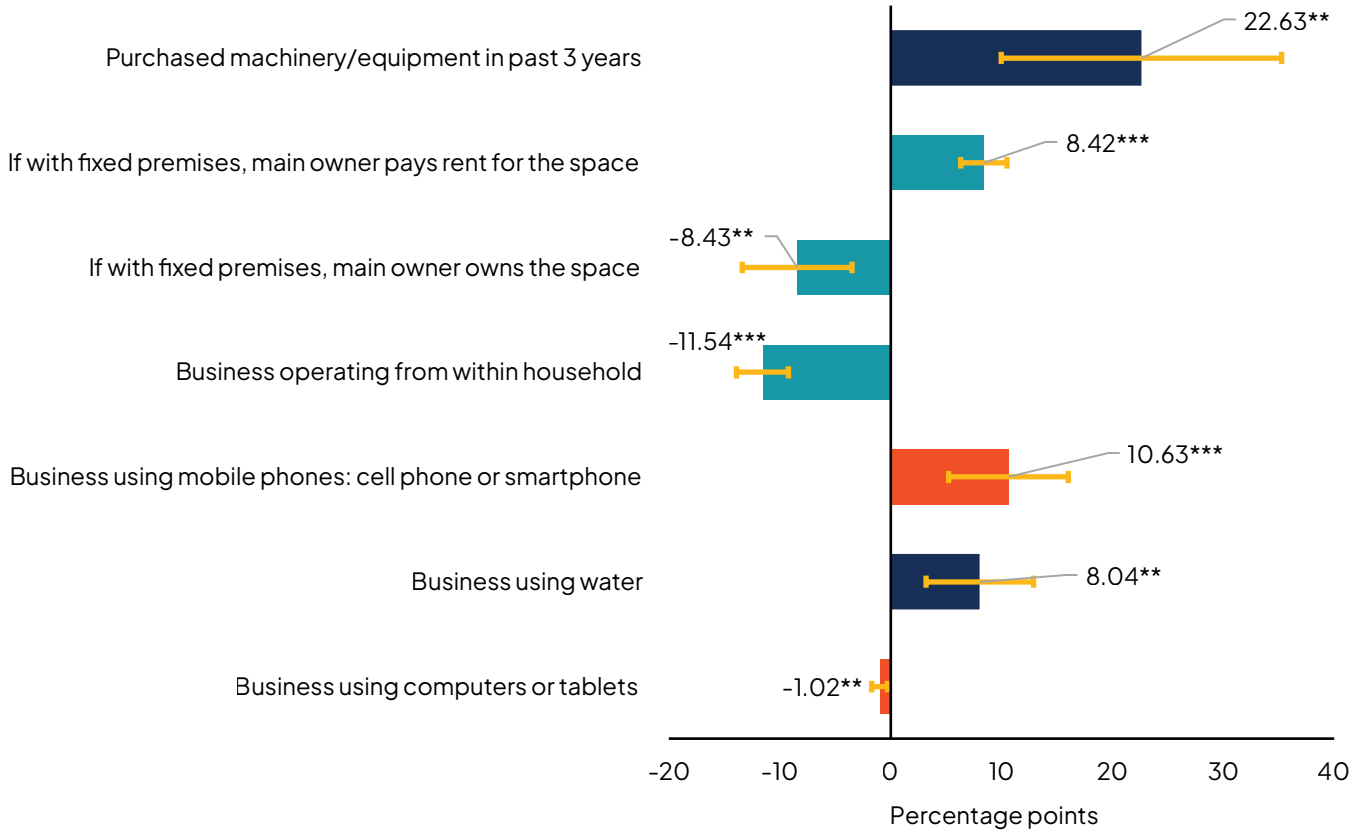
b. Business management practices



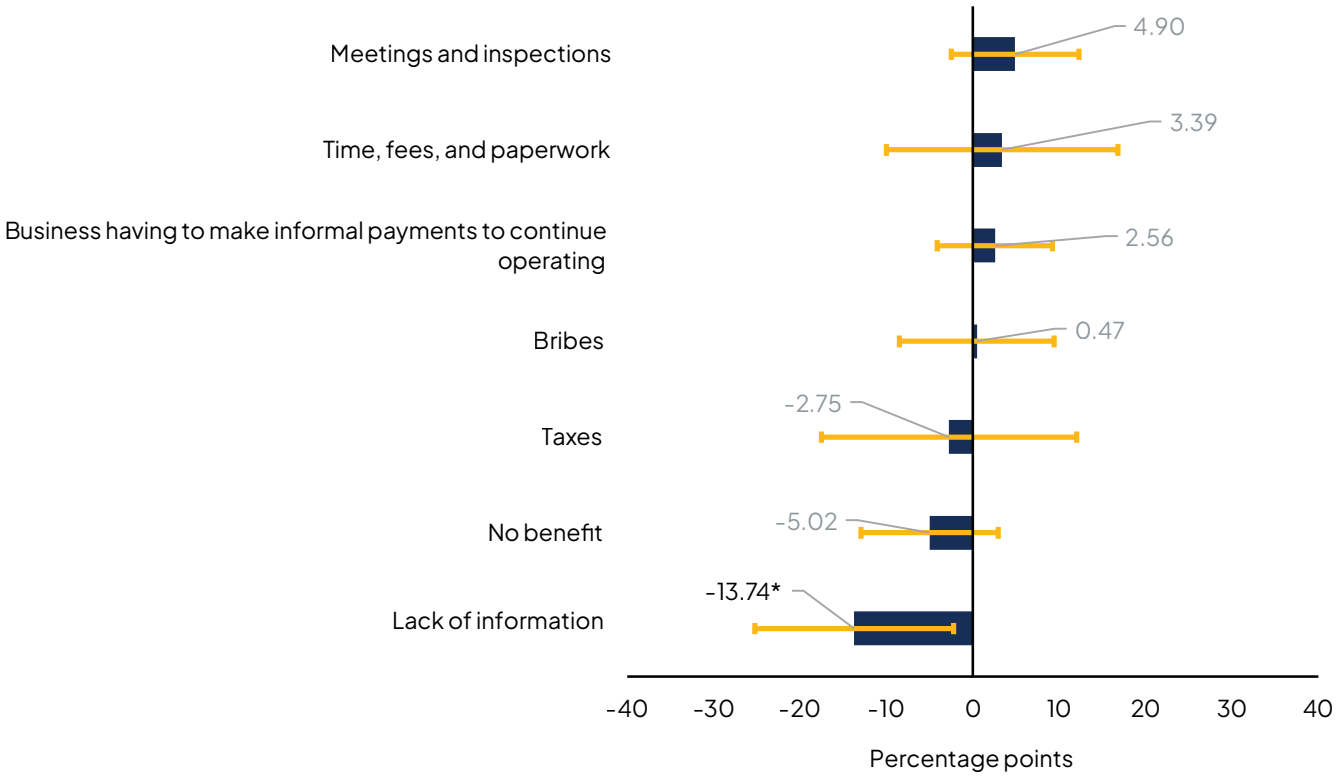
c. Use of contractual agreements, performance, and use of finance and credit



d. Infrastructure, location, and use of technology

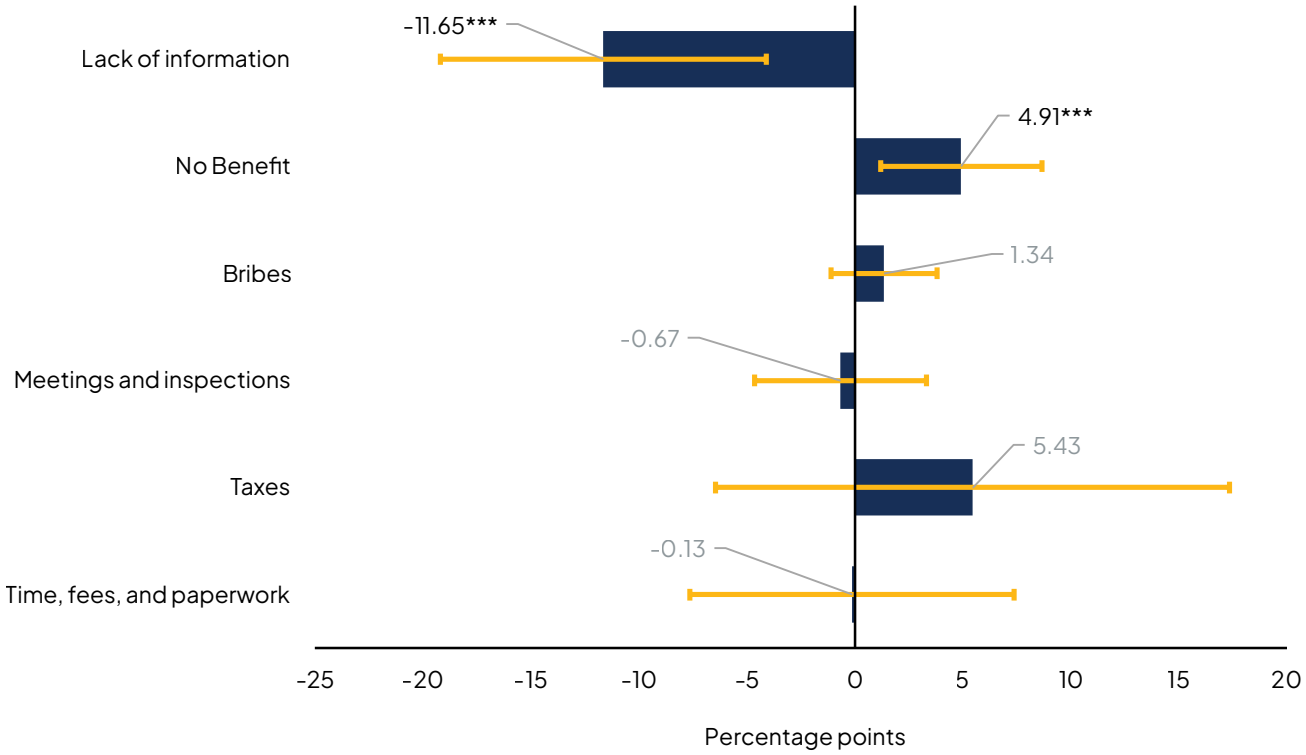


e. Reported reasons to not register



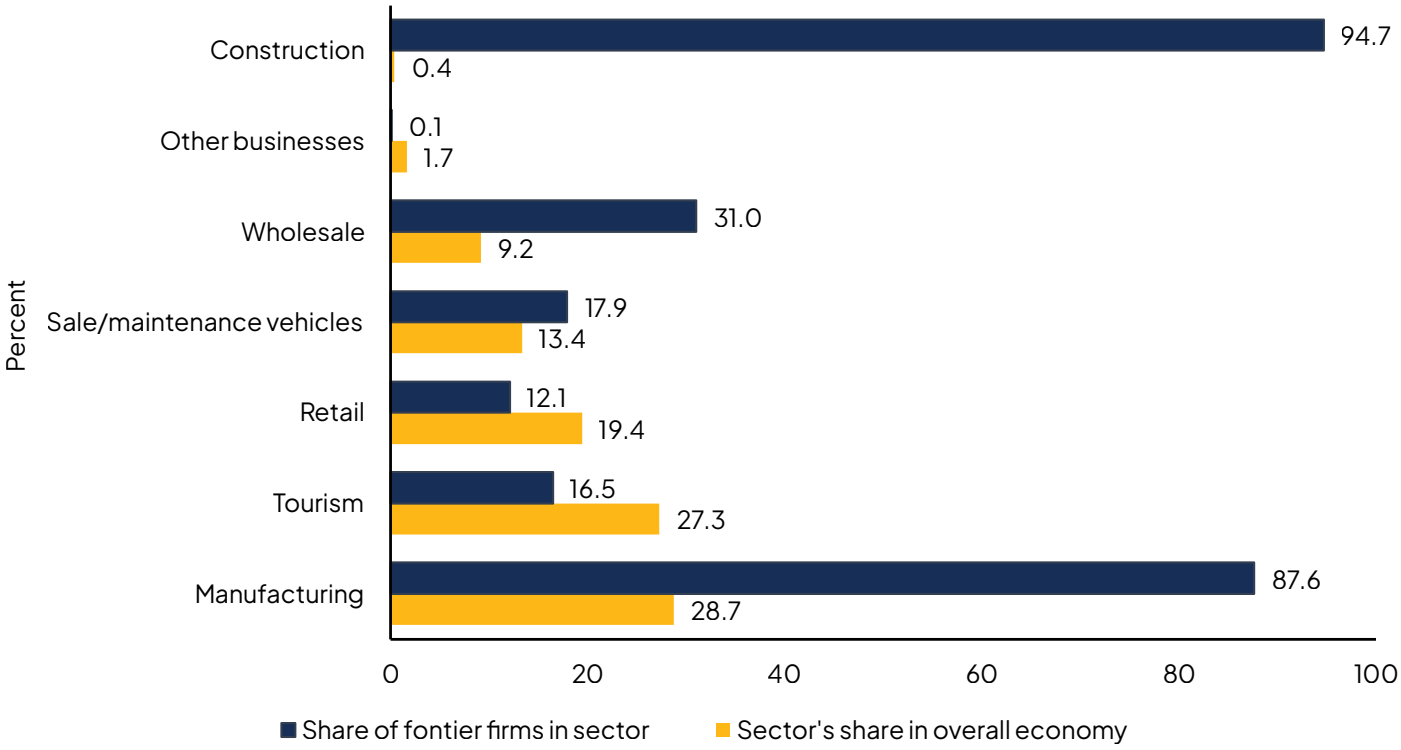
Sources: Original figure for this publication based on M-ES; World Bank 2025b.
Note: The reported coefficients are estimated from regressions of outcomes on a high-productivity informal firm dummy (where high-productivity informal status = 1), controlling for subsector and city fixed effects. The high-productivity informal definition is sector specific because a high-productivity informal firm is defined to include all firms in each sector that are above the 60th percentile of the log sales per capita distribution of formal microfirms within the same sector (N = 133). For panel b, an additional control on owner educational attainment was added. The management practices index combines information on the 13 management practice indicators that were investigated through the survey questionnaire. The battery of questions was adapted and shortened from the original set developed for smaller businesses by McKenzie and Woodruff (2017). Gold whiskers show 95% confidence intervals.
** p < .1 ** p < .05 *** p < .01.*

Figure A.8 Marginal effect of the classification of firms as high resemblance on self-reported barriers to business registration



Source: Original figure for this publication based on World Bank 2025b.
*Note: The reported coefficients are estimated from a regression of outcomes on a high resemblance status dummy. Other controls include city fixed effects, sector fixed effects, and the log of the number of employees. Each coefficient on the x-axis represents the marginal effect of status as a high-resemblance informal firm on the probability of reporting each business registration barrier, conditional on the controls. Gold whiskers show 95 percent confidence intervals. * p < .10 ** p < .05 *** p < .01.*

Figure A.9 Share of frontier firms, by economic sector, Nepal



Source: Original figure for this publication based on World Bank 2023.
Note: The figure is organized according to the sectoral share in the overall economy from lowest to highest, which sums to 100. Manufacturing includes furniture, textile, metals, electronics; nonmetallic; wood, paper, media; and agrifood. Wholesale and retail each include both agrifood and nonagrifood. Tourism includes hotels, and restaurants.

Annex B. Tables

Table B.1 Blinder-Oaxaca decomposition, labor productivity gap, informal female- and male-owned firms

Indicator	(1)	(2)	(3)	(4)
Overall				
Log labor productivity, female	9.84***	9.84***	9.84***	9.84***
	(0.05)	(0.05)	(0.05)	(0.05)
Log labor productivity, male	10.22***	10.22***	10.22***	10.22***
	(0.05)	(0.05)	(0.05)	(0.05)
Difference	−0.39***	−0.39***	−0.39***	−0.39***
	(0.07)	(0.07)	(0.07)	(0.07)
Explained	0.00	0.08*	−0.01	0.03
	(.)	(0.03)	(0.04)	(0.05)
Unexplained	−0.39***	−0.47***	−0.38***	−0.35***
	(0.07)	(0.07)	(0.07)	(0.06)
Unexplained				
No. of employees (regular month)^2		−0.26+	−0.17	−0.21
		(0.14)	(0.14)	(0.14)
Management practices index			0.11	0.13+
			(0.07)	(0.07)
Explained				
No. of employees (regular month)		0.16*	0.13*	0.14*
		(0.07)	(0.06)	(0.06)
No. of employees (regular month)^2		−0.12+	−0.09+	−0.10+
		(0.06)	(0.05)	(0.05)
Sectors		0.04**	0.04**	0.04**
		(0.01)	(0.01)	(0.01)
Business operating from the household			−0.05**	−0.04**
			(0.02)	(0.02)
Education			−0.03*	−0.02+
			(0.01)	(0.01)
Average age of business (years)			−0.02*	−0.02+
			(0.01)	(0.01)
Main reason for starting business: location/hours				−0.01*
				(0.01)
Main reason for starting business: no other source of income				−0.02+
				(0.01)
Observations	2,168	2,168	2,168	2,168

Source: Original table for this publication based on World Bank 2025b.
Note: Based on a subsample of ISES firms with observations on owner characteristics and on owners who started the activity (85 percent). Column (1) presents the raw gap. Column (2) includes the number of employees, its square, and city and sector fixed effects. Column (3) includes business location, household sociodemographic characteristics (main owner with household members ages under 6; household size), and controls for owner education, experience, and management practices (main owner school level: 5 categories; average age of business; management practices index). Column (4) controls for reasons for opening a business and access to finance variables. For the explained and unexplained portions, only significant coefficients are shown. Log coefficients can be converted into percentage effects using the exponential transformation. The coefficients of the overall productivity differential and the unexplained portion can be interpreted as follows: $(e^{-0.39}-1)*100 = -32.2\%$, $(e^{-0.47}-1)*100 = -37.5\%$, $(e^{-0.35}-1)*100 = -29.5\%$.
** p < .05 ** p < .01 *** p < .001 + p < .10.*

Table B.2 Firm-level regression of ethnicity on formal or informal ownership of firms

Variables	(1)	(2)	(3)	(4)
Hill Chhetri	−0.13*	−0.04+	−0.02	−0.04
	(0.05)	(0.02)	(0.02)	(0.02)
Terai Brahmin/Chhetri	−0.10	0.01	−0.00	0.02
	(0.20)	(0.07)	(0.07)	(0.06)
Other Terai caste	−0.47*	−0.21**	−0.19**	−0.12*
	(0.19)	(0.06)	(0.06)	(0.06)
Hill Dalit	−0.15	−0.06	−0.12**	−0.03
	(0.09)	(0.04)	(0.04)	(0.05)
Terai Dalit	−0.30	−0.14**	−0.17*	−0.04
	(0.19)	(0.05)	(0.08)	(0.06)
Newar	−0.33***	−0.05+	−0.04	−0.03
	(0.04)	(0.03)	(0.03)	(0.04)
Hill Janajati	−0.30***	−0.09***	−0.06*	−0.04
	(0.05)	(0.02)	(0.02)	(0.03)
Terai Janajati	−0.23*	−0.05	−0.06	0.01
	(0.08)	(0.04)	(0.04)	(0.05)
Muslim	−0.19	−0.10*	−0.15*	−0.05
	(0.16)	(0.04)	(0.07)	(0.06)
Other	−0.09	0.00	−0.02	−0.12
	(0.26)	(0.08)	(0.06)	(0.07)
Observations	4,275	4,275	4,275	3,957
R-squared	0.08	0.51	0.56	0.58
City fixed effects	No	Yes	Yes	Yes
Subsector fixed effects	No	No	Yes	Yes
Education fixed effects	No	No	No	Yes

Sources: Original table for this publication based on M-ES; World Bank 2025b.
Note: The Hill Brahmin ethnicity is the reference group. The outcome or dependent variable, firm type, is binary with 1 if the owner operates a formal microfirm and 0 if it is an informal firm. Standard errors clustered at the strata level are in parentheses.
** p < .05 ** p < .01 *** p < .001 + p < .10.*

Table B.3 Labor productivity ratio: Formal microenterprises to informal microenterprises

Percentile of labor productivity distribution	All firms	Manufacturing	Retail	Services
p10	3.33	3.21	3.33	2.22
p20	3.75	2.25	4.67	2.00
p30	3.33	4.33	4.44	1.83
p40	3.75	2.89	4.17	2.19
p50	4.00	2.67	4.00	3.13
p60	4.00	5.00	4.44	2.67
p70	4.00	4.17	4.38	2.29
p80	4.47	3.56	5.00	3.75
p90	5.38	5.30	5.71	6.00

Sources: Original table for this publication based on M-ES; World Bank 2025b.

Table B.4 Blinder–Oaxaca decomposition of the log productivity gap between formal microenterprises that started informally and formal microenterprises that started formally

Indicator	(1)	(2)	(3)	(4)	(5)
Overall					
Started Informal	11.19*** (0.10)	11.19*** (0.09)	11.19*** (0.09)	11.19*** (0.09)	11.19*** (0.09)
Started Formal	11.51*** (0.06)	11.51*** (0.06)	11.51*** (0.06)	11.51*** (0.06)	11.51*** (0.06)
Difference	−0.32** (0.12)	−0.32** (0.11)	−0.32** (0.11)	−0.32** (0.11)	−0.32** (0.11)
Explained	0.00 (.)	−0.06 (0.08)	−0.03 (0.09)	−0.13 (0.10)	−0.19+ (0.11)
Unexplained	−0.32** (0.12)	−0.26** (0.09)	−0.29** (0.09)	−0.19* (0.09)	−0.13 (0.08)
City and sector FE	No	Yes	Yes	Yes	Yes
Owner level controls	No	No	Yes	Yes	Yes
Firm level controls A	No	No	No	Yes	Yes
Firm level controls B	No	No	No	No	Yes
Observations	1,426	1,426	1,426	1,426	1,426

Sources: Original table for this publication based on M-ES.
Notes: (1) Subsample of M-ES (formal micro) firms with observations on owner characteristics (91 percent). (2) Owner-level controls include sociodemographic characteristics (main owner with household members ages under 6; main owner is the primary household income earner; household size of main owner ; main owner is an internal migrant; majority of owners are female; average age of owner; main owner educational attainment (three categories); owner received training to improve business skills) and employment characteristics (main owner looked for a contract job in the past two years; currently has a job with a contract; has ever had a job with a contract; was unemployed prior to this business; experience in the sector). Firm-level controls A include share of workers who can read; use a computer; number of employees; share that was paid in previous month; average years of business; number of months business in operation; and all management practices, excluding the overall index. Firm-level controls B add available information on use of financial and credit services, use of infrastructure and technology (mobile phones, computers, machinery, electricity, water), business practices (providing or purchasing inputs, products, and services under contractual agreements). (3) Robust standard errors in parenthesis.
*+ p < .10 * p < .05 ** p < .01 *** p < .001.*

Table B.5 Characteristics associated with informal high resemblance microenterprises

a. Outcomes used in the linear discriminant analysis	Coefficients (robust standard errors)
Majority of owners are women	−21.27*** (2.07)
Average age of owner (years)	2.55** (0.99)
Main owner has no schooling	−14.25*** (1.62)
Main owner has completed secondary school	51.08*** (4.17)
Main owner's experience in the sector (years)	6.75***(0.91)
Share who can read	12.98***(3.05)
Share who can write	13.40***(2.60)
Share who can use a computer	26.62***(1.65)
Management practices index	14.50***(1.39)
Business visited competitors to see what products they have for sale	9.64*(4.22)
Business asked customers for feedback on potential new products	21.65***(6.70)
Business talked with former customers to see why they stopped buying	16.21***(4.12)
Business used any special offer to attract customers	7.01***(1.66)
Business asked suppliers which products are selling well	16.01***(4.38)
Business attempted to negotiate with a supplier for a lower price	18.22***(3.21)
Business with sales target for next year	17.16***(5.20)
Business comparing achieved sales with targets at least monthly	1.77**(0.68)
Business making budget of the costs it is likely to face next year	5.66***(1.70)
Business preparing a profit and loss statement at least once a year	32.43***(7.20)
Business with written or recorded business records	29.81***(3.26)
b. Outcomes not used in the linear discriminant analysis	**Coefficients (robust standard errors)**
Main owner currently has a job with a contract	−1.91*(1.00)
Average age of business (years)	−1.24 **(0.51)
Business using machinery or equipment	7.47+(4.30)
Business using water	6.82+(3.68)
Log total cost of labor in the previous month	−0.39+(0.22)
Business started or acquired with main owner's own funds	−8.50*(3.79)
Business selling goods and services on credit	17.33***(2.75)
Business buying goods and services on credit	10.29+(5.99)
Business applying for loan in previous year	11.19*(5.03)
Business stating no need for a loan	8.58*(3.89)
Business financing operations using funds from friends or family	14.80***(2.30)
Business financing major purchases using funds from friends or family	4.03+(2.41)
Business operating from a household	11.98***(4.01)
Main reason for starting business: no other source of income	15.05***(4.67)

Source: Original table for this publication based on World Bank 2025b.
Note: The reported coefficients are estimated from regressions in which outcomes are regressed on a high resemblance status dummy. Panels a and b control for city and subsector fixed effects and the log of the number of employees. Panel b includes controls for variables used in the linear discriminant analysis (LDA) model. The motivation for this specification is that several firm characteristics outside the LDA are likely to capture similar underlying dimensions of firm capacity already embedded in the LDA variables. Only statistically significant coefficients are reported. The following outcome variables were considered in the regressions, but were not statistically significant. Panel a: owner skills and background (owner received business training; share of workers who speak a language other than their own); business practices (business does not run out of inventory frequently). Panel b: owner employment history and household characteristics (main owner is a migrant; household size of the main owner; owner has household with members ages under 6; owner was unemployed prior to starting the business; owner currently or has ever had a job with a contract; owner actively looked for a contract job in the previous two years); firm size, workforce, and operations (business has paid workers; number of months the business operates per year; business operates from nonfixed premises); technology and infrastructure (use of computers or tablets; use of electricity); finance and costs (log total cost of electricity; log total cost of raw materials; average net profit or loss; log productivity; financing operations via banks or microfinance institutions; financing operations via moneylenders; starting the business with bank or informal funding; financing major purchases through banks or moneylenders); location and start up motives (main reason for starting the business; main reason for choosing the business location; ownership or rental status of fixed premises).
** p < .05 ** p < .01 *** p < .001 + p < .10.*

Table B.6 Blinder-Oaxaca decomposition, log productivity gap, formal and informal microenterprises

Indicator	(1)	(2)	(3)	(4)
Overall				
Log labor productivity, formal	11.39*** (0.05)	11.39*** (0.05)	11.39*** (0.05)	11.39*** (0.05)
Log labor productivity, informal	10.03*** (0.03)	10.03*** (0.03)	10.03*** (0.03)	10.03*** (0.03)
Difference	1.36*** (0.06)	1.36*** (0.06)	1.36*** (0.06)	1.36*** (0.06)
Explained	0.00 (.)	0.16* (0.07)	0.21* (0.08)	0.39*** (0.08)
Unexplained	1.36*** (0.06)	1.20*** (0.08)	1.15*** (0.09)	0.97*** (0.09)
City and sector fixed effects	No	Yes	Yes	Yes
Owner level controls	No	Yes	Yes	Yes
Firm level controls A	No	No	Yes	Yes
Firm level controls B	No	No	No	Yes
Observations	3,888	3,888	3,888	3,888

Sources: Original table for this publication based on M-ES; World Bank 2025b.
Note: Subsample of ISES and M-ES firms on which the owner characteristics are observed (91 percent). Owner-level controls include sociodemographic characteristics (main owner with household members ages under 6; main owner is the primary income earner in the household; household size of main owner; main owner is an internal migrant; majority of owners are female; average age of owner; main owner school level: three categories; owner received training to improve business skills) and employment characteristics (main owner looked for a contract job in the previous two years; currently has a job with a contract; has ever had a job with a contract; was unemployed prior to this business; experience in the sector). Firm-level controls A include share of workers who can read; use a computer; number of employees; share that was paid in previous month; average years of business; number of months business in operation; and all management practices, excluding the overall index. Firm-level controls B add the available information on use of financial and credit service, use of infrastructure and technology (mobile phones, computers, machinery, electricity, water), business practices (providing or purchasing inputs, products, and services under contractual agreements). The coefficients for unexplained and explained portion are not shown in the table. Robust standard errors in parenthesis.
** p < .05 ** p < .01 *** p < .001 + p < .10.*

Table B.7 Share of informal microenterprises that are at least as productive as formal microenterprises, by subsector

Indicator	Percentile of productivity distribution of formal microenterprises		
	10th	30th	60th
Manufacturing: food	22.68	22.68	22.68
Manufacturing: nonfood	38.74	38.74	4.62
Retail: food	53.32	21.47	4.75
Retail: nonfood	42.15	5.64	0.65
Services	60.72	37.99	1.30

Sources: Original table for this publication based on M-ES; World Bank 2025b.

Table B.8 Linear regression: Log productivity of formal microenterprises regressed on variables related to facing competition from informal sector

Indicator	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Faces competition	−0.25** (0.07)	−0.25*** (0.06)	−0.24* (0.10)	−0.25* (0.09)	−0.21* (0.08)	−0.07 (0.06)	−0.22* (0.08)
Food processing # faces competition						0.37 (0.23)	
Manufacturing other than food # faces competition						−0.58** (0.20)	
Retail other than food # faces competition						−0.14 (0.10)	
Services # faces competition						−0.40+ (0.22)	
Identified as major obstacle							0.25*** (0.05)
City fixed effects	No	Yes	Yes	Yes	Yes	Yes	Yes
Subsector fixed effects	No	No	Yes	Yes	Yes	Yes	Yes
Firm-level controls	No	No	No	Yes	Yes	Yes	Yes
Manager controls	No	No	No	No	Yes	Yes	Yes
R2	0.014	0.091	0.246	0.255	0.298	0.302	0.297
Observations	1,437	1,437	1,437	1,437	1,437	1,437	1,437

Sources: Original table for this publication based on M-ES.
Note: The coefficient on faces competition captures the baseline difference between formal microfirms that face competition from informal firms and formal firms that do not face such competition. The coefficient on identified as major obstacle captures additional differences within the subset of firms facing such competition. Reselling of food # faces competition is the reference category. Manager controls include gender, experience, management index, and education. Firm-level controls include number of employees and age of business. Robust standard errors are in parentheses.
**p < .05 **p < .01 ***p < .001.*

Table B.9 Blinder–Oaxaca decomposition analysis of the labor productivity gap between female-owned and male-owned formal microenterprises

Indicator	(1)	(2)	(3)	(4)
Overall				
Log labor productivity, female	11.18*** (0.13)	11.18*** (0.13)	11.18*** (0.12)	11.18*** (0.11)
Log labor productivity, male	11.46*** (0.05)	11.46*** (0.05)	11.46*** (0.05)	11.46*** (0.05)
Difference	−0.28+ (0.14)	−0.28* (0.14)	−0.28* (0.13)	−0.28* (0.13)
Explained	0.00 (.)	0.06 (0.07)	−0.02 (0.08)	−0.10 (0.09)
Unexplained	−0.28+ (0.14)	−0.34** (0.11)	−0.26* (0.11)	−0.19* (0.09)
Unexplained				
Household size of main owner			0.50 (0.44)	0.60+ (0.32)
Education			−1.05* (0.46)	−1.34** (0.47)
Main reason for starting business: profitability				−0.48* (0.21)
Main owner has a separate bank account for the household				0.13+ (0.07)
Business applying for loan in past year				0.08+ (0.05)
Explained				
Cities		0.02 (0.02)	0.05* (0.03)	0.05+ (0.02)
Household size of main owner			−0.04+ (0.02)	−0.03* (0.02)
Main owner has a separate bank account for the household				−0.08** (0.03)
Observations	1,116	1,116	1,116	1,116

Sources: Original table for this publication based on M-ES.
Note: Subsample of M-ES firms on which owner characteristics may be observed and the owners of which started the activity (62 percent). Column (1) presents the raw gap. Column (2) includes the number of employees and its square, as well as city and sector fixed effects. Column (3) also includes sociodemographic characteristics of the household (main owner with household members ages under 6; household size of main owner) and controls for education, experience, and management practices (main owner school level: five categories; average age of business; management practices index). Column (4) controls for reasons for opening a business and access to finance variables. For the explained and explained portions, only significant coefficients are shown. Log coefficients can be converted into percentage effects using the exponential transformation. For example, the coefficients of the overall productivity differential and the unexplained portion can be interpreted as follows: $(e^{-0.28} - 1) * 100 = -24.4\%$ and $(e^{-0.19} - 1) * 100 = -17.3\%$. Robust standard errors are shown in parenthesis.
** p < .05 ** p < .01 *** p < .001 + p < .10.*

Table B.10 Regression: correlates to growth among formal nonmicro firms

Indicator	Dependent variable: firm in the 75th percentile of employment growth over the previous three years			
	(1)	(2)	(3)	(4)
a. Barriers reported as a major or severe obstacle to growth				
Access to finance	0.06 (0.09)	0.01 (0.09)	0.08 (0.09)	−0.07 (0.09)
Access to land	−0.10 (0.08)	−0.01 (0.10)	−0.11 (0.10)	−0.04 (0.10)
Business licensing and permits	−0.44*** (0.11)	0.00 (.)	−0.51*** (0.12)	0.00 (.)
Corruption	0.06 (0.06)	0.28 (0.21)	0.07 (0.06)	0.27 (0.18)
Courts	0.26* (0.11)	−1.28*** (0.23)	0.30* (0.12)	−1.29*** (0.24)
Crime, theft, and disorder	0.30* (0.13)	0.74*** (0.13)	0.26+ (0.14)	0.69*** (0.12)
Customs and trade regulations	0.03 (0.07)	−0.07 (0.11)	0.05 (0.08)	0.06 (0.12)
Electricity	0.12 (0.08)	0.14 (0.27)	0.11 (0.07)	0.19 (0.25)
Inadequately educated workforce	0.05 (0.10)	0.66*** (0.16)	0.01 (0.10)	0.63** (0.19)
Labor regulations	0.06 (0.32)	0.95*** (0.18)	−0.10 (0.32)	0.92*** (0.22)
Political instability	0.03 (0.05)	−0.15 (0.15)	0.04 (0.06)	−0.22 (0.17)
Tax administration	−0.32** (0.11)	−0.14 (0.32)	−0.33* (0.13)	−0.06 (0.35)
Tax rates	0.14+ (0.07)	0.21* (0.10)	0.13 (0.08)	0.04 (0.15)
Transport	−0.17* (0.06)	0.02 (0.19)	−0.16* (0.08)	−0.19 (0.18)
b. Firm practices introduced in innovation and worker training				
Formal training, full-time employee, last fiscal year	−0.03 (0.06)	−0.03 (0.11)	−0.04 (0.07)	0.03 (0.14)
New or enhanced processes, previous three years	−0.06 (0.13)	−0.13 (0.12)	−0.03 (0.15)	−0.08 (0.09)
R2	0.113	0.593	0.098	0.644
Observations	540	69	533	69

Sources: Original table for this publication based on World Bank 2023.
Note: (1) all Enterprise Survey firms. (2) Enterprise Survey firms that started informally. (3) all Enterprise Survey firms, reweighted by their resemblance to microformal and informal firms using M-ES and ISES propensity scores depending on the available predetermined variables: main owner's experience in the sector (years); majority of owners are female; business started or acquired with main owner's own funds. (4) Enterprise Survey firms that started informally, reweighted by their resemblance to informal microfirms; only ISES propensity scores depending on the available predetermined variables: main owner's experience in the sector (years); majority of owners are female; business started or acquired with main owner's own funds. The dependent or outcome variable Jobgrowth_75 is binary with 1 if firm is in the 75th percentile of the sample distribution of job growth (number of permanent full-time employees) in the previous three fiscal years among formal firms (Enterprise Survey only). Sector fixed effects, region fixed effects, and log number of employees are included as control variables. Standard errors clustered at the strata level are shown in parentheses.
** p < .05 ** p < .01 *** p < .001 + p < .10.*


WORLD BANK GROUP